CHAPTER I
Introduction

1.1 Concept of Profit Planning

Profit planning means the development and acceptance of goals and moving an organization efficiency to achieve the objectives and goal.

In recent year, comprehensive profit planning has been used extensively in the literature of business. In other terms sometimes, it is used as comprehensive budgeting, managerial budgeting and budgeting profit planning broadly defined as a systematic and formalized approach for accomplishing the planning co-ordination and control responsibilities of management. Specially, it involves the development and application of:-

a) Specification of enterprises goals.
b) A long range profit planning developed in broad terms.
c) Broad and long range objectives for the enterprises
d) A short range profit plan detailed by relevant responsibilities.
e) A system of periodic performance report detailed by assigned responsibilities
f) Follow-up procedures.

Generally, the concept of profit planning technique must continually be adopted, not only for each particular enterprise but for changing conditions within the enterprises. It is undergone through each and every aspect of the enterprises so it provides a framework for implementing such fundamental aspects of scientific management as management dynamic control, continues feedback, responsibility towards accounting management by exception and managerial flexibility. To gain a sophiscated understanding of the broad concept of comprehensive profit planning, first of all one must realize the total system concept that integrate all the functional and operational aspect of an enterprises. Profit planning has a unique relationship with the accounting system in the enterprises in following respect.

1 Actual data utilized in the measurement of performance (actual data compare with planned data)

2 Accounting provides input of historical data that are particularly relevant for analytical purposes in the development of enterprises plans.

3 The final components of a profit plan generally are structured in the accounting format.

These are provided in large measured by accounting system profit planning developed and adopted to any particular accounting system. In the profit planning, financial planning is also involved like profit planning responsibility accounting, variable expenses and performance reports, contribution to accounting, standard cost etc.

Mostly, chief executive make two basic plans i.e. tactical short-run plan and other is long-run strategies plan. Both plans are vary usually in planning process of enterprises. So, the strategic long-run plan and tactical short-run plans are the broad objectives of the enterprises. Part of long-run is none or less informal as represented by tentative commitment and made by the executive committee in its planning session. Long-run plans has been completed with the combinations of basic component Income statement, Balance Sheet, Cash Flow Analysis, Capital expenditure and Revenue Expenditure plan, Personal requirement, research plans etc detailed by each and every year. As a result, the long-run plan covers all the main areas of anticipated activity sales, expenses, research, development capital and revenue expenditure cash profit and its return on investment.

Tactical short-run profit plan will be discussed and analyzed in the primary annual result, the detailed by month, responsibility and product, the short-run plan provides a general understanding of annual profit plan and to provide an overall view of the comprehensive short-run plan usually is developed in terms of physical units.

Profit Planning is an important approach mainly in profit oriented enterprises. Profit planning is a tool of management. It is not an end of management but it facilitates the managers to accomplish managerial goal in a systematic way.

The management is efficient, if, it is able to accomplish the objectives of the enterprises. It is effective, when it accomplish the objective within the minimum efforts and cost too. In order to attain long-run efficiently and effectiveness, management must chart out its course of action in advance. A systematic approach that facilitates effective management performance is profit planning and control or budgeting. Budgeting is an internal part of management. In a way a budgeting control system has been described as a historical combination of goal-setting machine for increasing an enterprises profit.

Profit is the ultimate or main goal of every business organization. They involve in business only for making profit. Profit cannot be achieved easily; it should be managed well with better managerial skill. So, profit is the planned output of management by element, profit is the difference between revenue and its cost. Profit pal refers to the planning of revenue and planning of cost.

Profit Planning involves development and application of:-

- Specification of goals.
- Broad and long- run objective for the organization.
- Long-run profit plan in broad terms.
- Tactical short-run profit plan detailed by assigned responsibilities.
- Control system
- Follow-up procedures
- A system of periodic performance report detailed by assigned responsibilities.

Thus, profit planning represents an overall plan of operations, providing guidelines to management. It enables the management to correct its policy. Profit planning covers a definite period of time and formulates the planning decision of management.

1.2 Focus of the Study

Nepal is an agro-based country. Near about 80%of people of Nepal are engaged in this sector is declining day by day today. It means people those who were engaged in this sector are being less interested. So, people are attracted for the rapid development of the nation and are seeking another alternative and more attractive sector i.e. non-agriculture sector.

Non-agriculture sectors means the acquiring manufacturing organization, electricity, gas, water construction trading, hold real estate and community and social services.

Those types of non-agricultural sectors are established on public and private sector. Those organizations which are operated under the ownership of government of Nepal are called public organizations and that organization operated under ownership of an individual or a group of people are called private sector non- agricultural organizations.

Non-agriculture private sectors are classified into the six sectors which are as follows:-

I. Manufacturing sector
II. Trading sector
III. Service sector
IV. Social sector
V. Financial sector
VI. Community and social service sector

Among these various sector, the study will attempt to focus on study at the non-agriculture private manufacturing sector i.e. "manufacturing sector" which is cement industry of Nepal.

Cement is a fundamental construction material for strong and durable construction work. The demand of the cement has been increasing day by day. Cement is supplied from internal and external sector production mostly from India. Himal Cement is the main internal source of Nepalese cement enterprises with an annual capacity is 1088400MT. It is a first cement factory in private sector of Nepal. Production capacity of public cement industry is so longer other then private industry but so many difference causes are affected to the public industry then the private sector shows their hands into cement industry and established so many cement industries.

Out of those private cement industry which are established by private sector the first ever cement industry of Mechi zone is namely Mittal Cement Industries. This study will be attempted to focus on study of the cement industries which is Mittal Cement Industry Pvt. Ltd.

1.3 Industrial Background of Mittal Cement Industry Pvt. Ltd.

Mittal Cement Industry Pvt. Ltd. was inaugurated by Mr. Mohan Lal Agrawal on 5th Magh 2056, under the company act 2053BS in first year plan. It is the industrial establishment in the country, located at Mechi Zone, Jhapa district, Chandragadi V.D.C Ward No 05 Pathabari.

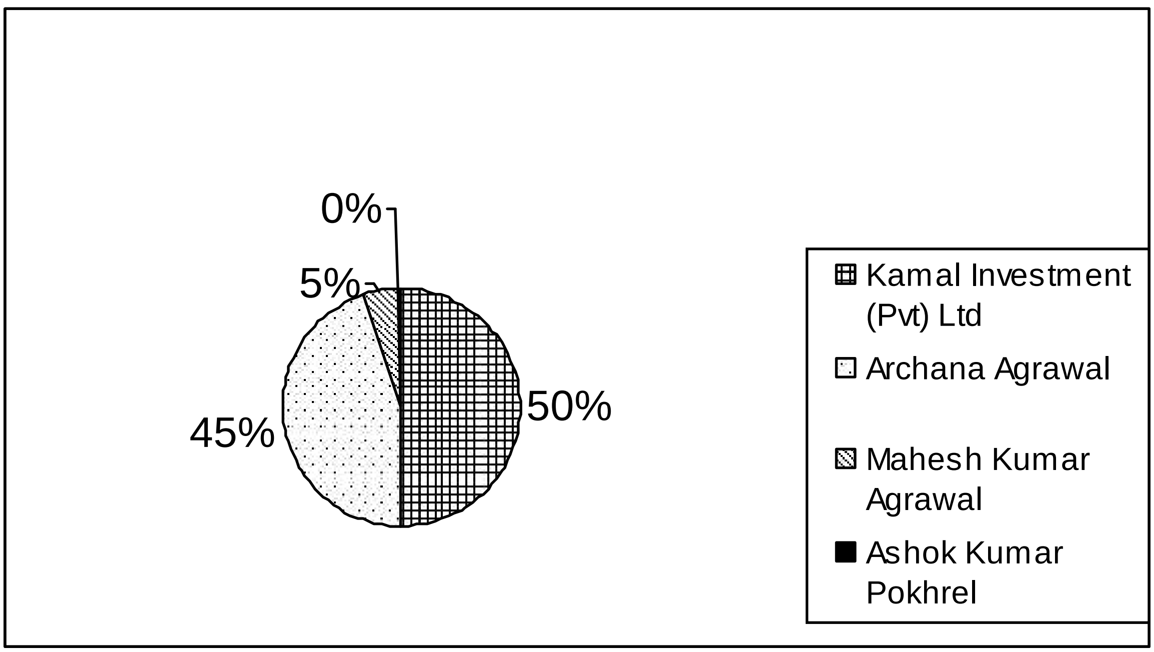
The project with estimated authorized capital of Rs100 million, issued capital 50 million with paid up capital Rs 41.1 million was lunched which was financed by various shareholders. Latter credit for financial support was taken from by NIC Bank, Birtamode. Name of various shareholders with their respective % and amount of share hold by them are presened below:-

Table-1.1			
Share Holding Pattern of Mittal Cement Industry Pvt. Ltd			
Shareholder Name	**No. of share**	**Amount @100**	**Percentage**
Kamal Investment (Pvt) Ltd	205500	20550000	50
Archana Agrawal	183500	18350000	44.65
Mahesh Kumar Agrawal	21000	2100000	5.11
Ashok Kumar Pokhrel	1000	100000	0. 24
Total	**411000**	**41100000**	**100**

Source : Annual Report of Mittle Cement Industry

Figure 1.1

Share Holding Pattern of Mittal Cement Industry Pvt. Ltd



In order to maintain the accepted quality level, Mittal Cement Industry Pvt. Ltd. has developed the technique to test the material as well as fully automatic equipment before use. If they are of acceptable quality then only they are granted for use. That's why quality of the product is regularly tested and than they are distributed in the market. So, due to its constant and high quality maintaining activities it has achieve the goodwill in the market. As a result government of Nepal has provided the mark of Nepal standard and

ISO mark too. It has regarded as the best quality cement in the market by the customers and even contractor prefer this cement. Due to its popularity Ordinary Portland Cement (OPC) 'Pashupati' Pozolona Portland Cement (PPC) 'Durga' and Portland slag Cement 'SURYA' has captured the market and its production has been started only from fiscal year 2056/2057

It has installed full capacity for related capacity of production 100MT of cement or 2000 bags cement (50 kgs per bag) a day. That means yearly production is 31000MT of cement or 620000bags. Production, for its installed capacity of 31000MT of Mittal Cement Industry (Pvt) Ltd, annual requirement of raw material are as follows:-

Table No. 1. 2

Yearly Raw Material Requirements

Raw Material	**Quantity**
Clinker	52000 MT
Gyspum	650 MT
Fly Ash	9000 MT
Bags	120000 Pkt
Printed Sheet	120000
Grinding Media	50 MT

Source : Annual Report of Mittle Cement Industry

The industry wholly imported the required raw material like Limestone, Gypsum, Iron ore etc from the neighboring country India and Bhutan at past but now-a-days it also buys from Maruti Cement Industry, Shiraha.

The industry produces following three types of cement

I. Ordinary Portland Cement PASHUPATI of 43 and 53 grade

II. Portland Slag Cement SURYA of 43grade

III. Pozolona Portland Cement DURGA OF 53grade

It has high demand due to maintain better quality of the product. It has segmented its market only with local means within the country. From their total production 70% of cement is consumed in Jhapa district and remaining 30% is distributed in other district like Ilam, Pachthar, Morang and Sunsari etc. Mostly it has followed wholesale channel of distribution but in some specific cases it has distributed directly to the customer. Mittal Cement Industry (Pvt) Ltd. contributes high tax to the government inform of VAT, Income Tax, Custom Duty, Antasulka etc. with compare to other private industry those are located in this territory.

The industry generated direct employment opportunity to about 50 to 60 person. Among them 42 employees are employed now, out of which 10 person work on technical field and rest 32 person are in administration and other field. It has been providing regular business to 12 trucks and 170 dealers, regarding to the cement.

To prevent dust emission in the atmosphere, facilities such as bag filter are used in cement industry. The bag filters have normally 85% efficiency of collecting dust from the exhaust. It has installed dust filter in every station to control dust concentration in the exhaust which has saved factory's extra expenses which it has to pay (as a rule) for protecting vegetation and living beings in the surrounding areas. There are altogether 2 bag filters. In this way it protects its surrounding from the health hazard.

There are sufficient mechanical lab, quality assurance department and other facilities in the industry. Mittal Cement Industry Pvt. Ltd has its own staff quarter and it also has a health station providing good medical facilities to its staff by an experienced and qualified doctor. It has provided dust allowance, medical allowance, incentive bonus, house rent and life insurance facilities to the administrator for motivating them toward their duties. The industry demanding the environmental freshness so, it has its annual program of free plantation around the factory area. Not only plantation rather the plant is also preserved very well in the direct supervision of Indusrty management. It is directly concerned with different types social work as like so many drinking water tubels, pitched road, gravel road around the factory as well as quarry site is constructed in the financial assistance of Mittal Cement Industry Pvt. Ltd. and also contributing amount help for the establishment and operation of school, colleges and temples. It used to do other entertainment program in its annual function for the entertainment to the entire employee.

1.4 Objectives of Mittal Cement Industry Pvt. Ltd

Like other industry, the basic objective of the industry is making profit, which is necessary to operate the industry and to make maximum contribution towards the development of the country and their citizen. The main objectives of industry are listed below:-

I. To have production of qualitative product in such a way that help to lead the country towards self dependency.
II. To utilize the available local resources like electricity, water, manpower, land etc.
III. To transfer manpower from agriculture sector to industrial sector for creating the employment opportunity in the country.
IV. To increase the efficiency of local un-skilled manpower into skillful manpower.
V. To create employment opportunity to all kind of manpower inside the country.
VI. To fulfill 50% need of total zonal demand of construction material which represents 5%of over all in Nepal.
VII. Contribute into the government revenue by various forms.
VIII. To reduce import of readymade cement for saving foreign currency.
IX. To help the government.

1.5 Statement of Problem:

Nepal is least developed and land locked country located between the two big country and world's new economic powerhouses the people republic China and India. Basically, it is agricultural based country in spite of its vast and rich natural resources. Nepal being a poor country falls under 3rd world at least developed country. It is because of large resources remain untapped due to lack of capital, skilled labor, manpower and technology practices and process of mobilization of such resources.

Private enterprises are considered as an effective tool on removing poverty of any country. Country can go ahead using that type of tools Industrialization is the back bone of the economic slow development of any country. It helps to build infrastructure for social and economic development of the nation.

At present this study highlight in detail the problem in relation of private enterprises in Nepal with special reference to Mittal Cement Industry Pvt. Ltd. the factory is successful partially to fulfill its objective. Success of any business enterprises is measured by generation of surplus. But the financial performance of manufacturing enterprises in Nepal is looked quite poor. So, they are not able to generate enough surpluses. Most of the Nepalese private enterprises are seen earning some amount of profit due to various causes.

1.6 Objectives of the study will be as follows:-

The primary objective of the study will be to highlight the degree of profit planning concept in Mittal Cement Industry (Pvt) Ltd. and secondary objectives are laid down below:-

- **To examine the practice and effectiveness of profit planning followed by Mittal Cement Industry Pvt. Ltd.**
- **To analyze various planned and functional budget**
- **To explore the cost structure.**
- **To find out variance between planned and actual expenditure of the enterprises.**
- **To study some suitable recommendation and suggestion.**

1.7 Limitation of the study

This research study will be concentrated on profit planning of private enterprises called Mittal Cement Industry Pvt. Ltd.

a) This study will be done about the academic activities and also will compile a short time frame of the academic session, so the study will be confined in the boundaries of limited time.

b) The study will be based on the published date provided by the factory along with other related journal, newspaper, bulletins etc. So, the output of the study will entirely be dependent on secondary data, which will not be sufficient for completion of the study.

c) There are so many manufacturing Private Enterprises in Nepal , out of them, the study will be confined only one industry i.e. Mittal Cement Industry (Pvt) Ltd. due to lack of time and resources.

d) This study will cover only five year data.

e) There are many financial and accounting tool but this study will deal only with certain accounting tool such as profit planning.
f) There are many statistical tools but this study will include some statistical tools which have been used in the analysis to achieve the set goals hence, the study will have limited significant from the practical viewpoint.

1.8 Significance of the study

Profit planning is very essential for any enterprise because it considerably contributes to improve the profitability as well as overall financial performance of an enterprise. It is also a vital instrument for minimizing future risk, maximizing output from the scarce resources and predicts the future. It will become as important tool in the field of management decision. So, it is very useful tool for decision making entrepreneur and future researcher.

The present study is concerned in profit planning of private enterprises of manufacturing company, Mittal Cement Industry Pvt. Ltd. Private enterprises are the back bone of economic development. The management of private enterprises wants to earn profit providing goods and services at cheaper cost. This study points out the strength and weakness of Mittal Cement Industry Pvt. Ltd. regarding its performance. This will provide guidelines for improving its performance to achieve the company's overall objectives. It examines that effectiveness of profit planning as well as problems and prospects of profit planning. This study will also provide help to Mittal Cement Industry Pvt. Ltd. to take necessary corrective actions to improve accounting health by exploiting the environmental opportunities avoiding threats.

1.9 Organization of the Study

This thesis will be organized in to five chapters. These titles of each these chapters are listed below:-

CHAPTERS	TITLE OF THE CHAPTER
CHAPTER I	Introduction of the study
CHAPETR II	Review of Literature
CHAPTER III	Research Methodology
CHAPTER IV	Presentation and analysis of Data
CHAPTER V	Summary, Findings, Conclusion and Recommendation

Chapter-I: Introduction of the study

This chapter describes the basic concept and background of the study. It serves orientation for readers to know about the basic information of the research area, various problem of the study, objectives of the study and need or significance of the study. It is oriented to readers for reporting, giving them the perspective they need to understand the detailed information about coming chapter.

Chapter II: Review of Literature

This second chapter of the study assures readers that they will be familiar with important research that will be carried out in similar areas. It also establishes link with a chain of research that is developing and emerging knowledge about concerned field.

Chapter III: Research Methodology

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. It describes about the various sources of data related with study and various tools and techniques employed for presenting the data.

Chapter IV: Presentation and Analysis of Data

This chapter analyzes the data related with study and presents the finding of the study and also comments briefly on them.

Chapter V: Summary, Findings, conclusion and Recommendation

On the basis of the result from data analysis, the research concludes about the performance of the concerned banks in terms of cash flow management. It also gives important suggestion to the concerned banks and authorities for better improvement.

CHAPTER-II
CONCEPTUAL FRAMEWORK

2.1 General introduction:

Industrialization plays a critical role in achieving high rate of economic growth in developing countries. Economic development of a country so contingent to the industrialization, which is conveniently measured by increase in the share of industry and a rise in Per capital income. Industrial development, a phenomenon more than what has been traditional defined, is a function of interaction among the set of parameters company and management dynamics. Industrialization initiates the process of social transformation by broadening the middle class group and creating a new industrial work force. This brings about re-distribution of income across social groups. Industrialization triggers various impulses that stimulate business or upper income group to undertake industrial ventures in order to increase imports and exports. Industrialization provokes structural change within economics and innovating basically three important factors: technology, specialization and trade.

In developing countries industrialization is challenging proposition between myth and reality that has moved through a series of changes centered around the specific issues like export promotion Vs import substitution lab our intensive Vs capital intensive technology large Vs small and cottage industries, industries based on indigenous Vs foreign raw materials and protection Vs competition. In the history of industrialization especially new industrial front, however, a majority of others developing economics in the region are struggling for break through the strike a “Third wave of development” expected to emerge in South-Asian region in the beginning of new century.”

Nepal exists in South Asian, a developing region in Asia where development efforts have been thwarted by amazingly in creasing population growth rate a cute disguised unemployment and object poverty that have often shivered the aspiration of better future of this region processing more than 20% of world popular. Being economic vulnerability, be it land-lockedness, poor in restructure, limited export potential or deprivation of transit facility, just to have a few, may diminish the prospect for development, unless these key bottlenecks are addressed with firm political determination with a clear national priority, pragmatic policies and appropriate strategy industrialization will remain in quandary.

2.2 Current issues in dying industries:

One of the reasons why Nepalese economy has not so bust growth lies in the under-developed state of industrial sector. Nepal just too heavily dependent on agriculture, which in terms greatly dependent on the vagaries of weather. If rain is good economy records merely growth figures. Our economy would not be so tied to the agriculture in adequate attention was paid to the industrial sector over the past decades. But that did not happen these situation. What is alarming is that what few industries. Nepal has also run into deep troubles over the recent years. The small cottage industries are also severely affected. Mirroring this general decline industries is the case of Jhapa, a eastern Terai district. Most of the small cottage industries in Bhadrapur and Birtamode, the two towns of the districts are on the verse of closure.

2.3 Private Enterprises:

Private enterprise have assumed significant role in almost every countries of the world. Yet, there has so far been no standard definition of its own. The term private enterprises has been defined Private enterprises as “Those organization which are wholly owned and or controlled by the private authorities consisting of establishment which by virtue of their kind of activities, technology and made of operation are classified as industries.

