CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Profit Planning means the planning of future curse of study. It is important to all types of Business Organization. It keeps the organization alive and ensures the future development and growth of the organization. To achieve required profit margin level, organization must have efficient management team. Efficient management team is the group of person having skilled manpower and experience in related field. Planning, organizing, directing, coordinating, decision making and controlling are the main functions performed by the management.

The term profit planning can be defined as the activities of the firm to be implemented for increasing profit. Profitable firm have competency power as well as capacity of paying debts in time. Similarly, successful business organization possesses the profitability range and it contributes especially to its shareholders, creditors, government and other concerned parties.

"Budgeting is an important tool for profit planning. Planning involves specification of the basic objectives that the organization will pursue and fundamental policies that will guide it." [1]

"The most detailed level of planning occurs when management operationalizes the objectives, goals and strategies incorporate them into the profit plan. A profit plan is a financial and narrative expression of the expected result from the planning decision. It is called the profit plan for the budget because it explicitly state the goals in terms of time expectations and expected financial results (return on investment, profit, cost) for each major segment of the entity. Typical profit plans established the content and format of the internal-control reports with respect to operations, inputs, outputs and financial position developed by the entity for monthly performance reporting to the various level of management". [2]

Planning of profit means monthly planning and controlling of sales, production, work-in-progress, finished goods inventories, direct labour costs, manufacturing

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[1] Jain P.K & Khan M.Y, **Management Accounting**, Tata McGraw Hill Publishing Company Ltd., 2nd Edition, 1993, page 580

[2] Glenn A. Et al**.. "Budgeting Profit Planning and Control** prenitice Hall of India fifth Edition. 2000, page 34

overheads, distribution and administrative expenses and material purchase and usage cash flows.

Similarly, profit planning involves flexible budget, capital expenditure and cost-volume-profit relationship and contribution analysis.

When sales increases, it leads to profit, therefore, it required planning of sales. "Sales planning is not only important but also the difficult to prepare. Sales plan provides basic guidelines for management decisions. It is an organized approach for developing a comprehensive sales plan. Sales planning process is an important part of PPC".[3]

Planning and controlling of production is another phase of profit planning and controlling system planning of production means production of goods and services to meet required sales and inventory. Production planning implies planning of production activities. The value of production is obtained with the use of following formula:

Production = Planned Sales + Closing Inventory – Opening Inventory

Production can be planned by preparing production budget. Planning and controlling of material purchase and usage budget is another step of PPC. If the price of materials purchases to up, the profit will go down and vice versa. For planning and controlling of material purchase, a material budget is prepared. A material budget also helps to maintain the optimum level of material and to purchase it on reasonable price. The firm can increase its profit by planning and controlling of raw materials purchases, Budget.

Direct labour purchase budget is prepared for assessment of total direct labour hours and labour cost, Manufacturing overhead budget distribution and administrative budget are prepared to control cost in related topic.

"Expenses planning and controlling is not reduction of cost but it means better utilization of limited resources. Expenses planning and controlling should focus on the relationship between expenditure and benefits derived from expenditure. There fore, expenses, planning and controlling is necessary to obtain enterprises goals."[4]

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[3] Fago (Limbu), et. Al.. **Budgeting: Application of profit planning and control**. K.P. Pustak Bhandar, Kathmandu, 6th edition 1999, page-1

[4] Ibid.., Page-94

Cash is a major part of organization. Adequate cash is always necessary for successful running of organization. So the cash must be planned and controlled for it's efficient utilization. Cash budget shows cash inflows, outflows, opening and closing balance of cash. High closing balance shows the strengths but non-balance indicates weakness of organization. Therefore, cash budget is a part of PPC.

All the costs can be classified into three categories which are fixed cost, variable cost and semi-variable costs. The costs are called as fixed cost which does not change with the change in volume of production. Similarly, those costs are called as variable costs which changes proportionately with change in production. While the costs which changes after certain level of output are considered as semi variable cost. All these costs should be planned and controlled by a budget which is called flexible expenses budget. By preparing this budget any enterprise can planned and controlled these costs which helps to increase in the profit.

Capital expenditures are also the factors of the determinants of the strengths and weakness of the organization. These types of expenditures can be planned and controlled by capital expenditure budget. Investment in plant & machinery, land and building and patents can be called capital expenditure. Capital expenditure may also be the expenditure for expansion, replacement and construction of fixed assets. By comparing cash outflow and inflow the capital expenditure are evaluated. There are five methods for the evaluation of capital expenditure which are Payback Period, Accounting Rate of Return (ARR), Net Present Value (NPV) and Internal Rate of Return (IRR), out of them; first two methods are called traditional methods. These methods ignore time value of money. The other methods are considered to be modern methods or discounted cash flow methods which take into account the time value of money. For the effective planning of profit it needs to prepare capital expenditure budget.

Cost - volume -profit analysis (CVP) analysis is also an important tool used for profit planning and control in an enterprise. The relationship between cost, volume and profit is called cost-volume-profit analysis. CVP determines required sales volume to avoid losses and earn profit. It shows the effect change in price of output and provide basis for minimum level of production.

BEP analysis is an effective tool for PPC. It shows the level of equilibrium or (the point of neither profit nor loss). If the production and sales are less than BEP, there will be loss. BEP is an analytical tool for knowing about profit or loss of the enterprise.

In order to planning of profit of any enterprise, it needs formulation of above mentioned different budgets, planning and controlling them and other accounting activities.

"A profit planning and control program helps the management to perform its planning function by developing a strategic (long-range) profit plan and a tactical (short-range) profit plan. Both of these plans include monetary exceptions (i.e. goals) for assets, liabilities, profit and return on investment. The foundation for the strategic profit plan (usually extending three, five or ten years into the future) includes the objectives, broad goals, planning premises and strategies of the enterprise as developed by top management. The tactical as the first year of strategic profit plan. It is the detailed plan for the enterprise and of reach of its responsibility centers". [5]

"The development of an annual profit plan ends with the planned income statement, the planned balance sheet and the planned statement cash flows".[6]

"A business budget is a plan which covers all operations for a definite period in future. It is a formal expression of policies, plans, objectives and goals laid down in advance by top management for the understanding as a whole and for every sub division thereof." [7]

"Profit planning in fact is a managerial technique and a profit plan is such a written plan in which all aspects of business operations with respect to definite future period are included. It is a formal statement of policy, plan objective and goal established by the top management in respect of some future period. Profit planning is a pre-determined detailed plan of action developed and distributed as guide to current

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[5] Glenn A. et. Al**.. "Budgeting profit planning and control**, prentice Hall of India, Page 62

[6] Ibid page 466

[7] Man Mohan & S.N. Goyal, **"Principal of Management Accounting**, Sahitya Bhawan, Agra, Page 50

operations and as a partial basis for the subsequent evaluation of performance. Thus we can say that profit planning is a tool which may be used by the management in planning the future curse of actions and in controlling the actual performance." [8]

PPC process is important to all the government organization. PPC t4echnique is efficient to maintain the organizational effectiveness. The present study is an attempt to examine the performance of SDB Chinese Brick Industry.

1.2 A Brief Introduction of SDB Chinese Brick Industry

SDB Chinese industry is the second technically advanced bricks factory in Nepal making machine made bricks since 1970 AD. It is one of the manufacturing companies in Nepal which makes different types of bricks for nation building.

It produces a grade bricks which are used in buildings, apartments, medical Halls, Hospitals. It also offers low priced bricks and these are used in building houses. The factory uses clay to produce bricks. The clay used in production of bricks is available locally and they are tested in its laboratory.

The factory was established in May 1998 under the company act, 1964. The construction work of the factory building was completed in march 1969 with the technical and financial assistance of people's republic of China. It was registered with authorized capital of Rs. 200,000,000.

In establishment period, drugland, sival and disel locomotives were used in soil spread out. For quality control of brick, "Modern Universal Testing Machine" was kept. Initially, its production capacity in period was 20,000,000 units of bricks. Now, it has two types of brick making machines named as brick making shop 1 and 2 and another normal bricks; known as brick making shop 3, 4 & 5 for making 'Double Diary' brick. It has also started quality testing machine for quality control. The main aim of company is to manufacture bricks with Chinese technology.

There are five departments in the factory which are Production Department, Mining and Repair Department. "All the employees and labours are appointed on contract basis except 90 employees which are permanent in the factory,

[8] Dr. S.P. **Gupta "Management Accounting**, Agra, Sahitya Bhawan 1992, Page 521

out of them, 79 persons are in management level and rest are in operation level, some planners and executive are also appointed in contract basis." [9]

1.3 Capacity expansion programme of SDB Chinese Brick (P). Ltd.

The factory has planned to expand its capacity from FY 2058/59. The plan provides following programmes to introduce:

i. It has planned for the construction of buildings in Terai region. The factory has unused land which are given to other party.
ii. For the effective operation of the factory, preventive maintenance has been planned to complete on time.
iii. Out of existing equipment of the factory; one Hitachi and two Trippers has been planned to lease out and make use of four trucks for delivery of bricks.
iv. The necessary clay for the production of bricks has also been planned to take from Gaya Mangla VDC, Chitwan.
v. The factory has managed competent manpower to use plant in full capacity.