Private enterprises in Nepal constitute a vital instrument for the social-economic development of our country. It enjoys a strategic, a crucial position. In our mixed economy, they have been established in many sectors for the overall development of the country with different goals and objectives.

Nepal has adopted mixed economy where by public and private sectors co-exist. Mostly private procedure of privatizing some public enterprises based on the strength of the private sectors such as Basbari Leather and Shoe Factory, Bhrikuti Paper Mills and Harisidhi Brick Factory is first phase under the program of privatizing other Public enterprises in the second phase have already been privatized and privatization of other two enterprises is in process.

Now a days, so many private enterprises in all sectors are established by person, a group of person and at in joint-ventures too.

2.4 Historical Background:

History of industrialization process in Nepal began with the formulation of first company act 1936 and with the establishment of Jute mill in Biratnagar while cottage and small scale industries were developed since ancient period and that glorious time for the development of handicrafts and cottage industries “A treaty was signed between Nepal and Tibet in 1645 AD that helped to strengthen our monopolized trans-Himalayas trade activities. Since the period of Mala dynasty this tready was a milestone towards the industrial development of Nepal. However, the history of modern industrialization in Nepal can be divided in three periods.

- 1936 to second World war period - 1950
- 1950 to First Plan Period - 1956
- 1956 to Tenth Plan Period

The phase 1936-1950 was a period of rapid industrial development mainly due to the war situation. The scarcity situation created by war, facilities given by the government like custom concession etc, availability of foreign capital and technology development usual supply of consumer goods from outside was distributed. Out of this scarcity condition some industries were established to meet the demand of essential goods like sugar, matches, cotton, textile etc at only of public sector that means government owned enterprises.

The second phase that is 1950 to first plan period was a decline period. The immediate cause of this declination was the end of World-war and thereby the minimization of abnormal profit. The other reasons were bad relation between employer and employees. World wide economic depression and the absence of well-developed network of financing institution etc. The first commercial Nepal Bank Ltd. Could do very industrial at time of government sector that means government owned bank.

2.5 Profit Planning:

Profit planning is one of the most important management tool to plan and control business operations. Budget or plan are financial plans prepared as a guide to and control of future operations.

It is viewed as process designed to help management effectively, perform significant phase of the planning function. It is a management tool which is applied every business endeavor or units. So, that a profit planning is the formal expression of the enterprises plans, goals and objectives stated in financial terms for specified period of time. Moreover, various strategies, policies, programs and procedures are applied by management for achieving prescribed objectives at a fluid environment.

Profit plan cab be broadly divided into two groups as functional plan and financial plan. Functional plan includes sales plan, production plan, raw material plan, direct labour plan and capital expenditure plan, projected income statement and project balance-sheet. After preparing these functional plan and financial plan the possible future profit could be known and one can be modify or re-visit plan to adjust the possible future profit to expectation. Profit planning is a continuous process of variance analysis is started.

Profit planning fits with the total systems concepts that integration all the functional and operational aspects of enterprises. Integration and inter-relationship of all the reads in business will be essential for effective management. Profit planning involves wide partition of the enterprises. It covers the entire organization from the chief executive officer- right up to front line supervisor.

Introduction:

Profit planning is one of the most important factor management tools used to plan business operations. The effective operation a business concern resulting into the excess of income over expenditure fully depends upon as what extent the management follows proper planning and effective co-ordination.

A profit planning is the formal expression of the enterprises plan goals and objectives stated in financial terms for specific future period of time. Mostly, profit plan depends upon the objectives of the organization. It determines approach by which the goals or objectives are to be accomplished commonly. The approach is described in the form of strategies, policies, programs and procedures for achieving the chosen objectives in a given environment. Profit planning program also provides proper organizational structure to implement the approved plans and policies.

Profit:

Profit is a primary measure of success of business enterprises. It is the main test of the business enterprises performance. Simply stating profit is the excess of income overcast of product.

In a general sense “profit” is regarded as income according to the equity holders. The meaning of the profit is deferent things to different people. Labour says that profit is accruing as wages. The owner point of view, profit is rent of rentable assets and interest occurs to them moneylenders. So, a layman, profit means all income that flow to the investors. As an accountant, profit is the access for all practical purposes. Profit or business income means profit, in acceptance or plus non-allowable expenses. In the economist’s profit, it is divided into two important means profit. In this concept only implicit or book cost are considered as expenses. In the economic sense profit is surplus of revenue and above all paid-out costs, including manufacturing overhead expenses plus opportunity cost. Besides, in economic profit is considered to be a short term phenomenon, it does not exist in the long-run especially under perfectly competition.

According to the economist perception, some economists says that profit as a rent of ability. Some says profit as reward for risk bearing of business. It is also says that profit is a return to uncertainly bearing or it is also a reward for innovation.

The word ‘profit’ implies a comparison of the operation of business between two specific dates, which are usually separated by6 an interval of one year. In order to optimize these corporate course of wealth on which national prosperity depends these corporate financial objectives of a company is to maximize with in socially acceptable limits. Profit from the use of the funds employed by them. The maximization of profit within socially acceptable limit implies that proper regard to public interest has been paid. No company can survive long without profit. For profit is the unlimited measure of its effectiveness and in a capitalizes society in no future. For private enterprises, which always increase losses measure of the effective performance of a business is profit, which really is a measure of how well a business performs economically. Profit is a signal for the allocation of resources and yardstick for judging managerial efficiency.

Every company, sooner or late, is faced with the necessity to mount a cost reduction or profit improvement effect to accomplish results, which have not been possible in the normal budgeting routine.

Profit is the primary objectives of a business. In view of the heavy investment, which is necessary for the success of most enterprises, profit in the accounting sense tends to because a long-term objective, which measures not only the success of a product but also of the development of the market for it. Four managers of business firms are vitally concerned, without which their firms cannot long survive. They want to be able to predict how various managerial actors will affect profit.

Planning

Planning concentrates on setting and achieving objectives of an organization. Planning is the first management function to be performed in the process of management.

Planning is the first of management function among the alternative proceeds organizing, directing, coordinating and controlling. Planning must choose among alternative objectives, Policies and programs as well as the methods, procedures and techniques for making the plan effective. Planning is the foundation of business security. It is the means by which the business enterprises assure tomorrow's solvency. To plan is to determint a forward program for governing the future affairs of an enterprise. The purpose of the plan is to adjust internal conditions to the predicted environment in order to obtain the greatest advantage for the company. The plan should be flexible to meet unfrozen condition. A co-ordinate plan could in corporate both immediate program and long-range objectives.

Planning is the process of purposeful thinking and deciding before acting. To be more practical, a formal or systematized planning deals with search for alternatives, evaluation of alternatives, choosing from among the alternatives and communicating the choice to the person concerned.

In industry and commercial business, the different between success and failure, profit and loss, depends upon the outcome of well-laid plans. Planning is an integral part of our everyday lives, without it actions become purposeless and effect is wasted. All effective planning involves the basis elements, which may be summarized as follows:

- A clear definition of the objectives,
- An analysis of the steps required to get objectives.
- An estimate of the time and effort involved in each individual step,

- Examination of the risks involved and assets of the allowances necessary to cover uncertainties.
- Calculation of the total time and cost involves reaching the objectives.
- Decision on the method to be implemented.
- Establish of time scheduled for individual parts of the agreed plan.

Planning is essential is essential to determine the goal. Planning direct the employees to determining the case of action and it reduces the uncertainty formal planning indication the responsibility of management and provides an alternative to grouping without directions. On the other hand, planning involves the determination of goals, process of reached goals or units are to assume responsibility and be held accountable.

Planning process 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 brain it both reasons and communication strategies planning is basically top management yaks accomplished with staff assistance. Long range plan provides of framework long range goals within which the operating plan would be developed. It has to operational planning. Full benefit of the planning can arise only from proper coupling of the two processes. Association of the lower levels is a must, while planning at each higher level.

In order to provide a broad general view of complete short-ranger profit plan shown here deal primarily with annual results, detailed classification by month responsibility and product. Therefore, these two steps revision that upon receipt of the planning, premises and procedural instructions each manager in chare of a major responsibility center will immediately initiate.

Planning is rational way and systematic way of perceiving how business industrial or an organization will get where it should go by examination future alternative course of action open to any organization and choosing them. In choosing must feasible and desirable courses of actions a perspective, a frame of reference is established for current decision. In this process planning examines the involving chains of case and effect likely to result in the future and respectively exploit or combat them as the cash.

There are two types or range of profit planning.

Long-range Profit Planning and Short-range Profit Planning:

The strategy long range plan and tactical short-range profit plan are usually developed currently. It is possible that executive management and the chief financial executive will develop the strategy denies full participation in the planning process by middle managers lack of participation can cause unfavorable effects.

The strategic profit plan is bread, and it usually encompasses three or more years in the future. The tactical profit plan is detailed and encompasses a one-year time horizon the upcoming year. The development of strategic and tactical profit plans each year is a process that individual managerial decision and ideally, a high level of managerial participation. It is possible for a firm to develop these two profit plans for all aspects of the operation certainly, however we have expressed the prevailing view that meaningful participation in the planning process generates positive behavioral effects.

2.6 Advantages of profit planning:

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

1. It forces early consideration of basic policies.
2. It requires adequate and sound organization structure that is there must be a definite assignment of responsibilities for each function of the enterprises.

3. It compels all member of management, from the top down, to participate in the establishment of goals and plans.
4. It compels department, managers to make plan in harmony with the plans of other department and entire enterprises.
5. It requires that management put down in figure what is necessary for satisfaction performance.
6. It forces management to consider expected future trends and conditions.

2.7 Disadvantages and Limitations of profit planning:

1. It is difficult if not impossible, to estimate revenues and expenses in our company realistically.
2. Our management has no interest in all the estimates and schedules. Our strictly informal system is better and works well.
3. It is not realistic to write out and distributed our goals, policies and guidelines to all the supervisors.
4. It takes away management flexible.
5. It creates all kinds of behavioral problems.
6. It is too costly article from management time.

In developing and using a profit planning and control program, the following additional limitations should be kept in mind.

1. The profit plan is based on estimates.
2. A profit planning and control program must be continually adopted to fit changing circumstances.
3. Execution of a profit plan is not automatically.

2.8 Fundamental of profit planning

Basically, profit planning provision provides opportunity for a regular and systematic analysis of occurred or anticipated expenses, organized future planning, fixing of responsibilities and stimulation of effort. In short, it provides a tool for more effective suspension of individual operations and practical administration of the business as whole. Properly viewed profit planning is comprehensive system to coordinate all aspects of the management process carefully knitting together the loose and ends of managements operation. A wide range of successful profit planning program has indicated that these are certain common ingredients and basic distinction that are crucial to sophisticated under standing and effective application of the concept failure to grasp an adequate perspective of these ingredients and distain action leads to ineffective profit planning and to misunderstanding of the comprehensive budgetary process.

An outline of the fundamental concepts of profit planning and control:

- A management process that includes planning, organizing, staffing, leading and controlling.
- A managerial commitment to effective management participation by all level in the entity.
- An organization structures that clearly specific assignment of management authority and responsibility.
    - A management planning process.
    - A management control process.

Fundamental of profit planning can be point-out as following.

I. Managerial involvement

Managerial involvement entails managerial support, confidence and participation and orientation. In order to engage completely in comprehensive profit planning, all level of management, especially top management must:

- Understand the nature and characteristics of profit planning.
- Be convinced that this party center approach to managing is preferable for their situation.

- Be willing to divide effort required to make it possible.

II. Organizational Adaptation

The program of profit planning is must rest upon sound organizational structure of the enterprises and clear-cut designation of lines of authority and responsibilities. The purpose of organizational structure and the assignment of authority are to establish a framework within which enterprise objective may be attained in a coordinated and effective way on a continuing basis. The scope and interrelationship as the operational efficiency, particularly all enterprises, except those sub-units are often referred to as decision centers on responsibility centers.

III. Full communication

Communication in the management and operation of the enterprise is a major managerial problem. Communication can be broadly defined as an interchange of thought 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. Communication may be thought of as the think that brings together the human elements in an enterprise, management is implemented through communication, the means by which behavior is modified and energized.

IV. Responsibility Accounting

In order to set-up profit planning on a sound basis there must be a responsibility accounting system, that is one railroad first and foremost to the organizational responsibilities within the primary accounting, secondary classification of costs, revenues and other financial data that are relevant may be utilized in accordance with the needs of the enterprise. A responsibility accounting system can be designed and implemented on a relevant basis regardless of the other feature of the accounting system can be designed and implemented on relevant basis regarded of the other feature of the accounting system and so on.

V. Time Dimension:

Profit planning have involved as a systematic approach to resolve many aspects of the time dimension in planning and controlling operation. Effective implementation of the profit planning concept requires that the management of the enterprise establish a definite time dimension. The dimension perspective in managerial planning requires a clean-cut destination, best historical decisions and the result of operations in the past often constitute in determinations.

Another time dimensions relates to project planning. A continuing necessity exists for management to plan specific project entail commitments over variable time span. Time dimension should be unique to the enterprise and should be designed to fix its particular needs and characteristics.

2.9 Foundation of Profit Planning:

An enterprise should take to establish a sound foundation for initiating a profit planning programs. Those steps are as follows:

Step-1: There must be commitments by the top management to the broad concept of profit planning and a sophisticated understanding of implications and operations.

Step-2: The characteristics of the enterprise and the environment in which it operates including the controllable and non-controllable variables must be identified and evaluated so that relevant decisions may be made about the characteristics of a profit planning program that would be effective and practical.

Step-3: There should be and evaluation of the organizational structure and assignment of managerial responsibilities and implementation of change demand necessary for effective planning.

Step-4: There must be an evaluation and reorganization of the accounting system to ensure that it is tailored to the organizational responsibilities so that it can provide data particularly useful for planning purposes.

Step-5: A policy determination must be made abut the time dimensions to be used for profit planning purpose.

Step-6: A program of budget education should be developed to inform management at all levels about:

- The responsibility of each level of management in the program.
- The way in which the program can facilitate the performance of each managers functions.
- The purpose of the program.
- The manner in which it will operate including the basic management policies and guideline for it's administration.

If these six steps are taken seriously by management at the outset should have the way for instituting a sound profit planning program.

2.10 Forecasting and Planning

The reason for forecasting is not so much to predict the future as to be prepared to meet it, when it comes forecasts involve a careful look at the future in terms of what is thought likely to happen which plans are the embodiment of what is the be alternated so as to meet that future. There plans are reflected in budget that shows the expected casts of reaching selected goals and it is important that budget should be seen in this way as the shadow of plans and not as the shadow of forecasts.

A plan may be described as a statement of objectives to be attained of the future and an outline of the steps a necessary to reach them. And since future possibilities depends on future circumstances, planning is inextricably bound up with persecuting some planning goes on in every company are through the plans may consist of little more than a few ideas in the chief executive's head based on an informal forecast derived from past experience known facts common sense and a few hunches planning explanations everyone does it in his daily life.

2.11 Role of forecasting in planning

Forecasting of a reliable and dynamic nature is an essential input to all planning process. More precisely it is a crucial part of the information on which planning decisions are made concurring the forward affairs of an organization. By definition, future in unknown, yet managers must take decisions today which either depend on or affect conditions ruling tomorrow such decisions can be in the field of investment, research and development, price advertising, recruitment and so on and involve the future values of variables like output demanded, wages rates, consumers income and the likely state of technology.

Business forecasting aims to reduce uncertainly about tomorrow, so that more effective decisions can be made today at by providing predictions of future values of variables from past and present.

Forecasting requires the assembly of pertinent facts about the past and present. Those facts should be appraised by a representative cross-section of the enterprise. Salesman, executing and the people who have gathered and analyzed the basic data the forecast could include:

- Estimates of general conditions in economy.
- Estimates of specific conditions, which effect the company's.
- In of market condition raw material prices lab our conditions new products etc.

2.12 Budgeting profit planning

Profit planning plays a very important part in business organization. It is a central part of formal organization, which implies communication and an individual contribution to co-ordinate action planned to secure the attainment of a common purpose.

Profit planning or budget explicitly states the goals in terms of time expectations and expected financial results for each major segment of entity.

A budget is a party of a broader financial planning process, budgeting includes plan that details revenues and new funds will be spent or labor, raw materials, capital gain and so on, as well as periodic reviews of actual versus budgeted amount. Budgeting is thus a management tool used both for planning and control. Depending on the nature of the business, detailed plans may be formulated for the next few months the next year orted for the next year of even longer.

Budget is a summary of all phase of a company's plans and goals for the future. It sets specific targets for sales, production, distribution and financial activities and it generally culminates in projected statement of cash position. An excellent method of determining profits and measuring managing, it should be emphasized that a budget is more than a financial instrument, for it relates also to quantities of product and to operations and consequently serves as a complete program of business activities in the period to which it relates. In award budgeting is planning the conduct of a business.

Any budget statement has the following essentials.

- Inputs and outputs are properly estimated and defined.
- Prediction in advance.
- Should be for a definite period of time budget is statement of estimated performance for specific period of time. The natural means of performance evaluation is the comparison between the ideals and the actual.

2.13 Corporate planning and profit planning

Corporate planning as concept requires some attempt at definition. It is a comprehensive future oriented continuous process of management which is implemented within a formal framework and which is responsive to relevant change in the external environment. It is concerned with both strategic and operational plans and through participation develops plans at the appropriate levels within the organization. It includes methods of monitoring and control and is concerned with both the short and long term.

2.13.1 Components or steps of corporate planning

a. Setting of corporate strategic objectives.
b. Establishment of the corporate performance required from.
c. External appraisal viz. surveying and analyzing the organizations environment.
d. Forecasting future performance based in the first phase on the results.
e. Analysis of the gap between the results.
f. Choice of strategies.
g. Evaluation of performance against plan.

Corporate planning and control planning has chosen relationship in the business plan. Profit planning is a no other dimension, it must be formulated within the corporate planning.

2.13.2 Importance of corporate planning

Corporate planning provides for as much flexibility as practicable but at the some time establishes a direction of corporate effort and a program of specific action which increase the achievements of the business over time through a increase the achievements of the business over time through a range of necessary of desirable modification. At least corporate planning reduces the adverse consequences of unfavorable circumstances beyond the influence of management. Any expectation that it can insure management answer signifies a fundamental misunderstanding of the nature and purpose of the process. Since the encompasses many indeterminate elements. It's potentiality is a significantly improved batting average of analysis and decision. A perfect record is by definition the result of chance, tool restrictive a scope of consideration or too short and interval of evaluation. A relatively small improvement in this diagnostic and prognostic average however, has a magnified affect on corporate success and profit overtime.

Corporate planning is required to help assure the survival and growth of a company. Corporate planning deals with the futuring of present decisions interims of setting goals developing strategies to achieve them translating strategies into detailed operational programs and assuring that plans are carried out. Corporate planning is essential in large organization to develop unifying framework in planning and decision making.

2.14 Line and staff responsibilities related profit planning

The chief executive has ultimate responsibility for profit planning. However, there must be a concentrate assignment of responsibilities to line a staff executive. Each line executive must be assigned center responsibility for:

- Operational decision inputs into the plan.
- Implementation
- Control

The profit planning program must be established upon a firm foundation of line responsibility and commitment to develop, implement and attain the role of each center in the enterprise objectives and goals. We can not over emphasize that profit planning and control program should be viewed as an approach to assist manages in line positions in carrying out their basic responsibility. They should view the plan as their own and they must assure full responsibility for attaining them.

In contrast the staff responsibilities for profit planning program includes:

- Designing and improve the system.
- Providing expert technical assistance analysis and advice to the line managers.

- Developing and distributing performance reports.
- Supervising and co-ordinations the operation of the system.

The chief financial officer should be assigned overall staff responsibility for the profit planning program. Normally the financial function includes a budget director or director of planning and control, who should be assigned the staff supervisory responsibility. Interview of the importance of an effective profit planning program the positive of the staff off the individual responsible for the program should be such that it will command attention and respect through at the out the firm.

2.15 Profit planning and control process

Profit planning will be related to profit making enterprises although it is applicative to other types of organizations. Profit planning process necessary integrates the planning leading control factions of management. Profit planning process typically is repeated each budget years. The planning process should involve periodic consistent and in-depth re-planning so that all aspects of operation are carefully re-examined and re-evaluated. An overview of a typical profit planning and control process has been depicted as below.

Management Function	Sequential phases of profit planning and control process	Primary responsibilities
↑ Planning ↓	1.External relevant variables; identity and evaluation 2.Broad objectives of the business develop or revise 3. Specific enterprise goals; develop consistent with item above tow 4. Enterprise strategies; specify major thrusts to attain the objective and goals. 5. Executive mgmt; planning instruments; specifying planning premises or guidelines for managers based on item above four. 6. Project plans; develop and evaluate for each project. 7. Strategic profit plan; develop for 3,5 or 10 years	↑ Executive Mgmt. ↓
Leading ↓	8. Tactical profit plan develop for up caring years. 9. Implementation of profit plans; implementation throughout the budget.	Leading Mgmt ↓
Controlling ↓	10. Performance Reports; prepare monthly reports by responsibility 11. Follow up; provide feed back, take corrective action and re-plan.	All Mgmt level ↓

2.15.1 The major components of PPC program are:

i. The substantive plan
ii. The financial plan
iii. Supplementary data and performance reports

2.15.2 Profit planning process are as follows:

i. Identification and evaluation of extremely variables.
ii. Development of the broad objectives of the enterprise.
iii. Establish specific goals further enterprises.
iv. Development and evaluation of enterprise strategies.
v. Executive management planning instructions.
vi. Preparation and evaluation of profit plans.
vii. Development and approval of strategic and tasted profit plans.
viii. Implementation of profile plans.
ix. Development dissemination and utilization of performance reports.
x. Use of flexible expense budgeting.

2.16 Development of Profit Plan

Profit plans are developed with the help of functional budgets. But before going to this process we have to a general knowledge of budgeting.

A budgeting is a comprehensive and coordinated plan expressed in financial terms for the operation of an organization for some specific period in the future. So a budget is the plan of the firm's expectations in the future. The word budget is used of many kinds of statements of future plans and expectation, varying enormously in their form and contents the use to which they are put and even their vary names (Edward and Hines, 1957:15)

A budget is generally understood to mean one of a series of similar statements prepared as a procedure and not as an isolated exercise. It is a statement of objective as well as a forecast of an estimate. In budgeting the companies are prediction what will happen.

“A budget is a quantitative expression of a plan of action and an aid to coordination and implementation. Budget may be formulated for the organization as a whole or for any sub unit. Budgeting includes sales, production, distribution and financed aspects of an organization. Budget programs are designed to carry out a variety of functions planning, evaluating, performance, coordinating activities, implementing plans, communicating, motivating and authorizing actions” (Charles, 1992: 123).

The preparation of comprehensive budget begins with planning of sales. This planning will establish the basis for the detail planning production. Following the production schedule material usage and purchase budget, direct labour budget, expenses budget are derived in an appropriate sequence.

2.16.1 Sales Budget Plan

Sales plan is the starting point in the preparation of comprehensive profit planning and control. All the other plans and budgets are dependent upon the sales budget. The budget is usually presented both in units and 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 (Holmes, 1970:627)

“The sales planning process is a necessary part of production planning because (a) it provides for the basic management decision about marketing, and (b) based on the decisions, it is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic, most of the other parts of the overall plan is not realistic” (Welsch, 1998:16)

The primary source of cash is sales revenue, so depending upon the sales volume all other operational activities such as capital additions, the manpower requirement, the production level etc. setting.

The sales budget is a foremost of total sales prices and values in respect of each production of a future budget period." After the planning premises have been received, development of the sales plan is next step in preparing the profit plans. The sales plan has three distinct parts (Ratham, 1994:12)

1. The planned sales volume at the planned sales price per unit for each product.
2. The sales promotional plan and
3. The sales expenses plan.

"The sales budget is the sales master plan for the future period. The sales budget itself is an estimate of three main figures" (a) The income that will be earned from sales, (b) The costs and expenses of making these sales and (c) the sales surplus. The income from sales will depend on the quantity and the price of the goods which will be sold" (Halsall, 1974:57-58)

The primary purposes of sales plan are as follows:

1. To reduce uncertainty about future revenues,
2. To incorporate management judgment and decisions in to the planning process.
3. To provide necessary information for developing other elements of a comprehensive profit plan and
4. To facilitate management control of sales activities (Welsch, 1998:172)

2.16.1.1 Sales Planning and Forecasting

We should not be confused on sales planning and forecasting which are synonymous. They are not the same. But they are related with each other. A forecasting is not a plan; rather it is a statement and quantified assessment of future conditions about sales revenue based on one or more explicit assumptions. A forecast should always state the assumptions upon which it is based. A forecast should always state the assumption upon which it is based. A forecast should be sales plan the management of company may accept, modify or reject the forecast. Whether a sales plan incorporates management decisions that are based on the forecast, other inputs and management judgments about such related items as sales volume, price, sales efforts, production and financing. A sales forecast is converted to a sales plan when management has brought to bear management judgment, planned strategies, and commitment to aggressive actions to attain the sales goods. (Welsch, 1998:171).

“The term sales forecast is sometimes distinguished from sales budget as follows. The forest is estimate, the prediction that may or may not become the sales budget. The forecast becomes the budget only if management accepts- it as an objective. Often the forecast leads to adjustments of managerial plans, so that the final sales budget differs from the original sales forecast. (Charles, 1992:15).

A sales forecast is converted into sales plan when management has brought to bear management judgment, planned strategies, commitments of resources and a managerial commitment to aggressive actions to attain the sales goals. In contrast, sales forecasting is a technical staff function. “A sales forecast has been translated into a sales budget and numbers of factors have to be taken into consideration. (Charles, 1992:66)

“The short term sales forecast provides the basis for the current year sales plan and finished goods inventory plan. At the same time the influence the long-term sales forecast is reflected to the capital expenditure plan and in finished goods inventory plan. The long term sales forecast serves at what might be called another end of the finished good inventory plan (Thomas, 1992:502)

Typically, sales forecasting are prepared at the staff level by technically trained individuals, employing numerous sophisticated analyses (such as trend fitting correlation analysis, mathematical models, exponential smoothing and operation research techniques) whereas sales planning is the function of top management.

2.16.2 Strategic and Tactical Sales Plan

A sales planning can be developed of two types of plans in accordance with period. Those are long range planning or strategic sales planning (for 5 to 10 years) and short range plan or tactical sales planning (for one year or less than one year). The sales planning prepared for more than one year is strategic sales pluming and the time is not fixed for long range plan. Commonly 5 years to 10 years strategic plan. The planning prepared for one year or less than one year is short-range sales planning or tactical sales plan. The format is also known as strategic sales planning. Usually strategic sales plan requires depth analysis of future market potential. This is build up from a basis foundation such as population changes, state of economy, industry projections and company objects. The effects of long-term strategies are also brought to bear on the long-term sales plan. They would affect in such area as pricing development of new product expansion of distribution channel, cost patterns.

Tactical sales plan is to be developed for short term period in a company for future 12 months detailed by months and quarters. It includes detailed plan for each major products and for grouping of major products. Short term sales plan (Tactical sales plan) are usually developed in term of physical units or jobs and in sales dollars.

For planning and controlling purposes short term profit plans must be developed by sales responsibility because short term profit plan provides major considerations for planning and controlling purpose. It is also necessary for completing other components of profit plan.

2.16.3 Comprehensive Sales Plan

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

Step-1 Develop management guidelines specifies to sales planning including the sales planning process and planning responsibilities.

Step-2 Prepare one or more sales forecast consistent with specified forecasting guidelines including assumption.

Step-3 Assemble all the other data that will be relevant in developing a comprehensive sales plan.

Step-4 Based on above steps apply management evaluating and judgment to develop a comprehensive sales plan.

Step-5 Secure managerial commitment to attain the goal specified in the comprehensive sales plan (Welsch, 1998:17)

It emphasizes that these step must be revised and implements in various ways depending on the characteristics of the business and the expertise of the management.

2.16.4 Consideration of Alternatives

Developing a realistic sales plan involves consideration of numerous policies and related alternatives and a final choice by executing management among many possible course of action. Important consideration should be given on the problems which are as follows:

a. Price-cost consideration

Price and sales volume are mutually interdependent in the competitive market because, sales volume and price also closely tied together, a complicated problem is posed for the management of almost every company. Thus estimation of the demand curve and the unite cost curve must be considered in the sales plan.

b. Product line consideration

In the development of sales plan the number and variety of products that will plan to sell, should be determined. The strategic and tactical sales plan must include tentative decision about new product line to be introducing ld product line to be dropped, innovation and product mix.

2.16.5 Production Budget Plan

The requirement of the sales plan must be translated into the supporting activities of the major functions. After complete sales plan the next step in developing profit plan is develop a production plan. In case of manufacturing enterprise, sales plan must be converted into production requirements. The production plan involves determining the number of units of each product that must be manufactured to meet planned sales and maintained planned inventory level of finished goods. The supporting activities are different for service company the sales plan must be converted service capability, for retail or wholesale enterprise, the sales plan must be converted into merchandise purchase, the sales plan be converted to production requirement in manufacturing company.

“A production budget is generally an extension of the sales budget subject to any increases in any inventories that may be decided” (Charles, 1992:48)

The marketing plan specifies the planned volume of each product for each time period through out the planning period. The next step is to develop a production plan. This entails the development of policies about efficient production levels use of productive facilities and inventory levels. The quantities specific the marketing plan adjusted to conform to production and inventory policies, given the volume of gods that must be manufactured by product and by interim time period. Thus, the production budget can be represented in this way:

Sales volume = finished goods inventory change production requirement (Welsch, 1998:2-10).

“The production plan involves determining the number of units each product that must be manufactured to meet planned sales and maintain the planned inventory level of finished goods. Production plan must consider for each product the quantity which is now no hand in inventory the quantity required to meet the projected sales and the quantity which it is desired to have in inventory at the end of the budget period. Production budget is based on estimated sales, production must be planned to allow sufficient time to manufacture the products before the estimated date of sales. “The product budget is estimated of the quantity of goods be manufactured during the budget period. The production is concerned with estimating the probable output of each product in the forth coming budget period. (Welsch, 1998:2-10)

Production is prepared on the basis of :

a. Sales budget
b. Plant capacity
c. Opening inventory of finished goods,
d. Required closing inventory of finished goods and
e. Policy of the management.

Production is prepared for each product and manufacturing department and divided into monthly budgets for planning the following factors is considered.

a. Economic batch-quantity
b. Delivery schedules
c. Seasonal condition
d. Optimum utilization of labour of plant capacity,
e. Optimum utilization of labour without much overtime and ideal time.
f. Stock requirements and
g. Work in progress (Welsh, 1998:184).

There are three types of production policy which are given below.

a. Stable Production policy Vs unstable inventory policy

In this policy fixed units are to be produced equally in every month or specified period, while the final inventory of finished goods are to be unstable. Therefore, the budgeted sale of that period is unequal. The policy utilizes the full capacity, it reduces labour turnover, and attracts better employee to the company. With this policy company can get regular supply of raw material. But, with this policy there is problem of high shortage, high capital requirement and high inventory risk.

b. Unstable Production policy Vs Stable inventory policy

Units of final inventory are to be stable at the end of each period and production units are to be fluctuated in each budget period. The number of units produced and budgeted sales are directly related. With this policy company can get advantages of simplified storages problem, low capital requirement, low inventory cost, proper preservation of inventory and lack of inventory risk. But, we can mention these disadvantages in this policy which are low efficiency of employee, high labour turnover, high training expenses, lack of regular supply of raw materials and increase idle capacity.

c. Flexible in both inventory and production

In this approach, flexible units are to be produced as well as flexible units of final inventory are to be maintained for specified budget period.

2.16.5.1 General Consideration in Production Budget

There must be coordination between sales plans, production plans and inventory policies and the production budget provides the basis of obtaining the coordination.

Production plan affects so many decisions; therefore there should be serious consideration in preparing the production plan. Welschm Milton and Hordon have suggested the following points to be considered in planning, production and inventory levels.

1. Total production requirements (by products) for the budget period.
2. Inventory policies about level of finished goods, work in process and the cost of carrying inventory.
3. Plant capacity policies, such as the limits of per miscible departures from a stable production level throughout the year.
4. Adequacy of manufacturing facilities.
5. Availability of direct materials purchased components and labour.
6. Length of the processing time.
7. Economical lots or run.
8. Timing of production throughout the budget period by products and by responsibility center.

2.16.5.2 Long Range Vs Short Range Production Plan

To develop a long range plan broad estimates of production levels are necessary to plan plant capacity requirement (involving capital addition), factory cost structures, personal requirements, and cash flows. For long range planning purpose, only major increased or decrease in inventories need to be taken into account.' But the short range production plan should be an annual production plan detailed by product and by months or quarters. Also the production activities should be planned by responsibility centre within the manufacturing division (Welsch, 1998:214)

2.16.5.3 Responsibility for Production Planning

Production manager is responsible for preparing the production budget. The completed marketing plan should be given to the manufacturing executive who is responsible for translating it into a planned production program consistent with managerial policies and subject to certain internal limitation. Planning, scheduling and disputing of the curtail production throughout the year are function of the production department, so production executive should be responsible for planning and control of these function. The executive have initial knowledge about plant and personnel capacities, availability of materials and the production situation. Inventory levels, stability of production and capital additions, are the issue of top management policies. In case of multi-plant production, a balanced and coordinated production program requires and for its careful attention of top management is required. With respect to planning of production, the planners must determine an optimum balanced between sales inventory and production levels.

2.16.6 Material and purchases Plan Budget

Production is possible when there exist materials. In the absence of materials we should go through purchase. In this connection, comprehensive profit planning cannot be dealt as a perfect subject except what material and purchase budget. After the sales and production has estimated, the next step is to prepare material purchase budget. When the production budget is completed then the requirement of raw material and components to be use in the process of manufacturing the finished products could be estimated. Based on the production budget, the quantities of each materials to be used is determined and this determination of material usage leads to the solution of the problem of when and how much to purchase of each material.

In developing material plan, adequate co-ordinate should planned and control among (1) production requirement of raw materials and common parts, (2) raw materials and parts inventory level, (3) purchase of raw materials.

This is materials and purchase budget which usually requires the following four sub-budgets.

1. Material and parts budget

It deals with quantities of direct materials and parts required for planning production by time, product and responsibility center.

2. Material and part purchase Budget

After the preparation of material budget, a plan for material purchase must be develop, which is known as purchase budget this specifies the quantities and timing of each materials and component part needed, quantities to be purchased, the estimated cost and the required delivery dates.

3. Materials and part inventory budget

This specifies the planned levels of raw materials and parts inventory in term of quantities and cost.

4. Cost of Materials and parts used budget

This budget specifies the planned cost of material and part that will be used in the productive process.

The materials purchase budget and its sub-budgets should be designed in such a way that the related activities and cost will be budgeted in terms of responsibility centre interim time periods, type of raw materials and parts and type of finished products.

Formula for planned purchase of materials

Material required for production (units)	……………
Add: Ending inventory of materials required	………….....
Total material required	xxxxxxxxxx
Less: Beginning inventory of material	………….....
Planned purchase of material	………….....

The basic two questions should be answered in developing the policy with respect to purchase and inventory. The first is how much to purchase at a time is determined by Economic order quantity (EOQ).

Formula for EOQ is: $EOQ \text{ X} \sqrt{\frac{2AO}{C}}$

Where,

A= Annual requirements in unit

O= Average annual cost of placing an order

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

The second is when to purchase is determined by Reorder Level (ROL). At this level, the inventory is equal to quantity needed to sustain production for a period equal to the time to reorder and receive the replenishment. Often safety stock is included in ROL.

2.16.7 Direct Labour Budget/Plan

2.16.7.1 Meaning

For annual profit plan, direct labour budget should be developed by responsibility centre, interim periods and product wise. Direct labour is defined as those labour costs directly identifiable with the production specific units of finished goods. The direct labour budget includes the planned direct labour requirements necessary to produce the types and quantities of output planned in the production budget. “Direct labour budget is largely dependent upon the production budget. Calculation of the total number of hours now takes place. Standard time is determined by time and motion studies, the hours are then converted into labour requirement of each department of cost centre. The labour hours multiplied by the rate of wage including allowances indicate the direct labour cost. (Welsch, 1998:23).

Direct labour budget is estimation of planned direct labour hours and cost. When production budget is competed and planned units of each product to be produced is budgeted then budget will be prepared by multiplying the estimated labour hours per unit to be produces. The direct labour budget comprises the planned direct labour requirement necessary to produce the types and quantities of outputs planned in the production budget. The responsibility for preparing the direct labour budget should be assigned to the executive in charge of manufacturing. The cost accounting and personnel departments also help for preparing direct labour cost plan. After completion of this plan, it should be submitted to the budget manager for review and next submitted to the executive committee. When the direct labour budget is tentatively approved it becomes the part of the profit plan. (Welsch, 1998:281).

In some case, it is found tthat labour cost are greater than all other costs combine. In broad concepts, labour costs include all expenditure of employee: top executive, middle management personnel, staff officers, supervisors and skilled and unskilled employee.

The production plan provides the underlying data for planning direct labour requirements. The direct labour budget required two additional decisional inputs:

a. The standard direct labour hours per unit of each finished goods and
b. The average hourly wage rate planned.

The budget must show the planned direct labor hours and cost by organizational responsibility and by product. The direct labour budget should be prepared in details. In order to calculate the cost of production of each product the labour budget should specify the planned direct labour requirement by interim time periods and by responsibility center, usually direct labour hous's budget and direct labour cost budget are prepared separately. Direct labour hour budget is converted into direct labour cost budget by used of the pay scale or rate per direct hour expected to be in effect during the coming budget period. Direct labour budget is the means to the management for planning manpower development program.

2.16.7.2 Approaches in Planning Direct Labour Costs

The approaches used to develop the direct labour budget depends primarily on the:

a. Method of wage payment
b. Typed of production processes involved.
c. Availability of standard labour times.
d. Adequacy of the cost accounting related to direct labour costs.

Basically, three approaches which are used to develop the direct labour budget:

1. Estimate the standard direct labour and hour required for each unit of each product and then estimates the wages rates by department cost-centre or operation. Multiply the standard time per unit of product by the average hourly wage rate, giving the direct labour cost per unit of output for the department, cost center or operation. Multiply the units of output planned for the department, cost center or operation by the unit direct labour cost rate to obtain the total direct labour costs by product.
2. Estimate ratios of direct labour cost to some measure of output that can be planned realistically.
3. Develop personnel tables by enumerating personnel requirements for direct labour in each responsibility center (Welsch, 1998:281-282).

So, for the controlling of direct labour cost is concerned, it depends on competent supervision direct elements of control of direct labour costs are as follows:

1. Day to day attention to such costs and
2. Performance reporting and evaluation of results.

2.16.7.3 Planning Direct Labour Hour and Wae Rate

Internal factors may indicate the most particle approach to use for planning direct labour hours. An important function of industrial engineering is develop standard labour times for various operations and products. In some producing department reliable labour time standards can be developed. It is impractical to estimate direct labour time accepts in terms of average based on experience. Generally, there are four times for each product. These are time and motion study, standard cost directly estimate by supervisors and statistical estimate by a staff group. So planned direct labour hours planning production rate.

If it is possible to relate planned production to direct labour hour and to plan wage rate realistically for each productive department, computation of planned direct labour costs involves multiplying planned labor hours by planned wage rates.

It is also important for serve and retail companies to budget labour costs. Labour account for the every portion of expenditure in bank, restaurants, hotels and transportation companies. Such companies do not generally use the classification of direct labour and labour costs are usually referred to as operating expenses.

2.16.8 Overhead Budget

The cost sector of manufacturing enterprise is vitally influenced by factory overhead, distribution on administrative expenses. There are three broad categories of expenses and general administrative expenses and for this three separate sub-budgets are prepared.

“Expenses planning should not focus on decreasing expenses, but rather on better utilization of limited resources. Expenses planning and control should focus on the relationship between expenditures and the benefits derived from those expenditures: The desired benefits should be viewed as goals, and sufficient resource must be planned to support the operating activities essential for their accomplishment.” (Welsch: 302)

To support the objectives and planned programs, reasonable expenses should be maintained and the relationship between expenditures and benefits derived from those expenditures should be focused and analyzed. Some companies cut expenses without considering the effects on benefits. Although such decision temporarily reduce expenses, soon they face ever higher cost because of break down inefficient machines, frustrated employees, shortened assets, lives etc.

The expenses of planning the knowledge of cost behaviour is important cost behaviour is the response of a different volume of output. There are three distinct categories of expenses when they are viewed in relation to change in output.

i.	Fixed expenses:	Change in total directly with changes in output, constant per unit.
ii.	Variable expenses:	Change in total directly with changes in output, constant per unit
iii.	Semi-variable expenses:	Neither fixed nor variable change in the same direction of output but not proportionately.

The expenses budget should be in total for each responsibility centers and by interim time periods. The expenses budget can be divided into three sub-budgets.

Three broad categories of expenses are included with the overhead budget.

a. Manufacturing overhead (Factory overhead)
b. Selling and distribution expenses
c. Administrative expenses.

2.16.8.1 Manufacturing or Factory Overhead Budget

After preparation of production budget, then direct labour and direct materials budget be prepared and manufacturing overhead budget is also prepared on the basis of production budget. Planned cost of goods manufactured is consolidation form of direct materials budget direct labour bud and manufacturing overhead budget.

Manufacturing overhead is not directly identifiable with specific products or jobs. It is a part of total production cost. Manufacturing overhead consists of indirect material, indirect labour, all other miscellaneous factory expenses, such as taxes, insurance, depreciation, supplies, utilities, repairs etc.