1.4 Focus of the study:

Liberal economic system policy has been applied by the Nepal Government to emphasize manufacturing industry. Various numbers of manufacturing industries have been established in the country. Manufacturing industry has a significant role in Nepal for the development of economy. The study is an attempt to examine the performance of the manufacturing industry based on the case of SDB. It focuses on the analysis of performance of SDB in terms of preparation of sales, production expenses and their financial targets and compare with actual situation.

1.5 Statement of Problem

The industrialization process in Nepal is applied in all the regions of the country. Government of Nepal has given emphasis for establishing manufacturing industries to the potential investors. As a result, manufacturing industries have been established in Nepal to maintain the supply and demands of the products. There remain many problems in a manufacturing industry regarding the performance results. Such problem required to be investigated. SDB Chinese Brick factory is a

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[9] The information is collected verbally using questionnaire with the Administrative Chief Mr. Dhruba Prasad Wagle.

brick manufacturing industry. It produces grade A Chinese brick in Nepal hence it is necessary to know the performance and capacity planning practices.

1.6 Objectives of the study

The objectives of the study are to examine the performance of SDB manufacturing industry. The specific objectives of the study are:

i. To review and examine various types of budget prepared by SDB Chinese Brick factory and compare with actual performance.
ii. To examine the practices and effectiveness of Profit Planning and control system of SDB Chinese Brick Industry (Especially BEP).
iii. To assess financial performance of the SDB.
iv. To analyses the Cost-Volume-Profit relationship of SDB.
v. To provide suggestion for further improvement.

1.7 Scope and Limitation of the study:

The limitations of the study are as follows:

1) It is concerned with PPC aspect of SDB.
2) Analysis is concerned with managerial and financial accounting aspects it does not cover other areas of enterprises.
3) The study is based on the data available from the management of SDB (P). Ltd. Chitwan.
4) The secondary data collection as a limitation: This mode of data collection has become the limitation i.e. some of the figures are missing. The data which is not available from the company is shown by assumption from the data of previous year. It means the data available of previous and successive year.

1.8 Need and significance of study:

In the context of Nepal, very few studies and research have been made in respect of budgeting and profit planning of Nepalese enterprises transferred from government ownership to private sector. Even if some studies have been conducted in this regard they hardly touched the depth analysis of factors in this field.

The need of the study is really to examine whether the SDB is applying a Profit Planning System properly or not. The Profit Planning Process significantly contributes to improving the profitability as well as the overall financial performance of an organization by helping to optimize resources. An accomplishment of objectives in every enterprise depends upon the efficient utilization of scarce resources. Also the financial performance of an organization depends purely on the basis of its use of resources. Budget is the key for Profit Planning. Most of enterprises runs under commercial principles. If the planning process of enterprises is made effective, the result and pace of development naturally steps forward. Profit Planning is the base of managerial efficiency and performance of enterprise. So, there is a need for study to examine to what extent. SDB is successful to improve performance in terms of Profit Planning practices and also to know whether the company is fully applying PPC concept or not.

1.9 Organization of the study:

There are five chapters in the study. The first chapter deals with the general background of the study with subject matter of the study. Brief introduction of SDB, statement of problem, focus of the study, objectives of the study, need and significant and limitation of the study are included in this chapter. The second chapter highlights the review of literature and conceptual framework which includes review of books, previous research works or thesis shows the research gaps.

The third chapter deals with research methodology, which gives the idea of research. The chapter includes sources of data, plan of the study, period covered, research variable, research tools used and population and sample size. The fourth chapter is the heart of the study which includes presentation and analysis of data. The fifth chapter summarized the whole study, states the strengths and weakness of the organization, offers recommendation for the improvement and shows conclusion. Bibliography, appendices have also been incorporated at the end of the study.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Fundamental Concepts of PPC

Profit Planning and control is the process in which management try to attain goals. According to Welsch, Hilton and Gordon [10] "The fundamental concepts of PPC includes the under laying activities or tasks that most generally be carried out to attain maximum usefulness from PPC. The fundamental concepts as identified by them with PPC are as follows:

a. A management process that includes planning organizing, staffing, leading and controlling.
b. A managerial commitment to effective management participation by all levels in the entity.
c. An organizational structure that clearly specifies assignment of management authority and responsibility at all organizational level.
d. A management planning process.
e. A management control process.
f. A continuous and consistent co-ordination of all management function.
g. Continuous feed forward, feedback, follow-up, and re-planning through defined communication channels (both downward and upward).
h. A strategic (long range) profit plan.
i. A tactical (short range) profit plan.
j. A responsibility accounting system.
k. A continuous use of the exception principle.
l. Behavioral management program

2.2 Establishing the foundation for PPC:

For establishing a sound foundation of any enterprises, it is necessary to prepare profit plan and implement effectively. In the preparation and implementations of profit plan Welcsch, et. Al. summarizes the following steps: [11]

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[10] Glenn A. Welsch, Ronals W. Hilton & Paul N. Gordon**. "Budgeting profit planning & control**, Prentice Hall of India, Page 31

[11] Ibid, Page 58

a. There must be commitment by the top management broad concept of PPC and understanding of its implications and operations.
b. Identification and evaluation of the controllable variables of the environment and the characteristics of the enterprise.
c. There should be an evaluation of the organizational structure and assignment of managerial responsibilities and implementation of changes deemed necessary for effective planning control.
d. There must be an evaluation and reorganization of the accounting system to ensure that it is tailored to the organizational (accounting responsibilities) and it can provide data particularly useful for planning and control purpose.
e. A policy determination must be made about the time dimension to be used for PPC purposes.
f. Program of budget education should be developed to inform management at all levels about: -
    - The purposes of the program.
    - The manner in which it will operate including the basis of management policies and guidelines for its administration.
    - The responsibility of each level of management in the program.

The ways in which the program can facilitate the performance of each manager's function.

2.3 Purpose of Profit Planning and Control (PPC)

The objective of profit planning and control is to assist in systematic planning and in controlling the operations of the enterprise. It is the best sources of communication and an important tool in the hand of management. The purposes of PPC are as follows:

- To state the firms' expectation in formal terms clearly to avoid confusion and facilitates their attainability.
- To communicate expectation to all concerned with the management to the firm so that they are understood supported and implemented.
- To provide a detailed plan of action for reducing uncertainty and for its proper direction of individual and group efforts to achieve goals.
- To co-ordinate the activities ad efforts in such a way the use of resources is maximized.

To provide a means of measuring and controlling the performance of individuals and units and to supply information based on which the corrective action can be taken.

2.4 Application of PPC To Various Types of Organization

Some people say that comprehensive profit planning and control is applicable only to large and complex organizations. Usually it is commented that "comprehensive budgeting is a fine idea for most business but ours is different" or "it is impossible to project our revenues and expenses." And so on. Sometimes specific industries are viewed as not amenable to profit planning and control. These views are common regarding non manufacturing enterprises service companies, financial institutions, hospitals, certain retail business, construction companies and real –estate enterprise.

To the contrary, profit planning and control can be adopted to any organization (Profit or Non profit, service or manufacturing, regardless of size, special circumstances conditions), the fact that the company has peculiar circumstances or critical problem is frequently a good reason for the adoption of certain profit planning and control procedures. In respect to size, when operations are extensive enough to require more than one or two supervisory personnel, there may be a needs in this respect than a larger one. As with accounting, a single profit planning and control system that is appropriate for all enterprises cannot be designed. A profit planning and control system must be tailored to fit the particular enterprise, and it must be continuously adopted as the enterprise and its environmental change.

2.5 Process of Profit Planning and Control :

PPC process considers integration of the planning and control function of management. A PPC program includes more than the traditional idea of periodic or master budget. It encompasses the application of a number of related management concepts though a variety of approaches, techniques and sequential steps. The process of PPC can be described as follows:

2.5.1 Identification and Evaluation of External Variable

The variable identification phase of Profit Planning Process focuses on identifying and evaluating the effects of the external variable. Identifications also involve separate treatment of variable that are non-controllable and those that are controllable. This means that management planning must focus on how to manipulate the controllable variable and uncontrollable variables. Relevant variables mean those that have direct and significant impact on the operation of enterprises.

2.5.2 Development of the Board objectives of the Enterprises

Development of the board objectives of the enterprises is a responsibility of executive management. Based on a realistic evaluation of the relevant variables and an assessment of the strength and weakness of the organization executive management can specify or re-estate this phase of PPC process. The objective should spell out, mission, vision and ethical character for the enterprise.