“Manufacturing overhead is that part of total production cost not directly identifiable with specific products or jobs. Manufacturing overhead includes many dissimilar expenses therefore it causes problems in the allocation of these costs of production. There are two distinct types of responsibility center (departments) in most manufacturing companies; producing and services. Responsibility for the operaton of each department should be classified separation of in the chart of account used by the cost accounting department.” “Manufacturing overhead is the total in indirect labour, indirect materials cost and indirect expenses of the factory” (Welsch, 1998:207).

While developing the manufacturing overhead budget the following step should be taken:

1. Translate the requirements specified in the production plan into output or activity in each department. By doing this we can compute the planned departmental output or activities.
2. Plan departmental overhead expenses.
3. Allocate the planned department expenses to the producing department.
4. Allocate the producing department expenses to the products.

Following this above step, per unit overhead rates for each product could be computed by adding the direct materials cost and direct labour cost for each products.
We are in position to computer the cost of goods manufactured.

2.16.8.2 Selling and Distribution Expenses Budget

Selling and distribution expenses include all costs related to selling, distribution and devivery of products to customers. In many companies, this cost is significant percentage of total expenses. Carefully planning of such expenses affects the profit potential of the firm. “Fundamentally the top marketing executive has the direct responsibility for planning the optimum economic balance (for profit potential) between (a) the sales budget (b) the adverting budget and (c) the distribution expenses budget. Because of interrelationship between them sales, advertising and distribution expenses should be viewed as one basic problem (Welsch, 1998:314).

Selling and distribution expenses are not product cost and are not allocated to specific product. A separate distribution expenses plan should be developed for each responsibility center in the distribution function- This includes expenses related to selling, distribution and delivery of products to customer.

Mainly there are two types of selling expenses:

1. Sales office expenses which cover the cost of salesman and their administrative support.
2. Sales direction and promotional expenses, which cover the cost of directing the sales effort and promotional charges such as advertising.

The distribution expenses budget should be planned by responsibility center and by interim time periods. In some case, this might be by sales district, in other cases this by products.

2.16.8.3 Administrative Expenses Budget

Administrative expenses include expenses other than manufacturing and distribution expenses. These expenses are incurred in the responsibility centers that provide supervision and service to all functions of the enterprise rather than in the performance of any function.

It is advisable to base budgets administrative expenses on specific plants and program. Post experience adjusted for anticipated change in management policy and general economic conditions helpful. Because most administrative expenses are fixed an analysis of the historical record will often provide a sound basis for budgeting them.

2.16.9 Flexible Expenses Budget

Flexible budget is directly related to expenses and cost. The fundamental concepts of flexibility budget for expenses are that all expense are incurred because of (a) the passage of time, (b) output or activity. The concept focuses on the effect on expenses (and costs) of the passage of time and output or productivity activity. The critical problem in developing budget formula for each responsibility center in a business is determination of the (a) fixed component and (b) variable rate of each expense. To determine fixed and variable components in expenses required the following steps.

1. Precise definition of expenses.
2. Careful selection of an activity base for each responsibility center.
3. Identification of the relevant range of output.
4. Selection of appropriate methods to analyze expenses to separately identify the fixed and variable components of semi-variable expenses.

2.16.10 Capital Expenditure Budget

"Capital budgeting involves the generation of investment proposals: the estimate of cash flows for the proposal the evaluation of cash flow, the selection of projects based upon a acceptance criteria, and finally the continual evaluation of investment projets after their acceptance (Van Horne, 1976:66)".

"Capital expenditure often called capital budgeting, which is the process of planning and controlling the strategic (long term) and tactical (short term) expenditures for expansion and contraction of investment in operating (fixed) assets. A capital expenditure is the uses of funds to obtain operational assets that will (a) help earn future revenues or (b0 reduce future cost. Capital expenditure includes such fixed (operational) assets as property, plant, equipment, major renovations and patents. Typically, capital expenditure projects involves large amount of cash, other resources and debt that are tied up for relatively long period of time. Capital expenditures are investments because they require the commitment of resources today to receive higher economic benefit (profits) in the fixture.

Capital expenditures becomes expenses in future as their related goods and services are being used to earn higher future profits from future revenues or to achieve future lost savings." (Ratham, 1994:394-395). "Capital budgeting is the making of long term planning decisions for investments and their financing" (Charles, 1976:453).

The investment decisions commonly known as capital budget Capital budgeting means planning for capital expenditures in acquisition in capital assets, such as a new building, new machinery or new project as a whole. The capital budgeting involves following steps.

1. Consideration of investment proposals including alternative.
2. Application of profits, cash flows and analysis of cost benefits of two project.
3. Estimation of available funds and utilization of funds.
4. The objective is to maximize the profits with the utilization of available funds" (Ratham, 1994:154).

The budget of capital is included in- the short range profit plan presents that specific portion of the strategic long range capital additions plans that will materialized during the upcoming year, capital expenditure as for (a) major capital additions such as land, buildings, major improvement and maintenance and (b) minor or small capital expenditures that should initially be records as assets because they help to generate future revenues. The capital of expenditure budget includes a strategic plan and tactical plan for (a) the major capital expenditure projects and (b) a blanket for the minor or small expenditures.

The top executive, working with the other members of executive management has primary responsibility for the capital additions budget. However, the primary responsibility for projects and other proposals should include divisional and departmental managers (Welsch, 1998:400).

The proposal generation, analysis and implementation are three states of capital budgeting. Welsch, ‘Hilton and Garden have suggested the following process for planning and controlling capital expenditure component activity (Welsch, 1998:140).

Phase 1 : Identify and generate capital additions, projects and other needs.

Phase 2 : Develop and redefine capital additional proposals.

Phase 3 : Analyze and evaluate all capital additions, proposals and alternatives.

Phase 4 : Make capital expenditure decisions to accept the best alternatives and the assignment of project designations to selected alternatives.

Phase 5 : Develop the capital expenditure budget,

a. Strategic Plan: re-plan and extent the long term plan by dropping the past year and adding one year into future.
b. Tactical Plan : develop a detailed annual capital expenditure budget, by responsibility the comprehensively profit plan.

Phase 6 : Establish control capital expenditures during the budget year by using periodic and special expenditure in periods after completion.

Phase 7 : Conduct post completion audits and follow-up evaluations of the actual results from capital expenditures in periods after completion.

The primary problems in developing a capital expenditures budget are:

a. The identification, analysis and evaluation of all relevant capital, expenditures, alternatives and,
b. Based on investment worth, selection of the best alternatives.

Capital expenditures involve two kinds of assets: (a) Depreciable assets, (b) Non-depreciable assets such as lands. Capital expenditure decision situation may be divided into 3 types (a) certainty (b) risk and (c) uncertainty.

The assets of capital budgeting analysis are comparing the benefits that occur over a period of time with amount invested. This comparison is made with a view to judging whether the benefits that occur over a period of time are at least high as the amount invested.

The selection of one alternatives or projects by the management is capital expenditure decisions. While doing such decision focus should be given mainly in two points. First investment decisions selecting the best alternatives based on their economic worth and second financing decision determining the amounts and sources of funds needed to pay for the selected alternatives. While making decisions of capital investment, serious consideration should be given and proper evaluation should be made on proposals.

The widely used methods for measuring the economic value of capital expenditure are:

1. Short cut method
    a. Pay back period
    b. Accounting rate of return
2. Discounted cash flow method
    a. Let present value
    b. Internal rate of returns

Short cut method

a. Pay back period: This method computes the pay back period which is the number of year it takes to recoup a cash investment from the annual net cash inflows from the investment. The formula is

$$\text{Pay back period in years (PBP)} = \frac{\text{Net cash Investment}}{\text{Annual Net Cash Inflows}}$$

b. Accounting rate of return: This method represents the ratio of the average annual profits to the investment in projects. The formula is

$$\text{Accounting rate of return (ARR)} = \frac{\text{Average annual net cash inflow}}{\text{Cash outflow of the investment}}$$

Discounted cash flow method

a. Net present method: This method compares the present value of the net cash inflow with the present value of the initial net cash cost of a capital expenditure project, tile amount difference between these two present value amounts is called Net Present Value. The net ash inflows are discounted to present value by using a minimum rate of return. The formula of calculate Net Present Value (NPV) is:

$$NPV \ \mathrm{X} \ \frac{At}{(1 \Gamma K)t}$$

Where,

K= cost of capital or forget rate of return,
T= No of years,
C= Initial cost outlays
A= Expected cash inflows.

b. Internal Rate of Return (IRR) : The IRR is time rate that will discount all the future net cash inflows so that their discounted sum will exactly equal the initial outflows of time investment project. The formula is:

$$A0 \ \mathrm{X} \ \frac{A1}{(1 \Gamma r)1} \Gamma \frac{A2}{(1 \Gamma r)2} .... \frac{An}{(1 \Gamma r)n}$$

Where,

R = IRR
A0 = initial investment at time zero.

After analyzing the above methods of measuring capital investment decision criteria can be summarized as follows:

Method

Accepted Project	Lower the PBP
PBP	Higher ARR
NPV	Higher the NPV
IRR	Higher the IRR
ARR	(IRR>K)

2.16.11 Cash Budget

The cash budget is a forecast of expected cash receipts and payments for a future period. A cash budget shows the planned cash inflow, outflows and ending position by interim time periods for a specific time period. In annual profit plan, short term cash plan is to be included. Basically cash budget includes two parts (a) the planned cash receipt (inflows) and (b) the planned cash disbursement (outflow).

Planning of cash inflow and outflow gives the planned beginning and ending cash position for the budget periods. It will indicates (i) need for financing probable cash deficit (ii) neef for investment planning to put excess cash to profitable use. Cash budget is related with other budget such as sales budget, expenses budget capital expenditure budget etc.

Objectives of Cash Budget are to

a. Give the probable cash position at the end of each period as a result of planned operation,
b. Identify cash excess or shortage by time periods.
c. Estimate the need for financing and or availabilities of idle cash for investment.
d. Co-ordinate cash with (a) total working capital (b) sales revenue (c) expenses (d) investments and (e) liability
e. Establish sound basis for continuous monitoring of the cash position.
f. Indicate the availability of cash discounts.
g. Preserve liquidity.

2.16.11.1 Approaches to Develop a Cash Budget

There are two approaches used to develop the cash budget.

A. Cash receipt and disbursement budget

It is also called cash account or direct method. It is simple to develop. It is after used for short term cash planning as a part of the annual profit plan. This approach is based on detail analysis of the increase and decrease in the budget cash account such budgets as sales, expenses and capital expenditures.

B. Financial Accounting Approach

It is sometimes referred to as the indirect income statement approach. Basically, planned net income is converted from accrual basis to a cash basis. Its starting point is planet net income. It requires less supporting details and provides less detail about the cash inflow and outflow. It is useful for making long range cash plan.

2.16.11.2 Techniques for improving cash flow

Planning cash flow of a company should include consideration of how to improve cash flows. Improving cash flows involves increasing the amount of available cash a day to day basis. To accomplish this objective, the management should focus on (a) the cash collection process to speed up cash collection (b) the cash payment process to show down the payment of cash (c) the investment policies for investment of idle cash balance to obtain the objective of cash improvement of the company.

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

1. Customers are encouraged for immediate payment of credit sales and account receivable.
2. Providing cash discount for early payments.
3. Reviewing credit grading process to determine whether bad credit risk are being scream out. All accounts receivable are received before due or not.
4. Considering the ways to decrease the time between the date the customers pay by cheque and the date that the cash is available for use in the bank account of company.

Normally, the following techniques are often used to minimize this time gap:

i. Using lock box system.
ii. Opening bank accounts in related areas.
iii. Decreasing cheques processing time within the company and make daily right deposits of all cash and cheques received during the day.
iv. Promote timely and frequent billing an account receivable. Bill immediately after sale.

Some process often used to improve the efficient of the cash payments process are as follows.

i. Making all the payment on the latest non penalty day. Do not pay early.
ii. Make all the payments by cheque to maximize float in favour of the company.
iii. Take cash discount allowed for early payments.
iv. Establish policy of non cash advance to both employees and outsiders.
v. Establish policies and payment process to minimize the possibility of fraudlent payments by company employees. The company should develop specific policy about the investment temporarily idle cash.

2.17 Performance Report

Attainment of the planned profit is vital since management has to develop considerable time and effort to develop this. Evaluation of effectiveness and efficiency of plans operations and performance are essential fields of managerial activities. Control is the process of obtaining conformity of actual performance with planned course of action.

For internal management use of performance reporting is important part of comprehensive profit planning and control system. Performance report shows the extent to which the organization planned goals and objective are attained.

Performance reports usually prepared on monthly based and follow a standardize format from period. Such reports are designed to facilitate internal control by the management. It reports the actual results compared with goals and budget plan. The main objectives of performance report are communication of performance measurements, actual results are related variances.

As being one of the main tools for management control performance reports should process certain characteristics. Welsch, Hilton and Gordon have suggested that the performance reports should be designed in such a way that it will fulfill the following criteria (Welsch, 1998:54).

1. Tailored to the organizational structure and focus of controllability (that is by responsibility center)
2. Designed to implement the management by exception principle
3. Repetitive and related to short time periods.
4. Adapted to requirements of the p primary users.
5. Simple understandable and report only essential information.
6. Accurate and designed to pin-point significant distinction.
7. Prepared and presented promptly
8. Constructive in time.

Performance reports should be available in timely basis. The gap between the decision point and performance reporting should be minimized. Unfavorable situations and problems are critical to manager at the time they occur. As time passes the manager becomes more concerned with new events and less concerned with past.

Manager should analyze these monthly reports carefully to be fully knowledgeable about high and low performance in their respective responsibility centers. Follow up procedures should begin at managerial level to discus and analyze both satisfactory and unsatisfactory conditions. Decisions should be made about the ways and means to correct unsatisfactory conditions. Favorable variances should also be analyzed (a) to determine whether the goal were realistic, (b) to commend those responsible for high performance and (c) to transfer some 'know how' to other responsibility centers.

2.18 Budget Variance

Variance is the deviation between budgeted or planned goals and actual results. As performance report shows such variance, the next step is to analyze such variance and to determine the underlying causes for managerial planning and control purpose variance analysis is to determination of the reasons for a reported variance whether favorable or unfavorable. The difference between standard cost and actual cost is variance.

There are numerous ways to study or investigate variance to determine the underlying causes. Some of the primary approaches are the following (Welwch, 1998:570)

1. Conference with responsibility center managers and supervisors and other employees in the particular responsibility center involves.
2. Analysis of the work situation including the flow of work co-ordination of activities, effectiveness of supervision and other prevailing instances.
3. Direct observation.
4. On the spot investigations by line managers.
5. Investigations by staff groups.
6. Internal audits.
7. Special studies.
8. 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 or reference point. Variance analysis is frequently applied in the following situations.

1. Investigation of variance between actual result of the current period and the actual results of a prior period.

2. Investigation of variance actual results and standard cost.
3. Investigation of variance between actual results and planned or budget goals reflected in the profit plans.

Generally, following steps involved in analyzing variance.

a. Setting standards
b. Measurement of performance
c. Analyzing variance
d. Taking corrective action

Variances are analyzed in the following areas:

a. Raw materials variance
b. Overhead variance
c. Sales variance
d. Profit variance

Variance should be broadly grouped under two categories favorable and unfavorable variances, future should be classified as controllable and then related center or manages should be accounted for responsibility.

2.19 Break Even Point

There is a close relationship between budgeting and cost-volume profit analysis (break even point). Although the analyze may be applied to historical data, its best application is to budget estimates. If flexible budget is not used and the variability of expenses is not known the careful analysis of cost-volume-profit relationship provides (a) expense data for annual profit plan and (b) expense data adjusted to actual output for the periodic performance reports. The break even point defined as that volume of levels at which revenue exactly equals total cost is some what incidental to the broader scope of cost volume profit analysis. This analysis is directly concerned with the effect on profits on changes in (a) fixed costs (b) variable cost, (c) sales quantities, (d) sales prices and (e) sales mix. It is a device used to determine the usefulness of the profit planning process of the firm. However, it should be noted that the formal profit planning and control involves the use of budgets and other force casts and break-even analysis simply provide an review of the profit planning process and helps to evaluate the purpose and reasonableness of such budgets and forecast. As a staring point in the profit planning, break-even point helps to determine the minimum sales volume at which the profit goal of the firm will be achieved (Hampton, 1976:582).

A break-even point occurs where total revenue from sales of goods or services is just sufficient to cover total costs. The formula used to calculate a break-even points as follows:

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{Selling price per unit-Variable cost per unit}}$$

Break even analysis is the study of the relationship between budgeted revenues and costs to determine how changes in each affect profits. The step in break-even analysis is to compare the break-even-point with projected operations. In the case of production below BEP, the responsible management should not proceed with the product under study unless fixed and variable costs can be reduced and or the selling price increase. It is in this way that break-even analysis facilitates pre-control and helps managers avoid situations where performance objectives will not be realized.

2.20 Production Planning in Nepalese Public Enterprises

Most of the public corporations in Nepal suffer from lack of corporate planning which renders the directionless and aimless. BOD of these corporation is occupied with routine work and minor day to day problem. The report of auditor general of Nepal has mentioned that most of the corporations do not perform their product planning. Generally, an enterprise sounds efficient which has a good profitability base of its own good market standing etc. Profitability itself alone is not good indicator of efficiency though it is one of the good indicators of efficiency. Profit and loss has too much impact on the morale of the enterprise itself that is why, every enterprise wants to disclose as much profit as possible by giving even cosmetic treatment, where possible. Product is the function of numerous variables like cost reduction due to adoption of new technical know how, managerial action, market forces (high demand) leading to high capacity utilization, consumer taste and behavior and so on (Shrestha, 1992:45).

How the product planning is developed and implemented can be understood from the research of Radhe Shyam Pradhan. He found that "The productivity fluctuate widely not only from one corporation to another but also from one year to another." (Shrestha, 1992: 86). Though fluctuation of profitability of enterprise is different in each year, no connective action and investigation has been done.

In manufacturing PEs, the profit planning program is the most important tools for the utilization of score of resources and for effectively accomplishing the goals and objectives of the undertaking.

2.21 Review of Some Research Works in the Related Field

Let us now review some of the works that have been done in the related area of research and to define what remains to be done in the field of research. It provides foundation for developing a comprehensive theoretical framework from which hypothesis can be developed for testing.

There are some research works made on the topic of profit planning in the Nepalese context. These studies directly or indirectly influence the concerned authorities and the shape of the present research.

In this section, some of the related thesis have been reviewed here in the context of Nepal.

1. Mr. Nava Raj Kandel (2006) has submitted a research work related to "Profit planning in Nepalise utility concern. He has tried to reveal the effectiveness of profit planning system in public enterprises. The case study is in Nepal Electricity Authority. The major finding of his study are as follows:
   i. The role and importance of public enterprise in the infrastructural development in the country is still vital because of an organized private sector. Lack of basic infrastructure and lack of initiative.
   ii. The main objective of public enterprises should be to generate a fair rate of return on investment along with quantitative service to the general public. But most of the Nepalese manufacturing public enterprises doesn’t set clear cut objectives and special goals.
   iii. Although, almost every manufacturing public enterprises have trained and experimental manpower in the field of planning, they lack initiative motivation and expertise in doing their jobs.
   iv. The in-depth overview of performance of manufacturing PE’s indicate that they are running in losses since long despite of governments directives of making at least 10% profit on its total implementation.
   v. There is no any specific concept of effective planning and implementation.
   vi. PEs are suffering from the problem of under utilization of capacity, idle manpower, recurring losses, higher production cost, underutilization of assets and are receiving criticisms from different persons and concern
2. Mr. Bir Bahadur Karki has conducted thesis on profit planning in agriculture farm special reference with “A study of potato and tomato production in Panchakhal valley under Kavre district of Nepal.” The main objective of study was to examine the effectiveness of profit planning system in the agriculture farming. Specially in potato and tomato vegetables crops. The study covered only five year period of time from 1987 to 1991. The study has tried to explain about the activities and also

state the trend of the production, profit, cost of these two crops. Data and information have been taken randomly from 35 farmers on the basis of sampling method. Data were taken from both sector i.e. primary and secondary sources.

Mr. Karki has pointed out various findings. Few major finding are as follows:

i. Generally, peasants prepare sales and production plan at the yearly Basis.

ii. The goals and objectives of farmers are not found in written and stated form.

iii. Peasants do not formulate the substantive plans, strategic long range profit plan, tactical short range profit plan, variable expenses budget and break even analysis.

iv. Peasant do not take in to account the inventory policy, proper routing and scheduling of the production plan and material plan.

v. Peasant do not prepare the planned income statement, balance sheet and profit plan.

vi. Peasant do not record cost of production, selling expenses and other expense, they also do not make calculation on their own labour, own manure cost, land revenues tax.

vii. Peasant do not have knowledge about the nature and contend of the profit planning.