2.5.3 Development of Specific Goal for the Enterprises

The purpose of the goal setting phase of the Profit Planning Process is to bring the statement of board objectives into sharper focus and to move from the general information to more specific planning information. It provides both narrative and quantitative goal that is definite and measurable. There are specific goals too that relate to the enterprise as a whole and to the major responsibility centers of the organization. Executive management as the second component of the substantive plan for the up coming budget should develop these goals. Executive management should exercise leadership in this planning phase so that there will be a realistic and clearly articulated framework within which operations will be conducted towards common goals.

2.5.4 Development and Education of the Basic Company Strategies

Company strategies are the basis thrusts, ways and tactics and are used to attain planned objectives and goals. A particular strategy may be short term and long term. Here are some actual examples of basic strategies.

- Increase long term market penetration by using the technology to develop new products and improve current product and enter into new markets.
- Emphasize product quality and price to capture the market.
- Expand marketing to all sectors.
- Market with low price to expand value.
- Use both institutional and local advertising processing to build market shares.
- Improve employees' moral and productivity by initiating a behaviour management programme.

2.5.5 Executive Management Planning Instruction

This phase involves communication of substantive plan to middle and lower levels of management. It explains the broad objective of an enterprise. Strategies and any other executives management instructions are needed to develop the strategic and tactical profit plans. It is also as called the statement of planning.

2.5.6 Development and Evaluation of Project Plans

Project plan encompasses each items of expenditure and action as plan for improvements of present products, new industries, exists from products and industries new technology and other major activities that are separately identified for planning purpose. The nature of project is such that they must be planned as separate units. In planning for project, the time span considered must normally be anticipated life span of the project.

2.5.7 Development of Strategic and Tactical Profit Plan

When the managers of various responsibility centers in the enterprises receive the executive planning instructions and the project plan, they can begin intensive activities to develop their respective strategic and tactical profit plans. The long-range and short-range profit plans are usually developed concurrently.

2.5.8 Implementation of Profit Plan

When the strategic and tactical profit plans are accepted for the enterprise at every level of management that should be implemented. The implementation aspect will be the major significance.

2.5.9 Use of Periodic Performance Report

As profit plan is implemented during the period of time specified in the tactical plan, periodic performance reports are needed. The accounting department, on a monthly basis, has to prepare performance reports. Some special performance reports are prepared more often "As on needed basis."

2.5.10 Implementation of Follow Up

The last step of PPC process is the implementation of follow up. It is an important tool of control because performance reports are based on assigned responsibilities which provide feedback takes corrective actions and helps re-planning and readjustment of profit planning activities." [12]

2.6 Long Range and Short-Range Profit Planning:

Every manager of company should begin intensive activities to develop strategic and tactical profit plans, "The strategic profit plan is broad and it usually encompasses for a numbers of years in the future, which the tactical profit plan is detailed and encompasses a one year time horizon and is made for the upcoming year. The development of strategic and tactical profit plans each year is a process that involves managerial decision". The executive management or chief financial executives develop the strategic and tactical profit plans. It is possible for firms to develop these two profit plans for all aspects of the operation centrally. However, it requires participation of all levels of management in the planning process to generate positive behavioral effects.

The strategic profit plan is a long range plan which includes annual income statement, cash flow projection, capital expenditure plan and a long range market penetration plan. The strategic plan does not include a formal balance sheet. However it is anticipated that important balance sheet items would be included. Then the long range plan covers all the key area of anticipated activity, sales, expenses, capital expenditure, cash profit and return on investment while a broad general view of a complete short range profit plan deals primarily with annual results, detailed classification by month responsibility and products. Therefore, upon the receipt of the planning premises and procedural instructions each manager incharge of major responsibility centers immediately initiate activities in his own functional sphere to develop strategic (long range) profit plan and establishes harmony with five year plan, a short range profit plan. For example, a plan consists of the following parts." [13]

- Basic objectives and purpose of the enterprise
- Marketing plans
- Research and development and engineering plans
- Capital instrument plan and
- Financial projection

[12] Dozy Tate "Thesis of Profit Planning, in Soft Drink Industry "A Case Study of Bottlers Nepal (Ltd.)" Faculty of Management T.U. 2001, page 51

[13] Ibid page. 46

2.7 Development of Profit Plan :

Development of profit plan starts from sales plan and it ends with planned balance sheet which is shown as follows: [14]

2.7.1 Sales Plan

The sales planning process is a necessary part of PPC because it provides inputs for the basic management decisions about marketing. It is an organized approach for developing a comprehensive sales plan. The sales plan is not realistic. Most of the other parts of the overall profit plan also are not realistic. Therefore, if the management believes that a realistic sales plan can not be developed, it needs little justification for PPC.

A sales plan incorporate management decisions that are based on the forecast, other inputs and managements judgments about such related items as sales volume, prices, sales efforts, production and financing.

The primary purposes of sales plan are:

- To reduce uncertainty about future revenues.
- To incorporate management judgments and decisions into the planning process.
- To provide necessary information for developing the other elements of a comprehensive profit plan.
- To facilitate management's control of sales activities.

A comprehensive sales plan includes both long-term (strategic) and short term (tactical) sales planning:

Long term sales plan considers usually of five to ten years where as the short term sales plans concerned with monthly, quarterly and annual basis of sales plan. Long term sales plan usually involves in depth analysis of future market potential, which may be built up from a basic foundation such as population changes, state of economy, industry projections and company objectives. Long-term managerial strategies affect the long-term pricing policy, development of new products and innovations in present products, new directions in marketing efforts, expansion and changes in distribution channels and cost patterns. Short-term sales plans are usually

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[14] Glenn. A. et. al**. Budgeting Profit Planning & control** Prentice Hall of India 5th Edition Page. 171

subject to review and make revision on a quarterly basis. The short-tem sales plans are usually developed in term of physical units and in sales and services. Sales plan is developed by making sales budget.

2.7.2 Production Plan

Production plan which is based on sales forecast is prepared after the sales budget. While preparing production plan, the managers must have an optimum co-ordination between sales, inventory and production levels. An efficient and coordinated production plan is necessary for economical manufacturing.

The production budget specifies the planned quantity of goods to be manufactured during the budget period. To develop the production budget, the first step is to establish policies for inventory level. The next step is to plan the total quantity of each type of products that is to be manufactured during the budget period. The third step is to schedule this production by interim periods. Required production can be computed as follows:

Units to be produced = Planned sales plus desired ending inventory of finished goods minus beginning inventory of finished goods.

2.7.3 Planning of Material and Parts :

A comprehensive PPC program includes planning and controlling raw materials and components used in the manufacturing of finished products. Materials and parts, which specify the planned quantities of each type of raw materials and parts required for planned production. It should also specify quantities of each type of raw material and part by time, product and responsibility centers.

2.7.4 Planning of Direct Labour :

Labour costs include all expenditures made for all level of employees: top executives, middle-management, personnel staff officers, supervisors and skilled and unskilled employees. To plan and control costs effectively, the different types of labour costs must be separately analyzed.

Labour is generally classified as direct and indirect. Direct labour costs include wages paid to employees who work directly on specific productive activity. Indirect labour involves all other labour costs, such as supervisory salaries and wages paid to toolmakers, mechanic, storekeepers and custodians.

The direct labour budget includes planned direct labour requirements necessary to produce the types and quantities of outputs as mentioned in the production budget. So, for comprehensive planning and controlling of profit, it needs special planning of direct labour cost by making direct labour budget.

2.7.5 Planning of Overhead Expenses

For planning and controlling of factory or manufacturing overhead distribution expenses and general administrative expenses, separate budgets should be made for each responsibility centers in the enterprise. The expense budget must be made in detail by interim time periods (months, quarters). After the production plan is completed, the cost budgets normally are developed simultaneously and are then consolidated into a budget appropriately labeled the planned cost of manufactured.

Distribution expenses include those expenses other than manufacturing. Distribution expenses incurred in different responsibility centers should provide supervision and services to all function. Each of the administrative expenses should be directly identified with a responsibility center and the center manager should be made responsible for planning and controlling expenses.

2.7.6 Planning of flexible expenses budget

The flexible budget concept is complementary to the tactical profit plan. Flexible budget for expenses has two functions: one is to provide expenses plans for the tactical profit plan and another to provide adjusted expenses plan to actual output for facilitating the comparison with actual expenses in periodic performance reports the fundamental concept of flexible budget for expenses is that all expenses are incurred because of passage of the time output or productive activities or a combination of time and output or activity premise is reasonable in a business (or any other entity). The expenses can be given in mathematical formulations from which expenses plans can be computed for planning and control. Application of the concept means that:

- Expenses must be identified as to their fixed and variable.
- Expenses must be reasonably related to output or productive activity which must be reliably measurable.
- Flexible budget formulas of reach expenses must be for a specified time period and for a specified relevant range of output or productive activity.
- For planning and controlling purpose, flexible budget formulas must be developed for each expense in each responsibility center in an enterprise.

2.7.7 Planning of Capital Expenditure Budget:

Capital expenditure budget is the process of planning and controlling the strategic and tactical expenditures for expansion and contraction of investments in operating (fixed) assts.

A capital expenditure is the use of funds to obtain operational assets that help to earn future revenues or to reduce future costs. Capital expenditures include fixed assets such as property, plant equipment, major renovations and patents. Typically, capital expenditure projects involve two planning and controlling phases which are investment and expenses.

The capital expenditure budget is an important part of a comprehensive profit plan. It is directly related to a company's operating assets, especially land, equipments and other operational assets and cash.

The capital expenditure budget enables executive management to plan the amount of resources that should be invested in additions to satisfy customer demands, meet competitive demands ad ensure to avoid idle operating capacity or excess capacity or investments in capacity that will earn less than an adequate return on the funds invested.

There are numerous methods of measuring the economic value of capital expenditures on investment, out of them four widely used methods are:

i. Payback Period
ii. Accounting Rate of Return (ARR)
iii. Net Present Value (NPV)
iv. Internal Rate of Return (IRR)

First two are simple and known as traditional method this method does not consider the time value of money. Profitability Index, (PI) is another method to measure economic value of investment which also does not consider the time value of money while NPV and IRR considered discounted value of money.

2.7.8 Planning of Cash Flow :

Cash budgeting is an effective way to plan and control the cash flows, assess cash need and use excess cash effectively. A primary objective of this budgeting is to plan the liquidity position of the company and determining future borrowing and future investments.

A cash budget shows the planned cash inflows and ending position by interior periods for a specified time span. This budget basically includes two parts:

i. Planned cash receipts (inflow)
ii. The planned cash disbursements (outflow), which shows opening and closing balance of cash respectively.

The primary purpose of cash budgets are to:

- Give the probable cash position at the end of each period as a result of planned operations.
- Identify cash expenses or shortages by time periods.
- Establish the need for financing and or the availability of idle cash for investment.
- Co-ordinate and integrate cash with :
  i. Total working capital
  ii. Sales revenues
  iii. Expenses
  iv. Investments
  v. Liabilities.
- Establish a sound basis for continuous monitoring of the cash position.

2.7.9 Completion of Profit Planning :

The development of an annual profit plan ends with planned income statement, planned balance sheet and the planned statement of cash flows. These three statements summarize and integrate the detailed plans developed by management for the planning period.

For the completion of the profit plan the following sub-budgets and statements are also prepared with above mentioned various budgets:

- Planned statements of cost of goods manufactured
- Planned statements of cost of goods sold
- Planned income statement
- Planned statements of cash flows
- Planned balance sheet

2.8 Manufacturing Enterprises and Profit Planning:

In manufacturing enterprises, profit planning programme is most important for the utilization of scare resources and effectively and effectively and efficiently achieve and accomplishing the goals and objectives in sales planning production planning. Planning of direct labour, material building, service inventory distribution and promotional expenses, factory overhead expenses, administrative expenses, capital budgeting cash flow, strategic tactical and manpower planning. But Nepalese manufacturing enterprises have not formulated the above plans. It is because of confusion in goals and objectives. The studies so far made did not analyze it in due context of profit planning. [15]

Hence most of the Nepalese manufacturing enterprises are not applying the concept of profit planning.

2.9 Public Enterprises and Privatization :

2.9.1 Meaning of Public Enterprises

In general, public enterprises are the providers of government's services and facilities easily to people. "PE can be defined as an activity of the government, whether, central, state or local, involving manufacturing or production of goods including agriculture or making available a service for a price such activity being managed either directly, that is departmentally, or through an autonomous body with the government having a majority ownership that is more than 50% of equity." [16]

By the above definition, public enterprises are state owned organizations having more that 50 percent share of government.

"Public Enterprises in Nepal constitute a vital instrument for the socio-economic development for our country. It enjoys a strategic ad crucial position in our mixed economy. They have been established in many sectors of the economy with a view to provide goods and services for the overall development of the country. Consequently, they are dominant in the production or supply of sugar, cement, cigarettes, leather, agricultural tools, petroleum products and all public utilities." [17]

U.N. has defined PE as "Those organizations, namely governmental enterprises and public corporations which are entirely or mainly owned and/or controlled by the public authorities consisting of establishments which by virtue of their kind of activities, technology and mode of operations are classified as industries." [18]

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[15] Dozy Tater, "Thesis of **profit planning in soft drink industry (A case study of Bottlers Nepal Ltd)."** faculty of management. T.U. 2001, Page 62.

[16] Laxmi Narayan **Principle and practice of public enterprises, management** S. Chand and company Ltd. Ram nagar, New Delhi-1100055. Page 3.

[17] P. Shrestha. **Public Enterprise in Nepal**, fist edition – 1990 Bahukendra Offset Press, Thapathali, Kathmandu, page - 1

[18] Ibid Page 3.

The Seoul workshop on "performance of Public Enterprises" held in September 1975 defined PEs as all productive entities/ organization which are owned and / or can trolled by public authorities and where outputs are marked." It had further clarified that:

a) "Productive entity or organization" refers to an identifiable decision making units with an explicit or extractable budget and which produces goods or services.
b) "Ownership refers to such entities or organizations whose more than 50% of outstanding entity is hold by a "Public authority" either "directly" or "indirectly".
c) "Control" means the power to be exercised in the management of the enterprises through the appointment of top management, members of the board of directors and the chief executives.
d) "Output" is said to be "marketed" if sales cover more than 50% of current cost.

Current costs here refer only to intermediate inputs and returns to factors not owned by the enterprises, and constituting largely wages and rent. Thus public enterprises usually refer to commercially operating organizations wholly or partly owned and effectively controlled by a public authority.

2.9.2 Public Enterprises and Privatization :

In general, public enterprises can be defined as the provider of government's services and facilities easily to the people. But nowadays, the enterprises are not able to do such activities due to mismanagement, lack of adequate capital, overstaffing, delay in operation, corruption and political instability. So it needs transfer of public enterprises from government ownership to the private sector, which is called privatization.

In other words "The process of transfer of government ownership and authorities of operation to the private sector by increasing competency and strength for the fulfillment of national objectives is called Privatization." [19]

"The government's main duties are to facilitate and regulate the private sector and monitor other manufacturing firms. Therefore, the government should concentrate itself in regulating the private sector and confine itself to those activities in which the

[19] Nijikaran Karyakaram Kehi Sandarvik Sawal Jawph, Nepal Governmetn Ministry of Finance. Privatization cell-2055 page 1

private sector is least interested or in which it has inherent limitations on account of security or social welfare considerations. In addition, the privatization of public enterprises could release the sales proceeds and subsidy fund to be used in more important alternative use. Privatization also significantly reduces the associated financial and administrative burden of the government and empour it to devote its financial resources on infrastructure building, maintenance of law and order and perform social welfare functions. Hence, emphasis should be given in building a conductive environment for enhancing the capability and efficiency of the government in the discharge of its basic functions and responsibilities of providing basic social services.

In Nepal government launched the privatization programme in 1992 to lead the economy. The programme was started with the objectives of enhancing the efficiency of public resources management, raising the private sector investment functions, priorities and resources on those areas which are identified as the most instrumental and critical of ensuring a self-sustained and viable economic development in the country, at first, three manufacturing enterprises were privatized. In 1993, Privatization Act 2050 (1992) was enacted. Subsequently, other 13 enterprises were privatized adopting different modalities." [20] There are 23 enterprises privatized by the end of 11 months of the FY 2002/03.

In conclusion, it cab be said that privatization can be defined broadly as relaying more on the private institutions of society and less on government to satisfy the peoples needs. It is the act of reducing the role of government or increasing the role of other private sector institutions of society in producing goods and services an din owing property.

2.10 Evolution of Manufacturing Industries in Nepal :

The establishment of PEs in Nepal was started after the establishment of Nepal Bank Limited in 1936. The evolution of PEs is explained as follows. [21]

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[20] Monitoring privatized enterprises (A report on performance of privatized enterprises. Ministry if finance, privatization cell) Dec. 1999. page 6.

[21] Ibid Page 3.

2.10.1 Pre-plan Period

Preplan period marks the period of almost non-existence of any government policy towards PE. Nepal Bank Limited was the single public enterprises established prior to the launching of planned development policy in 1956 (2013 B.S). Therefore, virtually no development of PEs took place during the period. Nepalese economy was characterized by lack of basic infrastructure, support services, essential basic industries and so on. Illiteracy rate was quite high; Private sector was also not developed. The country lacked resources both financial as well as non-financial including human resources comprising of entrepreneurs so necessary for the proper socio-economic development of the country.

2.10.2 The First Five Year Plan Period (1956-61)

The plan adopted the principle of mixed economy. Utility industries were reserved for the public sector investment that promised 'greater public welfare' and which fails to attract private investment whereas industrial sector was left open to private sector with government support service if needed. Seven PEs were established during this period which are: Nepal AAirlines Corporation, Nepal Industrial Development Corporation, Raghupati Jute Mill, Timber Corporation, Balaju Industrial District, Balaju Yantra (P) Ltd. and Asahaya Kalyan Kendra.