Finally, Mr. Karki come to conclude that most of the farmers are not adequately understanding and realizing objectives and there is no any practice of profit planning.

He recommends that farmers of Panchakhal valley need to adopt profit planning procedures and techniques. They should develop the flexible budget and cost volume analysis. They do not evaluate the statement of broad objectives and its achievement. They need to develop systematic periodic performance reports marketing information system.

3. Mr. Prawakar Shrestha has tried to point out some features and problems of profit planning in the contest of Nepalese manufacturing private enterprises in his research work "A profit planning in Private Enterprises in Nepal. A comparative study Jagadamba Cement Industry Pvt. Ltd submitted to faculty of management, central department of T.U. in the course of partial fulfillment of MBA. He has explored the data of 6 years from 2055/056 to 2060/061. Research methodology was followed through secondary sources of data for data gathering procedure. But other essential information primary data were also uxed.

   Mr. Shrestha has pointed out various finding on the analysis of data and information few major findings are as follows:

   i. Jagadamba Cement Industry Pvt. Ltd has not adequately considered controlled and non-controllable variables effecting the company.
   ii. Objectives are not clear, conflict between social objectives and profit objectives arises.
   iii. They have no satisfactory achievement of specific goals that were targeted.
   iv. Nepalese Private Enterprises have been lack budgeting experts and skilled planners. Plans are formulated on traditional ad-hoc basis.
   v. Red-tapism in decision making and implementation of profit plan and programs.
   vi. There are not successful to maintain coordination with an organization. Both companies have been suffering from the departmental and staff conflict.
   vii. Failure in achievement due to inadequate evaluation of internal and external variables.
   viii. Failure due to inadequate forecasting system.

Mr. Shrestha has recommended various recommendations to improve the profit planning system of these enterprises. Among them the major recommendations are:

i. It seems necessary to develop, implement and improve the process of profit planning from the very beginning to the end.
ii. Last volume Profit Analysis should be taken into consideration while developing sales plan and pricing strategies.
iii. System of periodical performance report should be strictly followed.
iv. A systematic approach to comprehensive profit planning should be developed.
v. Programmes to improve the employee productivity should be made effective.
vi. Sales forecasting should be made on realistic basis.
vii. Nepalese public enterprises should attempt to solve the behavioural problem. That arise in organization.
viii. Trained and qualified manpower of budgeting and planning should be hired.
ix. Planning department should be given adequate authority to decide and create new ideas to formulate various plan.

4. Mr. Jay Narayan Yadav has written a thesis about profit planning in manufacturing public enterprises of Nepal "A case study of Hetauda Cement Industry Ltd." He has included six year period starting from FY 2058/059 to 2063/064 for the sake of long run planning. He has also used the period of 7th years and 8th year period. The presentation and analysis of data is admirable, he has briefly presented the long-term and short term data and he has also described the weakness as well as concluding very well. He has used secondary data for unpublished documents mangazines and report of auditors general office and primary data collected from the personal inverview.

Mr. Yadav has pointed out various findings on the analysis of data and information. Few major findings are as follows.

i. Sales of HCIL are quite erratic and or flexible with which might have been caused by unstable trend in production.

ii. The operation cash flow, which is the indication of HCIL ability to meet its commitment is not satisfactory.

iii. The company have so many weak points some of them are lack of authority, scarcity of raw materials, packing materials, spare part of machinery and lack of high-grade limitation.

iv. The company, mostly used cost plus pricing policy but in rare case it used only the government pricing policy.

v. The working environment of the company is not so good.

vi. HCIL used the sales variance and yield variance to measure performance. The analysis shows that the variance of the company has not meet the largest so it is not so favorable.

vii. Lack in co-ordination on among department and there are role conflict between department managers.

viii. Most of the Nepalese Public Enterprises have unnecessary and unproductive expenditure and investment, which leads the PEs are running loss and become huge social burden.

Mr. Yadav has recommended various recommendations to improve the profit planning system of these enterprises. Among them the major recommendations are as follows.

i. Production should be smooth thus should be compatible with sales need.

ii. Material has to be decreased to enough margin to absorption of fixed cost and again leave surplus.

iii. The concept of PPC in accepting as the heart of management. In the absence of which the management will be of no meaning, but using PPC as weapon is not an easy task. The management of HCIL should be well recognized with PPC and its implementation. Even the government level seminar, training etc should be conducted in the managerial level. The experts on this field should be hired for a while for the betterment of the company.

iv. The personnel of HCIL are seemed to be de-motivated to their works, so the proper motivational program should be conducted and reward and punishment should be made more efficient.

v. It is found that the targets (Physical as well as financial) are settled in an ad-hoc basis so that the gap between achievement and target is pointed very high. This should be minimized for this. The HCIL should know the forecasting accuracy and so forth.

vi. The company should follow the modern management system with modern equipment so that the unnecessary employees and the salary benefits provided to them will be minimized or the expenses will be minimized so far.

5. Mr. Arjun Subedi has submitted a thesis entitled "Production Planning in Manufacturing Public Enterprises in Nepal" with special focus on "A case study of Nepal Drugs Limited'. It has examined to what extent the company has been applying profit planning system in actual practice His thesis has mainly concentrated with the application of comprehensive profit planning system and has examined the present planning premises adopted by NDL. The study period covered a period between FY 2053/054 to 2063/064. The data are taken from the financial reports of NDL and both primary and secondary

Mr. Yadav has pointed out various findings on the analysis of data and information. Few major findings are as follows.

i. NDL has a lack of budgeting experts and skilled planners so plan are formulated on traditional and ad-hoc basis.

ii	Planning department of NDL have no adequate authority to decide and create new ideas to formulate various plans.

iii. The plans are prepared at the top level and lower level participation is not encouraged.

iv. Return on capital employed is not satisfactory. There is negative return on capital employ in all the years except in FY 058/059, 059/060 and 060/061.

v. NDL is not able to maintain a proper co-ordination between various departments in term of goals, objectives and strategies formulation.

vi. Monthly and annual sales budget have been prepared but there is substantial gap between sales targets and achievements.

vii. Cash budget is not prepared.

viii. There is also substantial gap between production target and achievements. The production budget depends upon sales budget but the plan are made on ad-hoc basis.

ix. Cost volume profit relationship are not considered while developing sales plan and pricing strategies.

x. Different statistical tools show the positive relationship between budget sales and actual sales, budget production and actual production.

xi. There is no well-developed system of performance evaluation for employee.

xii. NDL has been suffering from under utilization of its available capacity.

xiii. There are no clear-cut boundaries to separate cost into fixed and variable. Classification of cost is not scientific and systematic.

xiv. Distribution system of NDL in producer-wholesaler-retailer-customer. It has only two sales deposit.

Mr. Subedi has recommended various recommendation which are as follows:

i. Nepal government should not interfere the PEs and NDL must be kept with full autonomous and responsibility. So that it can be accepted.

ii. NDL must formulate clear-cut goals, objective and policies organization wisely as well as departmental wise.
iii. NDL should develop specific program to face the competition. Quality of the products should be highlighted rather than the price aspects.
iv. NDL should decide to develop effective program to expand growth rate.
v. Cost volume profit relationship should be considered while formulating production plan and NDL should be familiar with flexible budget system.
vi. NDL should develop its overhead budget in a well-classified and scientific way.
vii. Cost should be clearly identified and separated as fixed and variable.
viii. NDL should stress an efficient utilization of fixed assets.
ix. Material purchase budget should be prepared into detail by raw material and by interim item periods. It should be developed on the basis of production budget. EOQ method should be applied on the whole purchasing raw material.
x. Capital expenditure should be planned in detailed for evaluation purpose. Discounted cash flow technique should be applied.
xi. New sales depots should be established at present. There are only two sales depots.

At last but not least, it is suggested that NDL should adopt systematic approach towards comprehensive planning. To apply this approach experts should be hired. This will lead to increase the productivity, profitability and discourage losses.

CHAPTER-III
RESEARCH METHODOLOGY

3.1 Research Methodology:

Research methodology is a way to systematic investigation to solve the research problem and create new knowledge i.e. general applicable. The research should have certain characteristic like possible be controlled rigorous systematic, valid and verifiable empirical and critical.

The basic objective of this study is to highlight the PPC in MCI Pvt. Ltd. with respect to efficiency to earn profit and sales. This study on the profit planning of MCI Pvt. Ltd. in the past years and the result will be carried with the help of different budgeting. The motive of the study is to analyze the plan of MCI (Pvt.) Ltd. with broad view to suggest the measures to improve the economic activities from the existing conditions as well as to recommend suggestions for its improvement in future. The methodology consist research design period covered nature and sources of data and tools and techniques of analysis. Research methodology is the way to solve systematically about research problem.

3.2 Research Design

Research design is the plan structure and strategy of investigation conceived as to obtain answer to research question and control variance. It means definite procedure and technique, which guide to study and propound ways for research viability. The aim of the study is analyzed the budgeting of MCI Pvt. Ltd. In this respect the present study has followed descriptive as well as analytical approach to achieve the objectives. On the basis of design and attempts have made to investigate profit planning of MCL (Pvt.) Ltd followed by some innovative suggestion.

Present study follows the descriptive as well as analytical statistics of the analysis to meet the stated objectives of the study. 'Descriptive studies were primarily concerned to find out 'what is'. The secondary data are analyzed from the data collected from the annual financial report of the related industry. Few financial statements of selected industry were tabulated using operational sheet.

3.3 Period Covered

Profit planning has two time period i.e. long term and short term plan. For short term plan it cover FY 2003/04 to 2007/08. On the basis of given data, strength and weakness of MCI Pvt. Ltd. are identified.

3.4 Population and Sample of Survey Design

A small portion chosen from the population for studying it's properties is called a sample and the number of units in the sample is known as sample size. The method of selecting for study, a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection of part of the population on the basis of which a judgment or inference about the universe is made. (Sharma and Chaudhary, 2058, 171-173).

Here only one sample industry is taken out of industry. For selecting the sample, non-random sampling method is used here among different methods. The samples are taken only from (Pvt.) Ltd. Industry under study is as follows, whose general introduction and major objectives are presented in chapter one. The sample industry is Mittal Cement Industry Pvt. Ltd. Likewise, financial statement of five years (beginning from 2003/04 to 2007/08 are selected as samples for the purpose of it.

3.5 Nature and Sources of Data

The research is based on primary as well as secondary source of data. For research purpose, published financial statements (i.e. annual report) of the industry were collected. Similarly, financial statement of selected industry and various market related information were collected and tabulated in spreadsheet. Such secondary information was gathered from the concerned industry.

Carefully designed research instrument (questionnaire) used for primary data analysis. The researcher has carefully designed questionnaire by considering various influencing factor of industry environment, cash management quality as well as financial activities. The factors derived from previous research findings related area are to profit planning. Basic sources of primary information were employees of MCI (Pvt.) Ltd. Related students and experts. In addition, answer on certain queries made to staffs of concerned industry personnel requires and discussion were also being conducted for classification and verification of collected data and for recommendation.

3.6 Primary Data

The primary data to obtain the opinion poll have also been used in this thesis writing. This was obtained by informal chat with the concerned personnel of sales, production, financial, administrative departments. Out of about 25 concerned people 12 persons have been selected for such informal chat back by the questionnaire of different aspects of inquiry and some primary data collected from daily news magazines.

3.7 Secondary Data

In this study secondary source have been used such as balance sheet, profit and loss amount, physical verification and different official records for 6 years from 2002/03 to 2007/08 as shown by financial statements, the trend of sales, production, inventory, cash volume, profit and ratio analysis both actual and budgeted data have been presented and analyzed.

Besides, annual report of MCI (Pvt.) Ltd., and other secondary data such as economy survey, article, research report and other publication, magazines and views-paper, and unpublished thesis and studies. All the gathered data have been used according to need and requirement of this study.

3.8 Tools and Techniques of Analysis

For presentation of collected data and it’s interpretation some budgeting tools are used. The tools used in this study are mainly ratio, percentage, BEP analysis, regression and correlation analysis, time series analysis, graph diagrams etc. There are sales, production, inventories, capacity utilization, profit and loss, manpower, capital expenditure, administrative expenses and cash flows relation to long term and short term period of MCI Pvt. Ltd. in the research variables of present study.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

It is a fundamental necessary for the PEs to formulate the goal and objectives for operational purpose. Profit planning is the formal expression of the enterprises plan, goals and objectives stated in financial terms destination. Profit planning is a systematic approach for attaining effective managerial performance. Profit planning is a managerial tool which is applied by every business, either manufacturing or non-manufacturing enterprises. "Comprehensive product planning and control is viewed as a process designed to help management effectively perform significant phases of the planning and control functions." (Welsch 1998:30).

In every country, public enterprises have been established for the development and strengthening the industrial infrastructure. They have been providing essential goods and services to the nation. Moreover, they help in generating government revenues and to get control over the price. Thus, PEs have been directly and indirectly contributing to the development of nation.

Profit is inevitable for business for its continuity, development and fulfillment of social expectation. Generally the effectiveness of business organization is measured from its earning power. Although the concept of profit has been changing from time to time, the objectives of profit has been taken as a traditional view. At present, profit approach is accepted which is possible through reduction of cost. Besides, the enterprises should consider preservation of environment and supplying goods and services in time and at responsibility and it should contribute to government revenue before attaining of its profit goal. The enterprises plan should be formulated within framework of four major elements: 1) Economic 2) Technical 3) Social and 4) Political. It has been suggested by business logic to meet the expectation of the public.

The PEs should be able to utilize the limited and scarce resource in a better way. It means that it has to utilize the limited resources economically.

4.2 Sales Planning

Sales plan provides basis management decisions for marketing strategies. On the basis these decision and strategies the enterprises can develop a comprehensive sales plan.

The sales plan in that step which open the door of financial plan. It is an estimation of sales for a period of time for future. The sales planning is already described under previous chapter sales budget.

Long Term Plan

In the context of this country a few public enterprise are prepared two periodic profit plan. A long-range profit plan encompassing a time horizon at time years beyond the upcoming year and a technical short-range plan for each four months period of following budget year.

Long Term Sales Plan

The table 4.1 shows a picture of long-term trends of MCI. The table shows the achievements are always below the target. Targets are unchanged since F/Y 2062/063 sales achievement is higher in 2061/062 and lowest in.

Table No. 4.1

Sales Targets and Achievements Cash

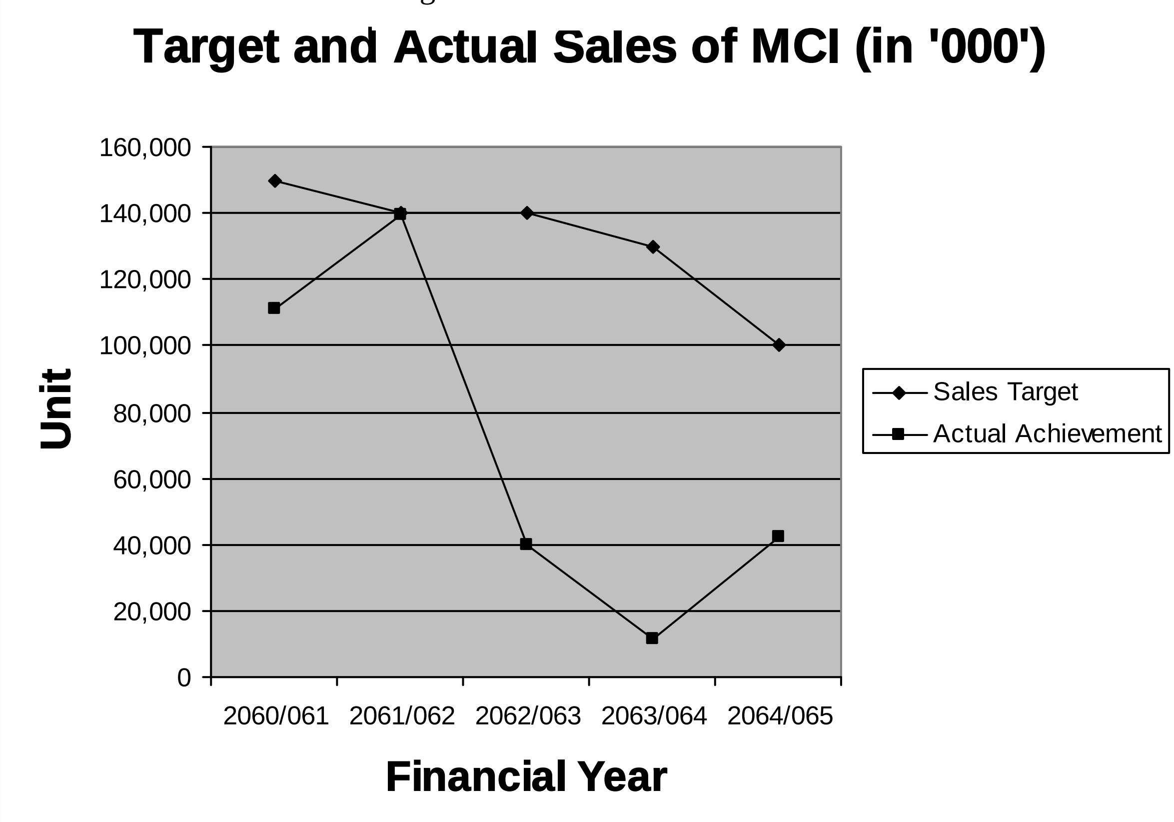
Amount. in '000' (in Rupees)

Fiscal Year	Sales Target	Actual Achievement	Achievement
2060/061	150,000.00	111,141.00	74.00%
2061/062	140,000.00	139,576.00	99.69%
2062/063	140,000.00	39,603.00	28.28%
2063/064	130,000.00	11,459.00	8.81%
2064/065	100,000.00	42,556.00	42.55%
Average			66.70%

Source : Annual Report of Mittle Cement Industry

The figure 4.1 shows the graphical presentation of the target and actual sales achievement of MCI.

Figure No. 4.1



The arithmetic means, standard deviation with coefficient of variation MCL's sales target and Achievement for ten years period from fiscal years 2064/065 from previous tables summarized as under.

Let us consider,

Sales target = x

Actual Achievement = y

Table No. 4.2

Statistical Value of Sales Target and Achievement

Detail	Sales Target(X)	Actual Achievement(Y)	Achievement (Y)
Mean (x)	13200	68868	68868
Standard Deviation (∃)	17204.65	48229.95	48229.95
Coefficient of Variance(C.V.)	13.03%	70.03.%	70.03%

Source : Appendix-1

This analysis shows that actual sales have been fluctuated over years and have never met the target. High standard deviation indicate low degree of uniformity of homogeneity of the data, which further substantiated by the coefficient of variance. On average, actual sales are 66.70% of the targeted sales.

To find out the correlation between target and actual, Karl Pearson's coefficient of correlation (r) is determined. For this purpose target figures (N) are assumed to be independent variable and achievement figure (y) are assumed to be dependent variable.

It is assumed that decrease there should achievement of correlation achievement will increase target increase be positive correlation between targets and achievement of correlation (r) is rested with probable error (r).

Karl Pearson's Correlation Coefficient is calculates as follows:

$$r = \frac{N \quad uv - \quad u \quad v}{\sqrt{N \quad u^2 - (\quad u)^2 - N \quad v^2 - (\quad v)^2}}$$

Where $u = \frac{x - A}{N}$ and $v = \frac{y - B}{K}$

and N, K are common factors.

r = 0.494 (Source : Appendix 2)

The figure of the value of 'r' shows that there is negative correlation between target sales and actual sales. But figure of 'r' is closer to '1' show that there is more close relationship between target and achievement. Actual sales deviated from year to year than target sales. The significane of the value 'r' is shown as under.

Probable Error (P.E.) = 0.506, where 0.506 is constant

$$= 0.6745 \times \frac{1-(0.495)^2}{\sqrt{5}}$$

= 0.2280

Since, r > 0.2280 the value of r is significant i.e. practically the correlation is certain. So, it is not doubtful that whether actual sales will go on same direction that of target sales.

A regression line can also be fitted to show the degree of relationship between target sales and actual sales and to forecast the achievement with given targets. For this purpose, achievement has been assumed to be dependent upon target sales as independent.

Here,

The regression line of achievement (y) on target (x)

$$Y - \bar{Y} = \frac{r\sigma_Y (X - \bar{X})}{\sigma_X}$$

= 68868

Sales Target (X)

Mean ($\bar{X}$)= 132000

S.D. (σ_X) = 17204.65

Sales Achievement (Y)

Mean ($\bar{Y}$) = 68868

S.D. (σ_X) = 48229.95

Then, $Y - 68868 = 0.494 \frac{48229.95}{17204.65}(X - 132000)$

Y = 1.3848X -113944.41

The regression line show negative relationship between target sales and actual sales, here a certain amount 113944.41 decrease but actual sales will be increase by 1.3848 per Rs. come out.