2.10.3 The interim Period (1961 – 62) :

The period was marked by establishment of 3 PEs Viz, Ranta Recording Corporation, National Trading Ltd. and National Construction Company of Nepal. The period was also marked by the declaration of HMG policy as laid down in the Industrial Enterprises Act of May 28, 1961 which adopted the PE on the same line & basis as per the first plan.

2.10.4 The Second Three Year Plan (1962 – 65)

The plan clearly demarcated the areas of public enterprises as basic utilities and infrastructures like electricity, transportation, communication etc, as well as support services for all sectors like supply of credit and other physical input like improved varieties of seeds and fertilizers. Eleven PEs were established during this period Viz. Gorkhapatra Corporation (the national daily news paper). Nepal Electricity Corporation, National Commercial bank, Birgunj Sugar Factory, Janakpur Cigarette Factory, Transport Corporation, Provident Fund, Hetauda Industrial District, Nepalese Carpet (P) Ltd., Patan Industrial District, and Fuel Corporation. The plan stressed for the first time for the balanced regional development.

2.10.5 The Third Five Year Plan (1965-70)

The plan emphasized for the need of involvement both the private as well as public sectors in the industrialization process of the country. It also outlined the need for pragmatic approach to follow by the industries to be established under the public as well as the private sector. Altogether twelve PEs were established during the period. Prominent one were; Basbari Leather and Shoe Factory, Agricultural Input Corporation, Agricultural Development Bank, Agricultural Tools Factory Ltd., Nepal Telecommunication Corporation, Chandeswari Textile Industry, Cottage Industry and Handicraft Emporium, Nepal Tea Development Corporation, Brick and Tiles Factory, Dairy Development Corporation, Himal Cement Company and National Insurance Corporation.

2.10.6 The Fourth Five Year Plan (1970-75):

The plan period was marketed by the establishment of numerous PEs numbering 27 in total Viz., Nepal Oil Corporation, Heatauda Textile Industry and Credit Guarantee Corporation, Rastriya Chamal Factory, Tobacco Development Company, Jute Development and Trading Corporation, Cultural Corporation, Nepal Film Corporation, Nepal Livestock Company, Agro Lime Industry, Vegetable Ghee Industry, Nepal Cheuri Ghee Industry, Eastern Electricity Corporation, Electronic Data Processing Center and Eight Paddy Rice Export Companies.

2.10.7 The Fifth Five Year Plan (1975 – 80)

The plan adopted the industrial policy of 1974 and provisioned for the establishment of industrial districts and four industrial ventures in the public sector, projecting a substantial expansion in the private industrial sector. However although the industrial districts were set up, only two industrial enterprise, one from the projected list and an other not envisaged in the plan were set up during the period. It also marked as the period of review and reconciliation of PEs and put a question mark on their proliferations. Consequently, Corporation, Co-ordination committee under the Chairmanship of the Prime Minister was established to study and recommend suitable measures for implementation. Government of Nepal adopted 'restraining policy' in the sixth Five Year Plan. However, few PEs came into establishment while some PEs were amalgamated and divested to private sector during the period. Hetauda Cement Factory and Janak Education Materials Centre were established during this period.

2.10.8 The Sixth Five Year Plan(1980 – 85)

Many manufacturing industries and enterprises were established during the period like Lumbini Sugar Factory, Bhrikuti Paper Industries, Nepal Paper Industries, Herbs production and processing Company, Nepal Rosin and Turpentine, Butwal Spinning Factory, Nepal Oriend Magnetite and Nepal Metal Co, Nepal Electricity Corporation and Estern Electricity Corporation as well as amalgamates of Balaju Textile Factory and Disabled Welfare Centre during the plan period, National Rice Mill was liquidated and Cendeswari Textile Factory and Nepal Churia Ghee Factory was sold to private sector.

The main features of this plan period were the presentation of PEs status in terms of targets and performances in the legislature for the first time for public accountability purpose.

2.10.9 The Seventh Five Year Plan (1985 – 1990)

The plan expressed concern at the state of affairs of PEs and pointed inadequacy of return from them as compared to the size of huge government investment and therefore called upon the need for running them efficiently. It also called for giving them the required autonomy and recommended suitable reward and punishment on the basis of performance evaluation.

Udaypur Cement Co. was established during the period. Industrial Services Center was bifurcated into two separate institutions viz. Industrial District Management Ltd. and Economic Service Center, Likewise, Nepal Television, Nepal Coal Limited, Nepal Bitumin & Barel Co., Engineering Consultancy, Nepal Housing and Finance Development Ltd. were established during the plan period.

Thus growth of PEs in Nepal has a long history some of which can be attributed to the foreign aid and donors' driver.

2.10.10 The Eight Five Year Plan (1992 – 1997)

The eight plan was postponed till the coming into office of the elected government. The present need of the nation has been to follow a pragmatic and balance approach with positive view to our own past experiences, geo-political situation, economic resources available and other numerous considerations.

Till eighth five year plan there were so many enterprises established. They were funded with zigzag way with up and down productivity and contribution to the government. In this context tit was thought by the government to privatize PEs. So, from the eighth plan period government started to privatize the public enterprises for effective operation of those enterprises.

In this plan period, altogether 16 enterprises were privatized which will be explained in the title "Phases of Privatization".

2.10.11 The Ninth Five Year Plan (1997 – 2002)

The main objective of privatization is to enhance productive uses of resources, in the light of economic, social and political realities of the country. Privatization programme encompasses all political, economic, financial, social aspects and is geared to achieve a particular objective. Its direct and indirect effects have tended to disperse across the various sectors of the economy. Hence, the programme of privatization has been oriented to attain multiple objectives. In line with this, the Ninth plan conceived the following objectives of Privatization. [22]

i) To increase the effectiveness and productivity of government resources through efficient utilization.

ii) To make the government role as a facilitator by encouraging and motivating the private sector for participation in economic development.

iii) To maintain economic stability by enforcing financial discipline and relieving the government progressively forms the burden of financing corporation deficits.

iv) To promote the participation of common people in the economic development by means of privatization.

During the Ninth Plan period, the government planned to privatize the following enterprises. [23]

1. Nepal Tea Development Corporation
2. Pokhara Dairy Development Project
3. Gorkhapatra Corporation
4. Himal Cement Company
5. Nepal Resin and Turpentine Ltd.

[22] Ninth Plan (1997 -2002) page -184

[23] Ninth Plan (1997 – 2002) page - 186

6. Nepal Bank Ltd.
7. Salt Trading Ltd.
8. Rastriya Beema Sansthan
9. Rastriya Banijya Bank
10. Butawal Power Company Ltd.
11. Lumbini Sugar Factory Ltd.
12. Janakpur Cigarette Factory Ltd.
13. Nepal Transport Corporation
14. Nepal Housing Development Finance Company
15. Industrial Management Ltd.
16. Agriculture Lime Industry
17. Agricultural Projects Service Center
18. Birgunj Sugar Factory Ltd.
19. Dairy Development Corporation
20. Cotton Development Committee
21. Herbs Production and Processing Company
22. Hetauda Cloth Industry Ltd.
23. Morang Sugar Factory Ltd.
24. Nepal Telecommunication Corporation
25. Royal Nepal Airlines Corporation
26. Birendra International Conference Center
27. Nepal Oriend Magnesite
28. Hetauda Cement Company
29. Udayapur Cement Company
30. Nepal Electricity Authority.

Out of them only 9 enterprises were privatized in the period[24]. The enterprises privatized were:

1. Nepal Development Corporation
2. Agriculture Project Service Center
3. Cottage Handicraft Sales Emporium
4. Nepal Coal Limited
5. Hetauda Textiles Ltd.
6. Nepal Transport Corporation

[24] Economic Survey, Nepal Government Ministry f Finance 2003 page 129

7. Butwal Power Company
8. Birgunj Sugar Mills
9. Agriculture Tools Factory

2.10.12 The Tenth Five Year Plan (2003 – 2008)

The main objective of Tenth Five Year Plan is to make economic sector of country effective, healthy, dynamic and competitive by maximum utilization of available resources. The plan conceives to expand the role of private sector for higher economic growth and effective operation of poverty alleviation programme. The strategies adopted for the promotion of private sector are as follows: [25]

1. Emphasis on investor friendly environment for forward economic improvement by policy wise guarantee.
2. Provision of entry and drawback of private investment in the every sector of economy by defining the role of private sector.
3. Increase in competitive capacity by providing facilities and benefits to the investment sector.
4. Acceleration of privatization programmes effectively.

2.11 Challenges Regarding the Development of Manufacturing Enterprises:

In the context of declining trend in production and low capacity utilization and the issues like marketing, capital inadequacy, technological development and industrial management; there is a need for privatization of enterprises and redefining the role of government. The government should initiate reform activities such as friendly environment, managing capital resources and industrial research and development to facilitate industrial development through privatization in the country.

Most of the public enterprises have been unable to meet their target of producing goods and provisions of effective service delivery. Government investment in the forms of share capital and loans has been on rise due to lack of effective capital management and capital formation of public enterprises. Most of the public enterprises are over staffed and there exists absence of uniformity in the provision of facilities to their staff. These enterprises have created large liability as a result of their inability to manage their funds properly making it difficult to ascertain the extent of their liability. Therefore, to create congenial environment to establish these

[25] Tenth Plan (203 – 2008) page 108

enterprises as viable entities with increasing their efficiency has been a challenge of this time. Moreover, overstaffing and settlement of unlimited liability of these enterprises has been an obstacle on the way of privatization and their restructuring. [26]

2.12 Present Status and performance of manufacturing Enterprises:

Privatization programme has bought positive impact on the economy. Nepalese manufacturing industries are operating in good environment in comparison to previous 10 years, although the results of them are not satisfactory.

B.P and PN Ltd and SDB have done very good in terms of additional investment, technological improvement, product diversification production and sales. In case of the former companies, it has contributed to additional employment, export, and profit and government revenue too. Presently, both of these companies are suffering from market problem. The BP and PNL had expanded its sales to international market. Accordingly, exported its product to India in the initial years of expansion but, currently the competition with the products of Indonesia, Canada and Confederation of independent States (from former Soviet Union) it gave a set beck in Nepalese product. Moreover, as a result of the fall of price of paper in the international market, the company has been affected by this fall in price. The Co's price of its product is no more competitive. Consequently, market is down and the company has to reduce its production. It has chain effect on productivity, employment, profit etc.

Similarly, SDB and BBF products are suffering form the market problem and they are operating at loss. According to the factory sources, the economy is to expanding and the construction activities have come down significantly. In the mean time more competitors have entered into the market. As a result there is more supply ad more demand in the market. Both of these companies have discounted the increased price by almost 25%. Still they could not generate additional demand for their products. Both of them are trying to export their products to Japan and Tibet. If they succeeded the profit margin will improve.

The NFDC and NFI are doing well after privatization. The total expenditure, production, sales, product diversification, technology improvement etc, have

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[26] Ministry of Finance Economic Survey, 2003, Page 130.

satisfactory improved. Only employment has fallen in both the companies. Their improvement trend is encouraging and can be believed that they will further improve in the future.

The SRJM was in a very poor condition. Since the government could not run it for almost 3 years. The success of privatization can be measured by the fact that this closed company is running smoothly now. Almost 1650 employees are now working in the company. Although the company is at loss, investment production, sales and export have gone up. It is expected that the company will be in profit in the near future. Product diversification and technological improvements were the advantages of manufacturing companies.

The BI"T is not doing well at the moment. Its total expenditure, production, sales, export and product diversification have improved, but employment has reduced. Its level of sales is not sufficient to bring the company into profit. It is facing international market problem. If it succeeds to diversity its products and export them to Europe as planned, it may overcome the problem. Moreover, if the government, by negotiating with the US government, succeeds to eliminate the quota limitation in the US market or to increase it the company may survive well in the future. Otherwise it is in very serious trouble presently.

In case of NB & BU, production, profit, investment tax and sales have improved. All the employees are made permanent. Some of the employees have taken voluntary retirement. Technology improvement and product diversification have been carried out. It is doing very good but, incase of NLOL performance is not encouraging. Its production, sales, profit and technology improvement has off loaded only partial shares, is doing well. It is removed that the top level management (the board) has some problems of lobbying. Similarly ATF was closed for nearly one year mainly because of the several disagreements among the investors who were chosen in appropriate way in the privatization process because of the decision based only on price rather than on technical side ability. Recently the company has restarted operation.

Table no. 2.1

Present status of manufacturing enterprises:

Manufacturing enterprises	Investment	Production	Sales volume and price	Employment	Borrowings	Profit/ Loss
BP & PNL	Increased	Increased	Increased	Increased	Increased	Loss
SDB	Increased	Increased	Increased	Minor Change	Increased	Loss
NFDC	Increased	Increased	Increased	Decreased	Increased	Profit
NLOL	Increased	Not significant change	Not significant change	Decreased	Increased	Profit
NB & BU	Increased	Increased	Increased	Minor Change	Increased	Profit
NFI	Increased	Increased	Increased	Decreased	Increased	Profit
SRJM	Increased	Increased	Increased	Increased	Increased	Loss
BTI	Increased	Decreased	Decreased	Minor Change	Increased	Loss
BBF	Decreased	Decreased	Increased	Minor Change	Increased	Loss

Source: Ministry of Finance, Economic Survey, 2003:

Many of the enterprises increased in the prices of the products and total expenditure and borrowings have also gone up, the price of the product did not cover the real cost. Consequently, after the restoration of peace process in the country, all of the companies increased the prices of the products by covering the real cost and profit per unit.

Similarly, the increased borrowings indicate that the new management has invested more funds in the companies. And the companies are trying hard to cope with scarcity of funds.

From the above discussion, it is clear that most of the manufacturing enterprises are doing well. BTI has exported most of its products. Some of the enterprises fought long time for their survival problem but it does not mean that the way is easier. There are several difficulties facing by the manufacturing enterprises. The Biratnagar Jute Mills is a private manufacturing industry having only the minority shares of Nepal government. The board contracted out the company to the private management. Later, the board chairman broke the contract with former management and again contracted it out to another management, which has recently informed the government that it can't run the company further. It seems that the management and the board are not in good tune. The mill was closed due to the fear of loss and limited product demand before few months. It was not only the cause of closing the mill but also the conflict between labours, other employees and the management.

But "The mill is reopened after the agreement between Arihant Multi Fibers and Trade union. According to the agreement total remuneration of the employees during the closed period will be paid after three months." [27]

Though there are some problems in the organization, most of the problems are originating from the economy itself. Scarcity of funds, absence of big investors and skilled manpower, impractical government regulation, absence of corporate culture, undeveloped capital market, smaller size of the economy national and international market problems, ignorance of people, etc. have nothing to do directly and specifically with the privatization programme itself though they do not affect the success of privatized enterprises as observed above. The BP & PNL, HBTF, BTI and BBF all are suffering from the above factors. "In this context, the government has to show its sensitivity towards these enterprises and should try to solve some of the genuine problems such as scarcity of funds and short comings in government regulation, Privatization Act, tax and other economic policies etc".[28]

There is big hue and cry regarding environment deterioration, foreign employees' recruitment and health hazardous production process of some of the privatized enterprises. As mentioned earlier, these are also the problems of the economy ax a whole and have originated from some of the compulsions of the government in general. These problems are prevailing in almost all of the private enterprises. It is the duty of the government to monitor and supervise these enterprises and force them to comply with the laws, by laws and regulations. If they do to follow the instructions, the concerned government agencies should punish them in accordance with the law. If the legal provisions are not sufficient, they should bring a

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[27] Kantipur daily, Mansir-16, 2060

[28] Ministry of finance, monitoring privatized enterprises (A report on performance of privatized enterprises. 1999, page 4).

news law with the approval of the parliament. But the government agencies responsible for implementing such laws, by laws and regulations are to come extent inactive. Instead, all blames are imposed on the privatization programme.

Naturally, the Nepalese economy is in the early stage of development, so there are several structural problems. These structural problems could be addressed in the due course of development process, which itself requires liberalization to eliminate some to the inherent problems of the economy. In this context, the privatization liberalization and sustainable economic development process have to go side by side.

They are interrelated and cannot go separately. Furthermore, most of the other economic problems could be solved to a large extent if the government helps theme to regulate the manufacturing enterprises in peaceful environment. [29]

2.13 Number of Establishments :

The new manufacturing industries came into existence after the establishment of first Jute Mill Industry in Nepal. Biratnagar Jute Mill Industry is the first manufacturing establishment in the manufacturing sectors. It was established in 1935 B.S. Many more modern manufacturing industries were established after the establishment of Biratnagar Jute Mill. The statistical data regarding the number of establishments are presented in the following table:

Table no.2.2

No. of Manufacturing establishments:

Census Year	Number	Growth Rate (%)
2018	459	-
2021/22	1330	190
2028/29	2434	83
2038/39	4903	37
2048/49	4271	76
2053/54	3557	-17
2058/59	3213	-10

Source: i) Statistic Department

[29] Ibid. Page no. 1

The above table shows the total number of manufacturing industries in different census years. And the growth rate of them in percentage. In census year 2018, 459 manufacturing industries were established in Nepal. The growth rate of manufacturing industries was 190 % in census year 2021 and 2022 and the number of establishment were 1330 in the same census year. After that the growth rate of manufacturing establishment began to fall down by 83 %, 37 %, 76 %, -17% and -10% in the census year 2028/29, 2038/39, 2048/49, 2053/54 and 2058/59 respectively.