The target sales of 2065/066 = Rs. 10,00,00,000

Now, the value of Y(achievement) with target is:

$$Y = 1.3848\ X - 13944.41$$

$$Y = 1.3848 \times 100000000 - 113944.41$$

$$Y = 138366055.59$$

In the relation between target sales and achievement sales remain same as previous year then the achievement sales for F/Y 2065/066 is Rs. 138366055.59 as stated by the above regression equation.

Another statistical tool called least square method can also be used to analyze the trend of actual sales and to estimate the possible future sales for a given time of year. Three elements is an important factor with the passage of time series. Least square method will show the relationship between and actual sales.

Table No. 4.3

Time Series Analysis (of Sales) Fitting Straight Line Trend by Least Square Method

Fiscal Year	Actual Sales (Y)	X	X^2	XY
2060/061	111141	-2	11	-222282
2061/062	139576	-1	1	-139576
2062/063	39603	0	0	0
2063/064	11459	1	1	11459
2064/065	42556	2	4	85112
Total	**344335**	p**X=0**	p**X^2=10**	p **XY =265287**

Source : Appendix-1

Note: Since the number of year is even so, the deviation are taken from the middle of year 2062/063.

Straight line trend (y) = a + bx

Where,

$$a \text{ X} \frac{y}{N}$$

or, $a \text{ X} \frac{344335}{5}$

… a = 68867

$$b \text{ X} \frac{xy}{x^2}$$

or, $b \text{ X} \frac{\text{Z}265287}{10}$

or, b = -26528.7

… y = 68868-26528.7 x

The trend line shows the negative sales figure 26528.7 will decrease the sales every year if sales trend of past year continue for future. But, this amount is very poor.

To continue the sales budget (plan) of MCI following points can be pointed out.

i. Actual sales are fluctuating from year to year than target.
ii. Achievement is below than target sales.
iii. Sales target has high expectation.
iv. This is positive correlation between target sales and actual sales.
v. The correlation of coefficient is highly significant.
vi. The regression equation shows that there is negative relationship between target sales and actual sales.
vii. The straight line trend shows the negative sales figure for future.

4.3 Production planning

Preparation of long-term production plan is the second step in developing the profit plan. Product plan is an estimating the quality of goods to be manufactured during the planned period. The production plan is based on capacity of plan and requirement of sales plan. The main objective of the production plan is to fulfill the sales plan requirements.

To develop the production plan the following formula (equation) is to be used.

Production (in units) = sales units + desired ending inventory of finished good- opening inventory of finished goods

This formula means production plan should be based upon sales plan and inventory policy of the enterprise.

While developing the production plan there should be serious considerations to the following decisions.

a. Total production requirement by (product) for the planning period.
b. Inventory policies relative to level of finished gods and work in process.
c. Timing of production throughout the planned period.
d. The effect of the length of the processing time.
e. Economical labour runs.
f. Availability of raw materials purchased components and labour.
g. Adequacy of manufacturing failures.
h. Plant capacity policies such as the limits of permission departures from a table.

The main problem of production is availability of raw material and skilled manpower address in questionnaire.

So, the long term production units in MCI are planned within the constraint of raw materials availability. Production quantities are not based upon sales forecast, rather than sales forecast are based upon production plan.

Table No. 4.4

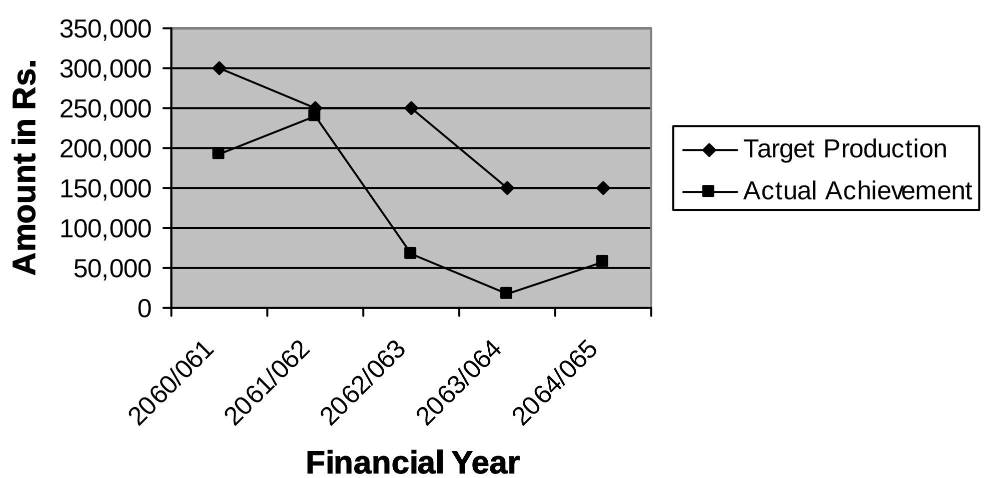
Production Targets and Achievements in Unit

Fiscal Year	**Target Production**	**Actual Achievement**	**% of Achievement**
2060/061	300,000.00	192,470.00	64.16%
2061/062	250,000.00	239,322.00	95.73%
2062/063	250,000.00	68,483.50	27.39%
2063/064	150,000.00	16,708.50	11.14%
2064/065	150,000.00	56,410.00	37.61%
Average			**47.21%**

Source : Annual Report of Mittle Cement Industry

The table no. 4.4 shows that the actual production is always below than production target.

Figure No. 4.4
Production Targets and Achievements in Unit



The figure 4.2 shows the graphical presentation of the target and actual production achievement of MCI. The figure shows that the actual production is below target production each year.

To find out the nature of variability of production target and production achievement of different years arithmetic means, standard deviation and coefficient of variation should be calculated.

Table No. 4.5

Variability of Production Targets and Production

Detail	**Production Target (X)**	**Production Achievement (Y)**
Mean	220,000.00	114,678.50
Standard Deviation (∃)	60,000.00	85,690.00
Co-efficient of Variation (C.V.)	27.27%	74.72%

Source : Appendix 3

Given analysis shows that standard deviation and coefficient of variance are greater in production achievement than production target which reflects that production achievement is more variable than targeted.

To find out the correlation between target and achiever figures, coefficient of correlation (r) is determined. For this purpose target figure (X) are assumed to be independent variable and achievement (Y) are assumed to be dependent variable. It means there should be positive correlation between target and achievement.

Karl Pearson's Correlation coefficient

Where,

$$r = 0.759$$

This figure of value of (r) shows that there is positive relation between target production and actual production.

The significance of the value of (r) is shown as under.

$$\text{Probable Error (P.Er)} = \frac{1.6748(1 - 0.759)}{\sqrt{5}}$$

$$= 0.1278$$

Since, r > 0.1278, the value of (r) is significant i.e. partially the correlation is certain. So, it is not doubtful that whether actual production will go on some direction that of target production.

A regression line can be filled to show the degree of relationship between target production and actual achievement for this purpose achievement is dependent upon target production.

The regression line of achievement (Y) on target production (X) as under

Production target (X)

Mean $(\overline{X})$ = 22000

SD (∃x) = 60000

Production Achievement (Y)

Mean $(\overline{Y})$ = 11467.5

SD (∃y) = 85690.07

r= 0.759

Regression equation

$$Y - \overline{Y} = r\frac{\sigma_Y}{\sigma_X}(X - \overline{X})$$

Putting the value

$$Y - 114678.5 = 0.759\frac{85690.07}{60000}(X - 220000)$$

or, Y = 1.08x-123768.94

This regression shows negative relationship between target production and actual production.

By this regression ascertaining the expected production achievement will give value of target production (X). This equation is used to ascertain the expected production achievement of F/Y 2065/066. The following result will come out.

Target production for F/Y 2065/066 = 150000 units

X = 15000 units (in tones)

Expected production achievement (Y)

$$Y = 1.084 \times 15000 - 123768.94$$

$$\text{or,} \quad Y = 38831.06 \text{ (tone)}$$

If the relation between target production and achievement production remains same as previous years than the achievement for F/Y 2065/066 is 38831.06 tones.

Another statistical tool called least square method can be used to analyze the trend of actual production and to estimate the possible future production for a given time of year. This element is an important factor with the passage of time. The production achievement change can be expressed by the component of series. Least square method will show the relationship between year time and actual production.

Table No. 4. 6

Time Series Analysis (of Production) Fitting Straight Line Trend by Least Square Method

Fiscal Year	Production Achievement (Y)	X	X^2	XY
2060/061	192470.00	-2	4	-384940
2061/062	2393220.00	-1	1	-239322
2062/063	68483.50	0	0	0
2063/064	16708.50	1	1	16708.50
2064/065	56410.00	2	4	112820
Total	573394.00	0	10	-494733.5

Source : Appendix 3

Note: Since the number or year is even, so that the deviations are taken from the middle of year 2062/063.

The equation straight line trend:

$$Y = a + bx$$

Where,

$$a \ \mathrm{X} \frac{y}{n}$$

$$\mathrm{X} \frac{573394}{5}$$

$$= 114678.5$$

$$b \text{ X} \frac{xy}{x^2}$$

$$\text{X} \frac{\text{Z}494733.5}{10}$$

$$= -49473.35$$

$$Y = 114678.5 - 49473.35\ (x)$$

This trend line presents the negative production figures. The production will be decreased by 114678.5 unit per year. If production trend of past year will continue for future.

To conclude the production budget plan of MCI the following points can be shown.

i. Production target is high but production achievement is low.
ii. Target production is more variable than actual production.
iii. There is positive correlation between target production and actual production.
iv. The production budget is not prepared on sales base.
v. The correlation coefficient is significant at all.
vi. The regression line shows negative relationship between target and actual production.
vii. The trend line of production shows the negative production figure for future.

4.4 Raw materials Budget of MCI

Material Budget is a coordination of the required raw material and parts inventory level, of raw materials and parts that must be purchased. Direct material cost cover that major portion of firms expenses in manufacturing expenses. Raw material budget is prepared after the completion of production budget. Production budget specify the quantity of products to be produced as calculated by multiplying the units to be produced with standard raw material quantity needed to produce for each unit.

In the production process most of the manufacturing expenses use material directly to include all material that constitute and integrate part of finished product and can be directly identified with cost of finished products. Direct material cost be usually viewed as a variable cost that that is a cost which varies in proportion to change in production output or volume. Indirect material is generally defined as material used in the manufacturing process but not directly tractable to each product.

In the concern of MCI, it used yearly raw material for 100% capacity is as follow:

Table No. 4. 7

Yearly Raw Material Requirements

Raw Material	Quantity
Clinker	52000 MT
Gyspum	650 MT
Fly Ash	9000 MT
Bags	120000 Pkt
Printed Sheet	120000
Grinding Media	50 MT

The total Material Budget of MCI is presented below.

Table No. 4. 8

Yearly Raw Material Budget

Raw Material	2060/061	2061/062	2062/063	2063/064	2064/065
Clinker (MT)	14070.00	19067.87	5941.475	1536.840	4751.200
Gypsum (MT)	974.95	1075.48	103.100	16.710	56410
Fly Ash (MT)	4086.85	2698.14	803.775	117.300	833.390
Bags (Pkt.)	388151	478479	137540	34157	111956
Printed Sheets (Pcs.)	-	356278	137540	34157	111956
Grinding Media (MT)	-	3.00	2.500	2.00	4.50
Slag	115.20	72.250	-	-	-

Source : Appendix 3

From the above table it is clear that MCI did not use slag in fiscal year 2062/063, 2063/064 and 2064/065. Industry also didn't use printed sheets and granting media in fiscal year 2060/061.

The following table shows the comparative material cost of MCI.

Table No. 4.9

Comparative Material Cost of MCI

Details	2060/061	2061/062	2062/063	2063/064	2064/065
Clinker	70,959,068.00	100,181,687.00	32,768,684.56	11,379,867.72	35,882,721.00
Gyspum	2,716,713.00	2,457,038.00	205,200.48	33,258.00	129,225.77
Fly Ash	10,920,009.00	7,813,568.00	2,109,640.09	298,121.00	2,298,978.97
Bags	3,090,543.00	4,377,853.00	1,288,712.91	405,349.08	1,238,469.40
Printing Sheet	-	66,613.00	25,696.50	6,345.50	20,895.75
Grinding Media	-	262,359.00	147,705.68	147,337.33	331,059.00
Stag	388,807.00	191,020.00	-	-	-
Total	88,075,140.00	115,350,138.00	36,545,640.22	12,270,278.63	39,901,349.89

Source : Annual Report of Mittle Cement Industry

The above table shows that total material cost in F/Y 2061/062 is higher than in all other fiscal year. The conditions of material play of MCI are not successful in this regard. Same are their enterprise expenses budget of MCI which are not diagnosed as controllable, non-controllable which means the expenses budget of expenses control program are not sufficient. Therefore, company should take this situation seriously and try to maintain the optimum level in the future.

4.5 Finished Goods Inventory

Finished gods inventory is the conclusion between sales and production. When sales exceeds production the inventory is used for sales and the end of inventory be decreased and on the other hand when production exceeds sales then the excess production will be Kept-In-To store and level of inventory will be increased. A certain level of inventory is needed for smooth sales activities of industry. Different industries have different inventory according to their nature. While determining inventory policies for finished goods, management should consider the following factors:

a. Stock levels

b. Storage of production period

c. Length of production period

d. Storage facilities and

e. Cost of holding inventory of MCI

Table No. 4.10

MCI Finished Goods Inventory on Trade (in Rs.)

Fiscal Year	Opening Stock	Closing Stock
2060/061	97202	294534
2061/062	294534	358869
2062/063	358869	21668986
2063/064	21668986	-
2064/065	-	327274.30

Source : Annual Report of Mittle Cement Industry

MCL has not maintained a clear-cut inventory policy. First the limited has policy for selling all production and than the remaining is kept as the stock for the next year in the other ward. MCI has a fluctuating inventory. The above table shows that closing of product is fluctuated year after year. It shows inventory is increasing because of he poor sales performance.

4.6 Planning Expenses

Planning expenses may cause either decreased or increased expenditure. Expenses planning should focus on the relationship between expenditure and the benefits derived from that expenditure.

MCI Pvt. Ltd has also some major problem of expenses. Few machines are old, so repair and maintenance expenses are growing day to day and electricity also failed. MCI Pvt. Ltd. being a private enterprise submitted the expenditure budget to finance ministry. But in such a case padding the expenditure budget is serious problem. Padding the budget means budgetary sack, which is difference between the total resource available to firm and total resources necessary to maintain the organization condition responsible for the budgetary slack. Budget padding problem exist because of insufficient alteration of policy maker, lack of communication for the budget approval process and ineffective leadership.

The table 4.10 represents different expenses such as manufacturing expenses, administrative expenses and depreciation etc. MCI Pvt. Ltd. from the year 2060/061 to 2064/065.

Table No. 4.11

MCI Pvt. Ltd. Expenses Report

Fiscal Year	Manufacturing Expenses (Rs.)	Administrative Expenses (Rs.)	Depreciation
2060/061	10686221	4187101	2346132
2061/062	12862682	358869	225219
2062/063	358869	21668986	3065977
2063/064	21668986	-	2929588.00
2064/065	-	327274.30	2550879.30
Source : Annual Report of Mittle Cement Industry			

Expenses planning and control is not reduction of cost it means better utilization of limited sources. It focuses the relationship between expenditure and benefits. Therefore, expenses planning and control is necessary to obtain enterprises goals. Reduction of cost without considering its effect on benefits causes higher costs because of break downs inefficient machines frustrated employees etc. Expenses must be necessary to operate the organization on efficiency. There are different kinds of expenses in the company.

The table no. 4.10 shows manufacturing expenses, administrative expenses and depreciation of MCI Pvt. Ltd from F/Y 2060/061 to 2064/065. The manufacturing expenses are higher than t other expenses. The total expenses of MCI in fiscal year 2060/061 is higher than other fiscal year and in 2063/064 lower than other years. It is necessary to control on excess expenses for every manufacturing enterprises. But MCI Pvt. Ltd. fails to control on its excess expenses for the reason, expenses are increasing year to year.

4.7 Human Resource Planning

Human resource planning refers the area of personnel needs, requirement, training, job description and evaluation, performance appraisal, union negotiation and wages and salary administration.

Direct labour cost occupies a significant position of total production. cost. So, that labour costs needs systematic planning and control. The basic reason for preparing separate direct labour, requirements, number of direct labour employees needed, labour cost of each product unit and investment requirement.

Labour is a major elements of production without it company cannot operate, so effective planning and systematic control of labor cost are essential to achieve the organizational objectives.

The following table shows the comparative direct labour plan of MIC Pvt. Ltd.

Table No. 4.12

Human Resource Budget

Fiscal Year	Office Level		Assistant Level		Total	
	Male	Female	Male	Female	Male	Female
2060/061	19	-	35	12	54	12
2061/062	18	-	48	17	66	17
2062/063	13	-	18	2	31	2
2063/064	17	-	20	5	37	5
2064/065	20	-	50	10	70	10

Source : Annual Report of Mittle Cement Industry

After analysis of direct labour plan, that is not sufficient for analyzed. There is not detail labor budget and no co-ordination with production target the factory has not determined the total labour hour required. It is limited only the number of persons. The above table shows that the number of direct labour is decreasing order in FY.

4.8 Capacity Utilization Planning

Scientific tools are used to manage inventory and capital facilities but they are not sufficient for profit planning to increase sales product is sufficient for better profit. Investment in fixed assets is commonly considered more productive with the implied assumption that their capacity is utilized properly. Capacity should be utilized optimally. Output should be market according to market condition although the profit is not the only sole indicator for good performance of company its various aspects and cross trend should be appreciated, such as sales may be increasing and profit may decline or inventory may be pile and solvency position or liquidity position may be weaken.

Production and sales as well as profit plans depend upon the capacity of machine. Higher the capacity higher units can be produced. Lost of production also depends on the utilization of capacity. Cost of production is lower at optimum level of capacity utilization. Lower utilization of capacity reduces working life of machine.

$$\text{Capacity Utilization} = \frac{\mathrm{Pr}\,oduction}{Capacity} | 100$$

Table No. 4.13

Human Resource Budget

S.N.	Fiscal Year	% of Capacity Utilization
1	2060/061	32%
2	2061/062	40%
3	2062/063	11.41
4	2063/064	2.78
5	2064/065	9.40
		Source : Annual Report of Mittle Cement Industry

The table no 4.12 shows the average percentage of capacity utilization from F/Y 206/061 to 2064/065. The main cause of idle capacity is inadequate availability of raw material, sales, manpower, poor management etc.

4.9 Capital Expenditure Planning

It involves decision to invest the firms fund to long term assets. Such decisions are of considerable importance to the firm. Since they tend to determine its value and size by influencing its growth, profitability and risk. Capital budgeting decision may be defined as the firm's decision to invest in current fund most efficiently in the long term assets and those which affected the firms operations beyond the one year period. The firms investment decision would generally include expansion, acquisition, modernization and replacement of long-term assets.

Since some annual return of saving is expected from each expenditure plan project therefore a decision on capital expenditure is generally taken on the basis of comparative study of investment and saving. The two are also termed as net cash inflows and net cash outflows.

Investment Evaluation Criteria

Three steps are involved in the evaluation as investment

a. Estimation of the required rate of return
b. Estimation of capital flows
c. Application of decision rule for making the choice

The following other characteristics should also be processed by a sound investment evaluation criterion.

a. It should measure the profitability by considering all cash flows.
b. It should be criterion, which is applicable to any conquerable investment project independent of other.
c. It should help to choose among mutually exclusive projects that project which maximizes the shareholders wealth.
d. It should recognize the fact that bigger cash flows are preferable to smaller ones and early cash flows are preferable to later ones.

e. It should provide a ranking of project in order to their economic desirability.

It should provide a means of distinguishing between acceptable and unacceptable projects.

In the case of MCI Pvt. Ltd. capital expenditure plan is prepared and finalized by the general manager of the company. Evaluation are made after planning of the company. Planning manager with the help of finance department and account department makes evaluations. MCI Pvt. Ltd. has not used for evaluation criteria.

It means that MCI Pvt. Ltd. has not practiced to use modern methods like, net present value method and internal rate of return method, which take time value of money into consideration,

4.10 Profit and Loss Account

Profit and Loss Account shows the final conclusion of operation of an accounting year. The traders are not satisfied with the calculation of gross profit earned during the accounting period. They needs to know the eventual profit or loss of the business with these objectives in view; a profit and loss a/c is prepared.

Profit and loss account contains all the items of revenue gains, losses and operating expenses incurred in carrying on the business and in selling and distributing the goods for the particular accounting period.

Here, in the table below Profit and Loss account of MCI Pvt. Ltd for last three fiscal year is presented in detail.

Table No. 4.14

P/L a/c of MCI Pvt. Ltd.