Figure No: 2.1

Graphic Presentation of No. of manufacturing establishments:

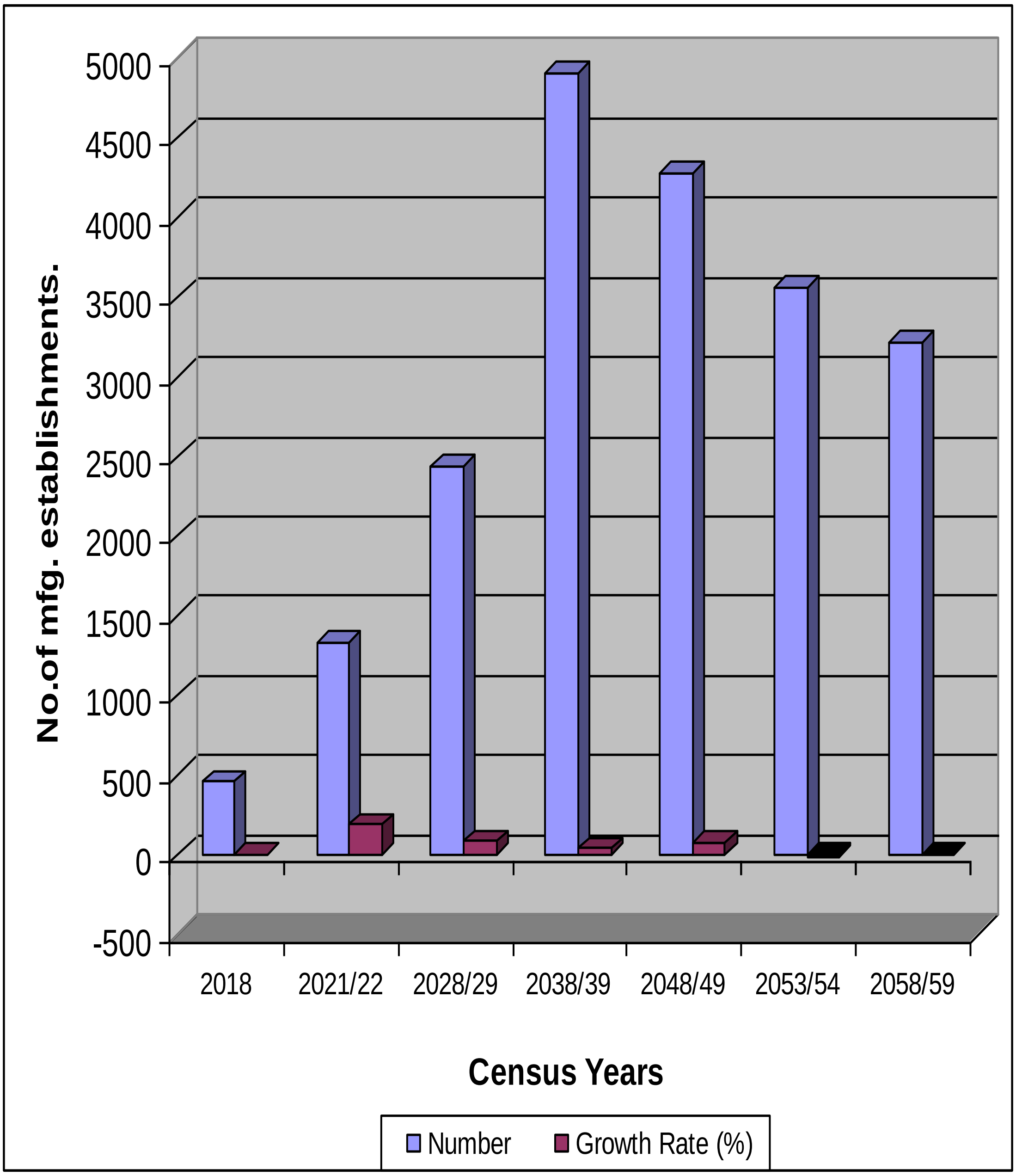
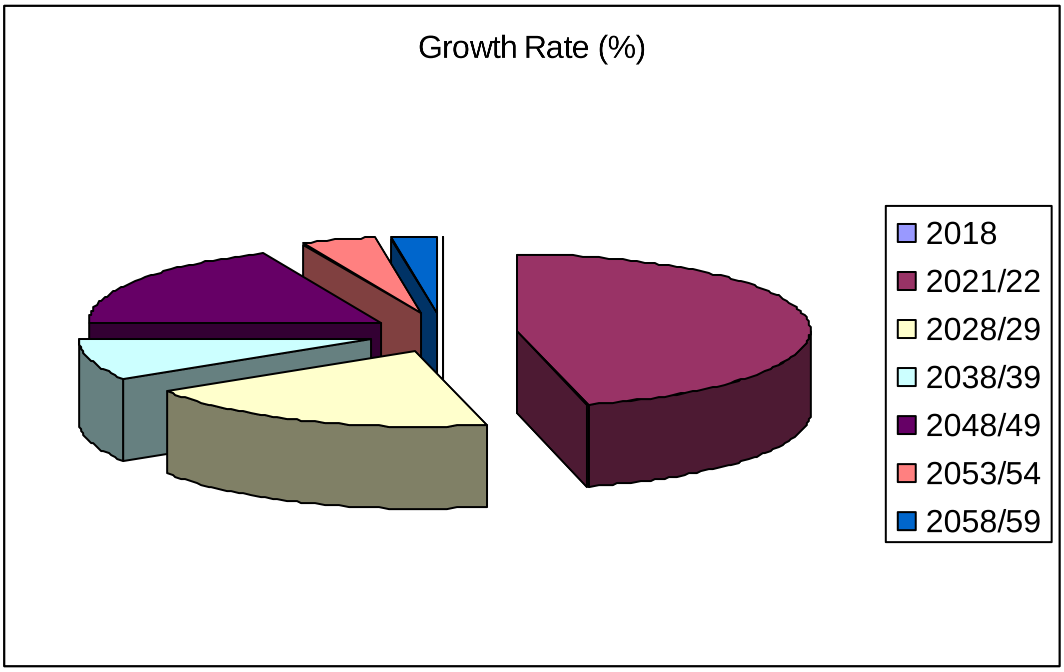


Figure No: 2.2

Graphic Presentation of Growth Rate of manufacturing establishments



2.14 Capacity utilization of manufacturing Establishments:

Capacity utilization is concerned with the production of the Industry. Capacity utilization is the ratio of production capacity and production quantity. Capacity utilization can be measured through the machine capacity of an industry.

Capacity utilization helps to find out the factory cost and productivity of a manufacturing establishment. It a factory operating at higher capacity utilization it naturally produces more items at low price. On the other hand if industry operating at a lower capacity utilization. It produces low output at higher cost. The number of establishments and their capacity utilization are given in the following table:

Table No. 2.3

Capacity Utilization of Mfg. Establishments:

Capacity Utilization	No. of Establishments	Percentage
Less than 20	202	6
20 – 40	709	22
40 – 60	1299	41
60 – 80	786	24
More than 80	217	7
Total	3213	100 %

Source: Census of Mfg. establishments in 2001/02, Kathmandu

From the above table it can be said that one thousand two hundred ninety nine manufacturing industries are using 41 % of total capacity in an average out of 3213 industries. Hence it can be concluded that most of the industries are operated below the 50 % capacity utilization. As a result, small quantities of production are produced at higher price. Therefore manufacturing industries are required to use more than 50 % of total capacity of an industry. This may lead to mass production of goods & services at lower price.

2.15 Employment in manufacturing Industry:

Manufacturing establishment required highly skillful manpower to operate industry in full capacity. Employment is an important factors of production and the success of an industry heavily depends upon the staffs employed with in an industry. Living standard and earning power of people can be maintained if the industry grows up. Here, an attempt is made to highlight the number of people involved in manufacturing industries.

Table No. 2.4

Employment in Manufacturing Industry:

Census Year	No. of Industries	No. of employees	Percentage growth (%)
2033.34	3528	50120	-
2038.39	4903	81050	62
2043/44	3633	129650	60
2048/49	4271	213653	65
2053/54	3557	187316	-12
2058/59	3213	181943	-3

Source: Statistic department

The above table shows the number of people employed in different manufacturing industries in different census year and the percentage growth of them. In the census year 2033/34 there were 50120 people who were employed in manufacturing industries. Similarly in the census years 2038/39, 81050 people have got employees were 129650 and 187316 respectively. And the growth rate were 60% and 65 % for the same years. But incase of the census years 2053/54 and 2058/59 there were negative growth rate of -12% and -31% in census year 2053/54 and 2058/59 respectively. The negative growth trend indicates that the people are loosing their employment opportunities in manufacturing industries.

This situation may not be a good sign to the Nepalese economy itself. To improve the national economy smoothly, the government of Nepal has to invest more money in manufacturing sectors.

The following tables show the no. of people employed in medium/big industries and domestic/ small industries.