Particulars	2062/063	2063/064	2064/065
Sales	39603350.00	11459160.00	42555960.20
Cost of Sales	40249422.00	14554274.00	42407779.67
Gross Profit	**(646072.00)**	**(3095114.00)**	**148180.53**
Less :- Selling, General and Administrative Expenses	2907272.00	2481380.00	2484943.01
Operating Profit/Loss	**(3553344.00)**	**(5676494.00)**	**(2336762.48)**
Less :- Interest	2835401.00	1771951.00	432163.77
Depreciation	3065977.00	2929588.00	2550879.30
Net Profit/Loss BT	**(9454722.00)**	**(10278033.00)**	**(5319805.55)**
Less Tax	-	-	(43618.02)
Profit after tax	**(9454722.00)**	**(10278033.00)**	**(5276187.53)**
Profit/Loss upto Last year	(7320635.00)	(16775357.00)	(27525680.81)
Balance transfer to B/S	**(16775357.00)**	**(27053390.00)**	**(32801868.34)**

Source : Annual Report of Mittle Cement Industry

The comparative Profit and Loss Account of MCI, which has been shown above clearing that it keep records of revenues with deducing all expenditure accrued for generating profit. Profit and loss account shows the final conclusion of operation of accounting year. There is no practice of preparing projected profit and loss amount in advance. At the end of each accounting year, the financial department prepares income statement to know the profit and loss position of the MCI. The detail comparative profit and loss account of 2000/01 and 2061/062 has been shown in appendix 5.

It can be clear from the above profit and loss account that only during Fiscal year 2060/061 the industry had profit before tax for which the industry distributed bonus to its employee. But, in all other year the industry has been suffering from loss before paying tax.

4.11 Balance Sheet

The balance sheet shows the assets, liabilities and equity for the firm as of the last day of the accounting period. In effect it matches resources (assets) with sources (liabilities). It is commonly presented in two columns that illustrate the relationship between assets and the sources of those assets.

The balance sheet of MCI Pvt. Ltd. shows the actual position of assets, liabilities and equities of the company.

The following table shows the comparative position of assets, liabilities and capital from fiscal year 2060/061 to 2064/065.

Table No. 4.15

Balance Sheet of MCI Pvt. Ltd.

Particulars	2064/065	2063/064	2062/063
Capital and Liabilities			
Share holders fund-			
Share Capital	41100000.00	40000000.00	20000000.00
Medium and Long Term Loan	2250000.00	12450000.00	20700000.00
Total Liabilities	**43350000.00**	**52450000.00**	**40700000.00**
Assets			
Fixed Assets	23734033.70	26284913.00	29214501.00
Current Assets Loan & Advances-			
Inventories	8276246.95	2847858.00	3080768.00
Sundry Debtors	379466.25	188890.00	1041217.00
Cash and Bank Balances	2063869.74	154182.00	1136003.00
Loans Advances and Deposits	1912248.72	1395999.00	1429647.00
Deferred Tax	(428672.79)	-	-
Less: Current Liabilities and Provisions-			
Sundry Creditors and Other Payables	8974060.91	5475232.00	9477993.00
Short Term Loans	18415000.00	-	2499500.00
Total	**25389060.91**	**5475232.00**	**11977493.00**
Net Current Assets	(12757229.25)	(888303.00)	(5289858.00)
Miscellaneous Expenses			
Preliminary Expenses			
Profit & Loss A/c	32801868.34	27053390.00	16775357.00
Total Assets	**43350000.00**	**52450000.00**	**40700000.00**

Source : Annual Report of Mittle Cement Industry

4.12 Planning of Cash Flows

In the modern age the cash flow related to the changes of required cash as a basis financial statement. The planned statement of cash flow is necessarily prepared near the end of the annual planning cycle along with the planned. The planning and control of the cash in flows the cash outflows and the related financial important in all enterprises.

A statement of cash flows report the cash receipt and cash payment of an organization during the particular period. Cash flow provides the explanation of the Balance Sheet items have changed by providing information about operating investing and financing activities. The statement of cash flows explains where cash come from during a period and where it was spent. It generally defines changes in cash and cash equivalents.

Basically, the methods of develop cash flows starting with net income adjustments to net income are made for non-cash items effecting accurate basic net income essentially net income is converted from the annual basis to a cash basis (e.g. cash flow from operations). The other cash inflows and outflows are estimated for non-operating items such as sales of fixed assets, capital additions and payment of debt and dividends.

Planning the cash flow of a company should include consideration of how to improve cash flow, improving cash flow basically involves increasing the amount at available ash on a day to day basis. At last MCI should have an effective system of cash planning and control because of the potential consequences, it is possible for management to make decision.

Table No. 4.16

Cash Flow Statement for the year ended 31st Ashad

Particulars	2062/063	2063/064	2064/065
A) Operating Activities			
Net Profit or Loss before Income Tax	(9454722.00)	(10278033.00)	(5319805.55)
Add: Depreciation	3065977.00	2929588.00	2550879.30
Bank Interest	2835401.00	1771951.00	432163.77
Cash from Operating before W/C Changes	**3553343.00**	**5576494.00**	**(2336762.48)**
Add/Less :			
(Increase)/Decrease in current assets	15201081.00	1118885.00	(6135214.92)
Increase/(Decrease) in current liabilities	(7157440.00)	(6502261.00)	19913828.91
Bank Interest	(2835401.00)	(1771951.00)	(432163.77)
Cash from operating activities	**1654897.00**	**(12731821.00)**	**11009687.74**
B) Investing Activities			
Fixed Assets Purchase	(227473.00)	-	-
Cash from Investing Activities	**(227473.00)**	-	-
C) Financing Activities			
Decrease in medium and Long Term Loan	**(473158.00)**	**(8250000.00)**	**(10200000.00)**
Increase in Share Capital	-	20000000.00	1100000.00
Cash from Financial Activities	**(473158.00)**	**11750000.00**	**(9100000.00)**
Total Cash Flow (A+B+C)	**954266.00**	**(981821.00)**	**1909687.74**
Opening Cash and Bank Balances	**181738.00**	**1136003.00**	**154182.00**
Closing Cash and Bank Balances	**1136004.00**	**154182.00**	**2063869.74**

Source : Annual Report of Mittle Cement Industry

4.13 Performance Evaluation

Performance reporting for internal management uses an important part of a comprehensive profit planning and control system. All companies regard less of their size have reporting requirement to show their overall performance. (Welsch, 1998:542)

In the Nepalese context, enterprises have not a systematic and in-depth approach to performance evaluation. Even being the private owned enterprise, MCI do not care of their performance. Different techniques and criteria can be evaluating the performance of enterprise.

This research report uses following techniques to measure the performance of MCI Pvt. Ltd.

a. Financial Rtio
b. Identification of cost variability
c. Cost volume profit analysis
d. Flexible Budget

4.13.1 Financial Ratio of MCI Pvt. Ltd.

Ratio analysis is an important tool of financial analysis. The term ‘ratio’ measures the numerals or quantitative relationship between two variables. A ratio is calculated during one item of the relationship with the other base. In other words ration is indicated quotient of the mathematical expression and relationship between two or more thins. A ratio helps the analyst to make qualitative judgment about the firms firm’s financial positions and performance.

i Current Ratio (Standard 2:1)

It is the relationship of current assets and current liabilities. Current assets are those which can be converted into cash within short period of time, normally not exceeding one year. Current liabilities are those obligation which are payable within a short period. The calculation is made by dividing the total of current assets by total of current liabilities. Thus:

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

ii. Quick Ratio (Standard 1:1)

All current assets are not equally liquid, inventory and prepared cannot be termed to be a liquid assets. The quick ratio can be calculated in following ways.

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

iii. Inventory/Stock Turnover Ratio

Inventory turnover ratio indicates the company efficiency of inventory management. Generally, a high turnover indicates an efficient inventory management but a low level of inventory turnover implies excessive inventory holding warranted by production and sales and activity a slow moving or absolute in inventory.

$$\text{Inventory Turnover Ratio} = \frac{\text{Sales}}{\text{Closing Inventory}}$$

iv. Debtors Turnover Ratio

It indicates the velocity of debt-coefficient of firm. The higher the ratio the main efficient is the management on collection of debtors. It indicates that within a short period, the firm is collecting the cash from debtors. A low ratio shows that debt are not being collected rapidly.

$$\text{Debt Turnover Ratio} = \frac{\text{Total Sales}}{\text{Closing Inventory}}$$

v. Capital Employed Turnover Ratio

A relationship between sales and total capital is represented by the ratio. A higher ratio is preferable which shows that firm is very efficient on sales activity.

$$\text{Capital Employed Turnover Ratio} = \frac{\text{Net Sales}}{\text{Total Capital Employed}}$$

vi. Return on Capital Employed Ratio

This ratio indicates the productivity of permanent capital in terms of return. A high ratio is good sign and significant. It is very important from investment point of view the higher return is desirable.

$$\text{Return on Capital Employed Ratio} = \frac{\text{Net Profit}}{\text{Capital Employed}}$$

vii. Gross Profit Margin Ratio

Gross profit margin ratio expresses the relationship between gross profit margin and sales. A higher ration is a sign of good management. A low gross profit may reflect higher cost of goods sold due to the firm's inability of purchase at favourable terms.

$$\text{Gross Profit Margin Sales} = \frac{\text{Gross Profit}}{\text{Sales}}$$

Table no. 4.17 represents the ratio analysis of MCI Pvt. Ltd.

Table No. 4.17

Mittal Cement Industries

Financial Ratio Analysis

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Current Ratio	0.93:1	0.57:1	0.45:1	0.84:1	0.50:1
Quick Ratio	0.22:1	0.47:1	0.19:1	0.32:1	0.17:1
Debtors Turnover Ratio	27.69 times	1.37 times	104.36 times	60.66 times	40.87 times
Inventory Stock Turnover Ratio	377.34 times	38.89 times	1.83 times	ℑ|times|	130.03 times
Capital Employed Turnover Ratio	5.56 times	6.98 times	0.97 times	0.23 times	0.98 times
Return on Capital Employed	3.17 %	-23.31 %	-23.23%	-19.59%	-12.17%
Net Profit Margin	0.56 %	-33.41 %	-23.87%	-90%	-12.40%

Source : Based on Annual Report of MCI : Appendix-8

The table no. 4.17 shows the various financial ratio of MCI. The table 4.17 shows that current ration of MCI is in decreasing trend.

i. **Current Ratio:** The statement of current ratio is 2:1 less or more than standard ratio is not preferable. If it is less than standard ratio, it shows that solvency position may be better but working capital management not good. In the case of MCI, the current ratio is less than standard ratio each year.

ii. **Quick Ratio:** Purpose of quick ratio is to test on the ability of the firm's for immediate payment of current liability. Standard ratio is 1:1 less than standard ratio is not favorable for a company. The quick ratio of MCI is also not favorable.

iii. **Debtors Turnover Ratio:** A relation between sales and debtors is known as debtors turnover ratio. To test the efficiency for collecting the debtors is the purpose of this ratio. Increasing ratio is preferable which shows that the firm is collecting the debtors with a very short period. The table shows that DTR is 1.37 times to 104.36 times. Debtors turnover ratio is fluctuating each years.

iv. **Inventory Turnover Ratio:** The relation between sales and stock is known as inventory turnover ratio. This ratio evaluates the efficiency of a firm for inventory management. Inventory ratio is favorable which shows that the firm is very efficient on inventory management.

v. **Return on Capital Employed:** In F/Y 2060/061 return on capital employed is positive but not satisfactory except 2060/601 it is negative which is unfavorable.

vi. **Net Profit Margin:** Net profit is negative every year in F/Y 2060/061. The increasing ratio is favorable for a company. It indicates that the profit is increasing and cost of production or the direct cost is decreasing. But in case of MCI the gross profit margin is very unsatisfactory.

4.13.2 Cost Volume Profit Analysis C.V.P.

The relationship between cost volume and profit is known as cost-volume-profit analysis. It is an analytical tool for studying the relationship between volume cost, price and profit. It is also an important tool used for the profit planning in a business organization. CVP analysis shows volume or level of activities necessary at break even or to gain a certain amount of profit.

CVP analysis includes both contribution analysis and break even analysis. Break even analysis emphasizes the level of output or production activities at which sales revenue exactly equal to total cost i.e. there is no profit or loss. CVP analysis rests upon the foundation of cost variability separate identification and measurement of fixed and variable components of costs.

CVP planning of MCI Pvt. Ltd is based on the following assumptions.

a. Cost volume structure is based on the accounting data 2060/061.
b. Activity base is selected in terms of sales rupees.
c. Selling prices, variable cost volume ratio and fixed cost per annum.
d. Change in inventories and disregarded.
e. Non-operating income and non-operating expenses are also excluded from CVP relationship.
f. Result are presented at total company not on product wise.

Some formulas of Break-Even analysis are given below:

a. For determining variables cost for a given sales volume.

   Variable cost = S-(S × p/v ratio)

   Variable cost ratio = 100-p/v ratio

b. For sales

   S= $S = \frac{(CM)}{p/v - ratio}$

c. For contribution

   CM = S× p/v ratio

d. For calculation of fixed cost

   FC = S × p/v ratio-profit

e. For BEP

   BEP in Rs. = $\frac{FC}{p/v \text{ ratio}}$

Where,

S = sales

Vc = variable cost

Fc = fixed cost

CM = total cost

BEP = break-even point

Cost-Volume-Profit analysis of MCI Pvt. Ltd.

Computation of BEP and CVP analysis based on F/Y 2060/061

a. Variable cost volume Ratio/ P/c Ratio

$$\text{V/V Ratio} = \frac{\text{Total Variable Cost}}{\text{Sales (Rs)}}$$

$$= \frac{98761361}{111140494}$$

$$= 0.88$$

b. Profit Volume Ratio/ P/c Ratio

P/V Ratio = 1-V/V Ratio

= 1-0.88

= 0.12

c. Break Even Point (in Rs)

$$\text{BEP} = \frac{\text{Total Fixed Cost}}{\text{p/v ratio}}$$

$$= \frac{6533233}{0.12}$$

= Rs. 54443608

d. Margin of safety for budgeted 2060/061

MOS = Budgeted Sales- BE sales

= 150000000-54443608

= 95556392

e. Margin of Safety ratio for F/Y 060/061

$$\text{M/S Ratio} = \frac{\text{Margin of Safety}}{\text{Budgeted Sales}} \times 100$$

$$= \frac{95556392}{150000000} \times 100$$

= 64%

f. Budgeted Profit for the year 060/061

Budgeted Profit = MOS × p/v ratio
= 95556392-0.12
= Rs. 11466767.04

4.14 Major Findings of the Study

The major findings of the present study can be summarized as follows:

The study showed that actual sales have been fluctuated over year and have never met the target, however, a small standard deviation indicates a high degree of uniformity of homogeneity of the data, which further substantial by the coefficient of variance. On average actual sales are 66.70% of targeted sales. The study showed that achievements are always below the targets. Targets are changed every year. Sales achievement is in 2061/062.

The figure of the value of ‘r’ shows that there is positive correlation between target sales and actual sales. But, figure of ‘r’ is closer to ‘o’ than ‘1’ so that there is less close relationship between target and achievement.

A regression line can be also fitted to show the degree of relationship between target sales and actual sales to forecast the achievement with given targets. For this purpose achievements have assumed to be dependent upon target sales as independent.

The sales plan in MCI Pvt. Ltd is usually developed in terms of sales amount in rupees. The responsibility of developing sales plan is upon planning department. MCI Pvt. Ltd. Sales it’s output through variety of outlets. The sales department does not prepare sales forecasts neither it considerably contributes for sales plan. The sales department has a responsibility to supply the goods to custom and record the order.

The study shows that the actual production is below than production target. The study shows the production plan of MCI is classified by product line and by time period of a year classified into four months period.

The study shows a clear picture of production plan and sales plan of MCI Pvt. Ltd. The study shows that achievement is always below the target in case of sales plan. Sales achievement is higher in 2061/062 and lower in 2063/064. The study shows that actual production is below than production target.

From study it is clear that purchasing expenses of MCI Pvt. Ltd are in fluctuating trend. If we compare the purchasing expenses of the F/Y 2060/061 to 2064/065, it seems that purchasing expenses is increased in respect to the production unit. So, it is not harmful to the enterprise but its production unit and the purchasing expenses is increased. It may cause a great loss to the enterprise.

Planning expenses may cause either decrease or increase expenditure. Expenses a planning should focus on the relationship between expenditure and the benefits derived from the expenditure. MCI Pvt. Ltd has also some major problem of expenses. A few machines are old. So repair and maintenance expenses are growing day to day and electricity is also failed. Padding the expenditure budget is serious problems. Padding the budget means budgetary slack, which has differences between the total resources available to firm and total resources necessary to maintain the organizational condition responsible for the budgetary slack. Budget padding problem exits because of insufficient attention of policy maker, lack of communication for the budget approval process and ineffective leadership.

The study shows that different expenses such as manufacturing expenses, administrative expenses and depreciation etc of MCI Pvt. Ltd from the year 2060/061 to 2064/065. The study shows that the manufacturing expenses are higher than other expenses. The total expenses of MCI Pvt. Ltd. In fiscal year 2061/062 is higher than other fiscal year and in

F/Y 2063/064 it is lower than other years. It is necessary to control excess expenses for any manufacturing enterprises. But, MCI Pvt. Ltd fails to control on its excess expenses for the reason. Expenses are increasing year to year.

The study shows the average percentage of capacity utilization from F/Y 2060/061 to 2064/065. The main case of idle capacity is inadequate availability of raw materials, sailed manpower, poor management etc.

The outcome of the questionnaires distributed to the sample size of 20 employees and management who used to work in MCI Pvt. Ltd. are obtained. Many transactions are involved in budgeting procedure. Some organizations follow one type of procedure and other follow the next. Different organizations follow the different procedure as their requirement criteria of planning external and internal forces, planning of different activities, using of different managerial planning tools, adoption of controlling practice of decision-making and planning, clarity of sales goals, responsibility accepted by different level of management, commitment for development of budget by different management level, participation of personnel in decision-making and implementation and other so many factors are involved in budgeting procedure. To analyze the production procedure of MCI Pvt. Ltd. research used the questionnaire failed by the respondents. The outputs of questionnaire are presented.

The study shows that 29.14 respondents have been pointed for top management, 68.80% for lower management. So, the decision of top management is more responsible for preparing production plan.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary:

Effective operation of a business concern resulting into excess of incomes over expenditure depends upon the extent of management's following proper planning, effective co-ordination and dynamic control. As we know, profit planning plays a vital role in the performance of all the organizations manufacturing or non-manufacturing, small or large. Without proper planning of profit and their implementation, organization cannot achieve their goals and objective more efficiently. Thus, profit planning the production and controlling the business operations in any king of business organization.

Mittal Cement Industry Pvt. Ltd. is one of the public enterprises. As a private enterprise MCI Pvt. Ltd. was established in 2056 Magh 5th in private sector. At the establishment time its capital was Rs. 19.1 million. MCI Pvt. Ltd. was established to fulfill the requirement of the people for development of people by production and distribution at a reasonable price all over the country. It was registered with company act 1996.

MCI Pvt. Is one of the private enterprises engaged serving Nepal by providing cement since 2056 B.S. MCI Pvt. MCI Pvt. Ltd. has been established to provide cement at a cheaper rate to the people of Nepal But not it is facing tougher competition from other cement from other medicine companies from within and outside the country.

The title of the study is profit.

A case study of Mittal Cement Industry Pvt. Ltd. The main objective of the study is to analyze the current practice of production planning and its implementation in private enterprise Mittal Cement Industry. Other specific objectives of the study are.

Private enterprises play crucial role in rapid growth of the economy. But, the performance of Nepalese private enterprises is very unsatisfactory. Most private enterprises have no clear-cut, specific goals and objectives and due to this policies and procedures due to inadequate knowledge about profit planning and lack of skilled planning expertise. Most of private enterprises are suffering from serious problems of running at continuous loss. There is the lack of proper co-ordination and communication of the goals and objectives of the organization. Likewise, planners are in lack of proper skill and technique to develop various functional budgets. In MCI Pvt. Ltd. though many of the functional budgets are prepared, flexible budgets, production planning system are not there.

Like the case of other Nepalese private enterprises, MCI is also facing the problem of government intervention and its autonomy is confined in words. MCI Pvt. Ltd. is also suffering from this kind of intervention. Most of the executives have direct link with political parties and they want to manipulate and embezzle the resources of the company. Not only this, MCI Pvt. Ltd's planning and policy making system is also affected by the regular change in government of the country. By this kind of intervention and instability of government, private enterprises performance is influenced and MCI can't be an exception of this. The present study has been undertaken to examine the application of systematic approach of profit planning specially production planning in Nepalese public enterprises and MCI Pvt. Ltd. has been taken as a sample private enterprise.

Analytical and descriptive research design has been followed. Secondary sources of data have been mainly used. Statistical tools like percentage, means, standard deviation, variance, correlation, regression have been used to analyze the data. Similarly, financial tools like financial ratio, flexible budget and CVP analysis have also been used.

The study has been organized in five main chapters: introduction, review of literature, research methodology, data presentation and analysis and summary, conclusion and recommendation.

CVP analysis is the major managerial planning tool of MCI Pvt. Ltd.; MCI Pvt. Ltd. gives high priority for periodic control and less priority for feedback, control. Top management doing with middle level manager makes decision in MCI Pvt. Ltd. The production goal of MCI Pvt. Ltd. is not so clear. Top management is responsible for preparing production plan.

5.2 Conclusion:

The conclusion of the research has been presented as follows:

i. MCI Pvt. Ltd. has a lack of budgeting experts and skilled planners so plan are formulated on traditional ad-hoc basis.
ii. Planning department of MCI Pvt. Ltd. Have no adequate authority to decide and create new ideas to formulate various plans.
iii. The plan are prepared at the top level and lower level participation is not encourages.
iv. Return on capital employed is satisfactory.
v. MCI Pvt. Ltd. is not able to maintain a proper co-ordination between various departments in terms of goal, objectives and strategic formulation.
vi. Monthly and annual sales budget have prepared but there is substantial gap between sales targets and achievement.
vii. Cash budget is not prepared.
viii. There is also substantial gap between production, target and achievement. The production budget depends upon sales budget but the plans are made on ad-hoc basis.
ix. Cost volume profit relationship are not considerable while developing sales plan and pricing strategies.

x. Different statistical tools show the positive relationship between budgeted sales and actual sales, budgeted production and actual production.

xi. There is no well-developed system of performance evaluation for employees.

xii. MCI Pvt. Ltd. has been suffering from under-utilization of its available capacity.

xiii. There are no clear-cut boundaries to separate cost into fixed and variable. Classification of cost is not scientific and systematic.

xiv. Distribution system of MCI Pvt. Ltd. is producer-wholesaler-retailer-customer. It has only two sales depots.

5.3 Recommendation:

After the analysis and through study of data and on basis of the summary and conclusion following recommendations have been presented.

i. Nepal government should not interfere the private enterprise and MCI Pvt. Ltd must be kept with full autonomous and responsibility. So that it can be accepted.

ii. MCI Pvt. Ltd. must formulate clear-cut goals, objectives, and policies organization wisely as well as department-wise.

iii. MCI Pvt. Ltd. should develop specific program to face the competition. Quality of the products should be highlighted rather than price aspects.

iv. MCI Pvt. Ltd. should decide to develop effective program to expand growth rate.

v. Cost volume profit relationship should be considered while formulating production plan and MCI Pvt. Ltd. should be familiar with flexible budget system.

vi. MCI Pvt. Ltd. should develop its overhead budget in a well classified and scientific way.

vii. Cost should be clearly identified and separated so fixed and variable.

viii. MCI Pvt. Ltd should stress and efficient utilization of fixed assets.

ix. Material purchase budget should be prepared into detail by raw material and by interim item periods. It should be developed on the basis of production budget EOQ method should be applied on the whole purchasing raw materials.

x. Capital expenditure should be planned in detail for evaluation purpose. Discounted cash flow technique should be applied.

xi. New sales deposit should be established at present. There are only two sales depots.

At last, but not least, it is suggested that MCI Pvt. Ltd should adopt systematic approach towards comprehensive production planning. To apply this approach planning experts should be hired. This will lead to increase the productivity, profitability and discourage losses.

BIBLIOGRAPHY

- Ackoff, R.I., (1970). A concept of Corporate Planning, New York, John Willey and Sons.
- Bedeian, Arthur G., (1985). Management, New York, Dryden Press.
- Chandra, Satish et. Al, (1997). Privatization of Pub Enterprises: A Constitutional Anatomy, New Delhi: Deep and Deep Publisher.
- Charles, R.H., (1992). Cost Accounting A Managerial Emphasis, New Delhi: Prentice Hall of India.
- Chorafas Dimttris N., (1920). Hand Book of Scientific and Technical Personnel, Reference Book, New York: MC Grawhill
- Dominiak, Geraldine F. and Lawderback, Joseph G (1985). Managerial Accounting (4th Edition). Boston, Massachusetts : Kent Publishing Company.
- Drucker, Peter F. (1964). Long Range Planning Management. New Delhi: Tata Mc Graw Hill Publishing Co. Ltd.
- Eding, Devid W., (1964). Long Range Planning for Management, New York: Harper and Low Publisher.
- Edwards, R.S. and Hines. J.S. (1957). Budgeting in Public Authorities, New York: RIPA George Allen and Unwin.
- Garrison, Ray H. (1985) Managerial Accounting Concept for Planning Control and Decision-Making Business Publication, Ontarlo: Irwn Dorsey Limited.
- Goel, S.L. (1995) Modern Management Technique, (Reprint Edition) New Delhi Deep and Publication.
- Goyal, S.N., Monohan(1997) Management Accounting. Agra Sahitya Bhawan Publication.
- Grace, C.E., (1964) Management Control, New York: Mare Dick Mitchall and Co.
- Gupta, S.P. (1992), Management Control. India Agra Sahitya Bhawan.
- Gray, Jack and Johnson, Keenth S., (1973). Accounting and Management Action, New York: Mc Grawhill Publishing Company.

- Gverrierl, Haber, Hoyt, Turver, (1980). Accounting for Management, New York, Mc Grawhill.
- Halsall, J.H. (1974) How to prepare and Operating Budgets, Loncion: Longman Group Limited.
- Holmes, J.C. (1970). Strategic and Operational Planning System: Principle and Practice, London: Mac Millan Publication.
- Harry. Joneo and Twiss, Brain L (1978). Forecasting Technology of Planning Decision Making, Hongkong, Shanghai Printing Press Ltd.
- Hengurari. N.L. and Ramaanaman, A.R. (1983) Management Accounting (4th Edition) New Jersey: Prentice Hall Inc. Eagie Wood Chiffs.
- Johan, Young Dong (1982) Profit Planning Through Cost Volume Analysis, Hongkong, Shanghai Printing Press Ltd.
- Lynch, Richard M. and Willamson Report W. (1984) Accounting for Management, (Third Edition), New Delhi Tata Mc. Graw Hill Publishing Co. Ltd.
- Mamoria C.B. (1989). Personnel Management, Seventh Edition, New Delhi: Himalaya Publishing House.
- Ninemeier, Jack D. and Schmidgall, Raymond S., (1984) Basic Accounting Standards, London,West Part Air Publishing.
- Ratham, G. (1994). Industrial Growth in Nepal, New Delhi: Oxford and IBM Publishing Co. (Pvt.) Ltd.
- Shrestha, S.K., (1992). Business Planning and Policies, New Delhi: Himalayan Publishing House, Bombay.
- Satnton. L.R. (1987). Long Range Corporate Planning, London: The Production Engineer Quoted in Corporate Planning.
- Terry, Geroge R., (1968). Principle of Management, Fifth Edition. Illinois:: Richard D. Irwin Inc. Home Wood.
- Thomas, William E. (Ed.), (1992). Reading in Cost Accounting Budgeting and Control, Sponsored and Published by American Accounting Association, New York: John Willey and Sons.
- Upadhyaya, Jitendra Prasad: A Financial Analysis of Manufacturing Public Enterprises in Nepal: A Case Study of Janakpur Cigratte Factory, Unpublished Master Dissertation CDM T.U. 1993 AD.

- Vinayakam, N. and Sinha I.B. (1992). Management Accounting Tools and Techniques, New Delhi: Himalayan Publishing House, India
- Welsh, Glenn A., (1996). Budgeting: Budgeting and Control, Fourth Edition, New Delhi: Prentic Hall of India.
- Welsh, Glenn A, Hilton, Ronald W. and Garden, Paul N, (1998). Fifth Edition, Budgeting: Budgeting and Control, New Delhi Printice Hall of India.
- Webster, A.W., (1992). Business Budgets and Budgeting Control, London: Sir Issac Pitman and Sons Ltd.
- Woeff, Howard K. and Pant, Prem R. A Handbook for Social Science Research and Thesis Writing. Buddha Academic Enterprises Pvt. Ltd. Kathmandu 2002 AD.

<u>Reports and Articles: -</u>

- Chamberitian, Neil W., (1962) The Firm Macro Economic Policy and Action, National Association of Cost Accountants Research Report, New York: Nc.Graw Hill.
- Druker P.F. (1959) Long Range Planning, Harper and Low Publishers, New York: Management Science Vol. 5. pp: 315
- Mittal Cement Industry (Pvt.) Ltd. Annual Reports, Kathmandu: MCI Pvt. Ltd.
- Pandey, J.K., (1983). Plus Generation in Nepalese Public Enterprises. The Nepalese Management Revieew. Vol. IV. No.-1

APPENDIX-1

Calculation of Standard Deviation, Coefficient of Variation of Sales Target and Achievement.

FY	Target Sales(X) in Rs. '000'	Actual Achievement(Y) in Rs. '000'	$U = \frac{X-A}{C}$	U^2	$V = \frac{Y-B}{C}$	V^2
2060/061	1500000	111141	10	100	71.54	5117.97
2061/062	1400000	139576	0	00	99.97	9994
2062/063	1400000	39603	0	0	0	0
2063/064	1300000	11459	-10	100	-28.14	791.86
2064/065	1000000	42556	-40	1600	2.953	8.72
Total	$\sum X$ = 6600000	$\sum Y$ =344335	$\sum U$ =-40	$\sum U^2$ = 1800	$\sum V$ =146.323	$\sum V^2$ =15912.55

where,

A = Assumed mean Target Sales

B = Assumed mean Achievement Sales

C = Common Factor

Here,

A= 140000, B= 39603 and C=1000

According to formula,

$$\text{Std. Dev}(\sigma x) = \sqrt{\frac{\sum U^2}{N} - \left(\frac{\sum U}{N}\right)^2} \times C$$

$$\text{Or} = \sqrt{\frac{1800}{5} - \left(\frac{-40}{5}\right)^2} \times 1000$$

$$= 17204.65$$

$$CV(X) = \frac{\sigma(X)}{\overline{X}} \times 100$$

$$= \frac{17204.65}{132000} \times 100$$

$$= 13.03\%$$

$$\text{Std.Dev}(\sigma Y) = \sqrt{\frac{\sum V^2}{N} - \left(\frac{\sum V}{N}\right)^2} \times C$$

$$\text{Or} = \sqrt{\frac{15912.55}{5} - \left(\frac{146.323}{5}\right)^2} \times 1000$$

$$= 48229.93$$

$$CV(Y) = \frac{\sigma(Y)}{\overline{Y}} \times 100$$

$$= \frac{48229.93}{68868} \times 100$$

$$= 70.03\%$$

APPENDIX-2

Calculation of Karl Pearson's Coefficient of Correlation for Sales Target and Achievement.

FY	Target Sales(X) in Rs. '000'	Actual Achievement(Y) in Rs. '000'	$U = \frac{X - A}{C}$	U^2	$V = \frac{Y - B}{C}$	V^2	UV
2060/061	1500000	111141	10	100	71.54	5117.97	715.4
2061/062	1400000	139576	0	00	99.97	9994	0
2062/063	1400000	39603	0	0	0	0	0
2063/064	1300000	11459	-10	100	-28.14	791.86	281.4
2064/065	1000000	42556	-40	1600	2.953	8.72	-118.12
Total	$\sum X$ = 6600000	$\sum Y$ =344335	$\sum U$ =-40	$\sum U^2$ = 1800	$\sum V$ =146.323	$\sum V^2$ =15912.55	$\sum UV$=878.68

Karl Pearson's Correlation Coefficient

$$r = \frac{N\sum UV - \sum U \sum V}{\sqrt{\left(N\sum U^2 - (\sum U)^2\right)\left(N\sum V^2 - (\sum V)^2\right)}}$$

$$\text{or} \quad = \frac{5 \times 878.68 - (-40) \times 146.323}{\sqrt{\left(5 \times 1800 - (-40)^2\right)\left(5 \times 159912.55 - (146.32)^2\right)}}$$

$$\text{or} \quad = \frac{4393.4 - (-5852.92)}{\sqrt{7400 \times 58153.18}}$$

$$\therefore r = 0.494$$

APPENDIX-3

Calculation of Standard Deviation, Coefficient of Variation of Production Target and Actual Achievement.

FY	Target Production in Rs. '000' (X)	Actual Achievement in Rs. '000'(Y)	$U\ X\frac{X\ Z A}{C}$	U^2	$V\ X\frac{Y\ Z B}{C}$	V^2
2060/061	3000000	192470	50	2500	123.99	15372.65
2061/062	250000	239322	0	0	170.84	29185.79
2062/063	250000	68483.50	0	0	0	0
2063/064	150000	16708.50	-100	10000	-51.78	2680.65
2064/065	150000	56410.00	-100	10000	-12.07	145.77
Total	$\sum X$ = 1100000	$\sum Y$ = 573394	$\sum U$ =150	$\sum U^2$ = 22500	$\sum V$ =230.98	$\sum V^2$ =47384.86

where,

A = Assumed mean Target Production

B = Assumed mean Achievement Production

C = Common Factor

Here,

A= 250000, B= 68483.50 C=1000

According to formula,

Std. Dev(∃x) = $\sqrt{\frac{U^2}{N} Z \left(\frac{U}{N}\right)^2} \mid ($

Or = $\sqrt{\frac{22500}{5} Z \left(\frac{Z150}{5}\right)^2} \mid 1000$

= 60000

CV(X) = $\frac{\pm(X)}{\overline{X}} \mid 100$

= $220000 \mid 100$

= 27.27%

Std.Dev(∃Y) = $\sqrt{\frac{V^2}{N} Z \left(\frac{V}{N}\right)^2} \mid C$

Or = $\sqrt{\frac{47384.86}{5} Z \left(\frac{230.98}{5}\right)^2} \mid 1000$

= 85690.07

CV(Y) = $\frac{\pm(Y)}{\overline{Y}} \mid 100$

= $\frac{85690.07}{114678.5} \mid 100$

= 74.72%

APPENDIX-4

Calculation of Karl Pearson's Coefficient of Correlation for Target Production and Achievement Production.

FY	Target Sales(X) in Rs. '000'	Actual Achievement(Y) in Rs. '000'	$U = \frac{X - A}{C}$	U^2	$V = \frac{Y - B}{C}$	V^2	UV
2060/061	300000	192470	50	2500	123.99	15372.65	6199.5
2061/062	250000	239322	0	0	170.84	29185.79	0
2062/063	250000	68483.50	0	0	0	0	0
2063/064	150000	16708.50	-100	10000	-51.78	2680.65	5178
2064/065	150000	56410.00	-100	10000	-12.07	145.77	1207
Total	$\sum X$ = 1100000	$\sum Y$ =573394	$\sum U$ =150	$\sum U^2$ = 22500	$\sum V$ =230.98	$\sum V^2$ =47984.86	$\sum UV$=12584.5

Here,

A= Assumed Mean Target Production

B = Assumed Mean Achievement Production

C = Common Factor

Here,

A= 250000, B= 68483.50, C= 1000

Karl Pearson's Correlation Coefficient,

$$r = \frac{N\sum UV - \sum U \sum V}{\sqrt{\left(N\sum U^2 - (\sum U)^2\right)\left(N\sum V^2 - (\sum V)^2\right)}}$$

$$\text{or} = \frac{5 \times 12584.5 - (150) \times 230.98}{\sqrt{\left(5 \times 22500 - (150)^2\right)\left(5 \times 47384.86 - (230.98)^2\right)}}$$

$$\text{or} = \frac{62922.5 - (34647)}{\sqrt{90000 \times 183572.5}}$$

$$\therefore r = 0.759$$

APPENDIX-5

Mittal Cement Industries (Pvt.) Ltd.

Profit and Loss Account

For the year ended Ashad 32, 2061 and 2062

Particulars	2060/061	2061/062
Sales	111140894	13956445
Cost of Sales	(99458859)	(13075869)
Gross Profit	11682035	8817836
Sales Expenses	(43305200)	(622110)
Administrative Expenses	(4187101)	(6699355)
Operating Profit and Loss	7061892.00	1496371
Interest	(3347929)	(3774479)
Depreciation	(2346132)	(2252119)
Preliminary Expenses	314382	-
Profit before bonus	(1053449)	(4530227)
Less : Bonus	(105345)	-
Profit before Tax	948104	(4530227)
Less Tax	(324575)	(131860)
Profit after tax	623529	(4662087)
Profit/Loss upto last year	(3282077)	(2658548)
Balance transferred to Balance Sheet	(2658548)	(7320635)

APPENDIX-6

Mittal Cement Industries (Pvt.)Ltd.
Balance Sheet
For the year ended Ashad 2061 and 2062

Particulars	2060/061	2061/062
Capital and Liabilities		
Share holders Fund:-		
Share Capital	20000000	20000000
Profit and Loss Account	(7320635)	(2658548)
Secured Loans	3473158	3473158
Total Liabilities	**16152523**	**20814610**
Assets		
Fixed Assets	32053005	23747045
Current Assets Loans & Advances:-		
Inventories	3598382	28188353
Sundry Debtors	10161752	4013510
Cash and Bank Balance	181738	457045
Loans Advance & Deposits	6992579	4375273
Total	**52987456**	**60781226**
Less: Current Liabilities:-		
Sundry Creditors	(36703073)	(39536696)
Short term loans	(131860)	(429920)
Total		
Net Current Assets	-	-
Miscellaneous Expenses	-	-
Preliminary Expenses	-	-
Total Assets	**16152523**	**20814610**

APPENDIX-7

Mittal Cement Industries (Pvt.)Ltd.
Cash Flow Statement
For the year ended Ashad 32 , 2061 and 2062

Particulars	2060/061	2061/062
1. <u>Operating Activities</u>		
Net Profit/(Loss) before income tax	948404.00	4530227
<u>Add:</u>		
Depreciation	2346132	2252119
Preliminary expenses	314382	-
Bank Interest	3347929	3774479
Provision	105345	
Cash Flow from Operating Activities before change in working capital	**7061892**	**1496371**
<u>Add/Less</u>		
(Increase)/Decrease in Current Assets	(11233591)	18441729
Increase/(Decrease) in current Liabilities	3732233	(2833623)
Provision Paid	(3347929)	(3774479)
Advance Tax Paid	(11508247)	(410000)
Cash flow from Operating Activities	**(4446355)**	**12490078**
2. <u>Investing Activities</u>		
Increase/Dividend received		
Fixed Assets/Investment Sales (Purchase)	(1869995)	(10558079)
Deposit, Loans and advance Decreased/(Increase)	9814639	(2207306)
Preliminary expenses Decrease/(Increase)	-	-
Total cash flow from Investing activity	**7944644**	**(12765385)**
3. <u>Financial Activities</u>		
Issues of share capital		
(Decrease)/Increase in long-term loans	(3750000)	-
Cash flow from Financial Activities	(3750000)	-
Total Cash Flow	(251711)	(275307)
Opening Cash and Bank Balance	705756	457045
Closing Cash and Bank Balance	457045	181738

APPENDIX-8

Mittal Cement Industries (Pvt.)Ltd.

Financial Ratio

Particulars		2060/061	2061/062	2062/063	2063/064	
rent Ratio	= Current Assets / Current Liabilities	37034181 / 39966616 = 0.63:1 times	20934451 / 36834933 = 0.57:1 times	5400955 / 11977493 = 0.45:1 times	4586929 / 5475232 = 0.84:1 times	12 / 2 = 0.
ck Ratio	= Quick Assets / Current Liabilities	8845828 / 39966616 = 0.22:1 times	17336061 / 36834933 = 0.47:1 times	2320187 / 11977493 = 0.19:1 times	1739071 / 5775232 = 0.32:1 times	4 / 2 = 0.
tor Turnover Ratio	= Total Sales / Debtors	111140894 / 4013510 = 27.69 times	13956445 / 10161752 = 1.37 times	39603350 / 379466.25 = 104.36 times	11459160.00 / 188890 = 60.66 times	42 = 40
entory Turnover Ratio	= Total Sales / Debtors	111140894 / 294534 = 377.34 times	13956445 / 358869 = 38.89 times	39603350 / 21668986 = 1.83 times	11459160.00 / x = | times	42 / 3 = 13
ital Employed Turnover Ratio =	Total Sales / Debtors	111140894 / 20000000 = 5.56 times	13956445 / 20000000 = 6.98 times	39603350 / 40700000 |100 = 0.97 times	1459160.00 / 52450000 = 0.23 times	42 = 0.
urn on Capital Employed	= Net Profit / Capital Employed	623529 / 20000000 = 0.63:1 times	(4662087) / 20000000 = (-23.31%)	ƒ9454722Å / 40700000 |100 = (23.23%)	ƒ10278022Å / 52450000 = (19.59%)	527 / 43 = (1
Profit Margin	= Net Profit / Sales ×100	623569 / 111140894 |100 = 0.56 %	ƒ4662087Å / 13956445 = (33.41%)	(9454722) / 39603350 |100 = (-23.87%)	(10278033) / 11459160.00 = (90%)	527 / 4255 = (1