Table No. 2.5

Employment in Industry Business:

Fiscal Years	Medium/ Big industries	Domestic/ small industries
2051/52	21339	65091
2052/53	34938	92581
2053/54	23970	85540
2054/55	10136	93094
2055/56	8432	88973
2056/57	15290	79618
2057/58	9165	67975
2058/59	11741	65374
2059/60	12877	47455
2060/61	11687	44725
2061/62	8452	-

Source: Industry department 2005

Figure No: 2.3

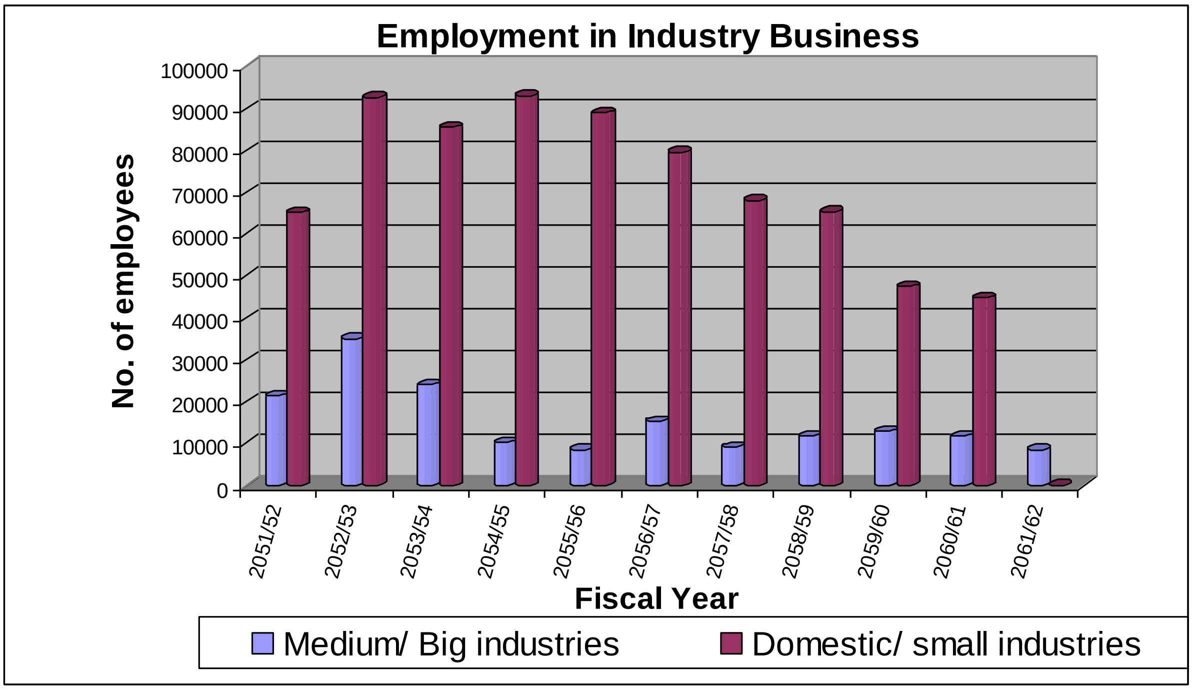
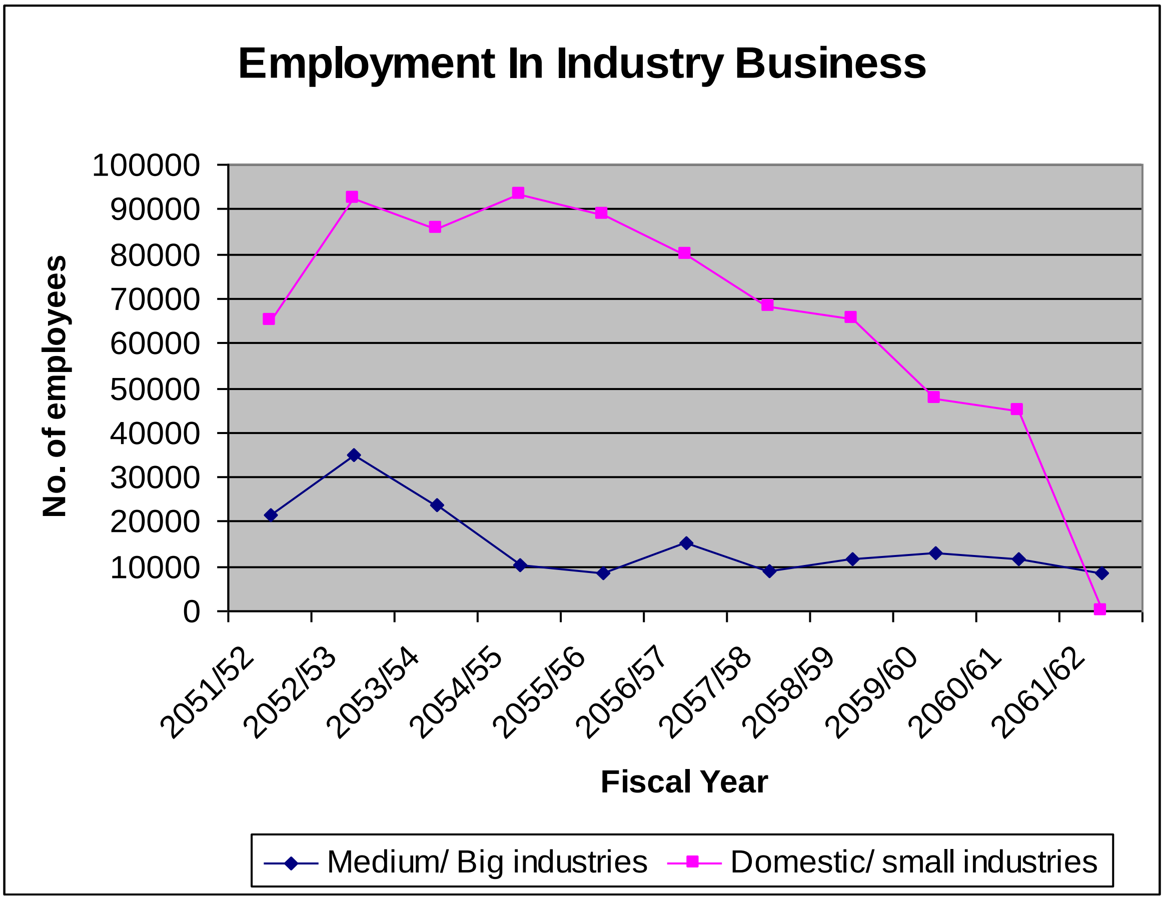


Figure No. 2.4



2.16 A Brief Review of Previous Research Works:

The profit planning in Nepal seems to be emerging sector for research and analysis. Very few researches have been made in the areas of profit planning and control. Out of them, very limited researches are able to go in the depth and detail of PPC, an attempt is made here to review some of research studies.

Dozy Tater[30] has submitted a dissertation on the topic entitled PPC: A case study of Bottlers Nepal Ltd. in March 2001. The period covered by her study was of 6 years starting from FY 1993/94 to FY 1999/2000. Necessary data were collected from primary and secondary sources. The basic objective of the study was to examine how far the different functional budgets were being applied as a tool of profit planning in business enterprises. The specific objectives of the study were:

i. To analyze the various functional budgets those are prepared in Bottlers Nepal Ltd.
ii. To examine the present planning premises adopted by this company.
iii. To examine the forecasting approach of Bottlers Nepal Ltd.
iv. To identify the BEP of the company.
v. To draw a picture of planning diversification in Bottlers Nepal Ltd.
vi. To examine the cost structure.
vii. To see the BN Ltd. in profit planning on the basis of overall managerial budgeting.
viii. To evaluate the variance between targets and actual of the BN Ltd.
ix. To recommend for the improvement in the situations of profit in BN Ltd.

Major Findings of the research works were:

i. Specific goals and targets were not found to be defined clearly to achieve the basic objectives of BN Ltd. Co.
ii. There was lack of defined authority and responsibility. So there is no proper coordination between the various responsible departments.

[30] Dozy Tater**, "Profit Planning in Soft Drinks Industry** (A case study of Bottlers Nepal Limited Balaju); (Unpublished Master Degree Dissertation Submitted to T.U. -2001)

iii. Inadequate profit planning due to lack of planning experts/ planners.
iv. Financial performance of company was not satisfactory.
v. The company failed to maintain its periodic performance and there was no proper reward and punishment system.

The main Recommendations of the study for the further improvement of the company were to:

i. Adopt the comprehensive profit planning from the very beginning to the end.
ii. Fix a target of sales revenue and it should make an attempt to increase sales revenue adding of new product line or increasing the sales by increasing the customer.
iii. Analyze SWOT (Strength, Weakness, Opportunity & Threats) analysis to improve the company's capability.
iv. Develop different functional, financial budgets in detail separating the costs into variables/ fixed, controllable/ uncontrollable.

The Tater study is helped to guide the company for further improvement and also to help for there researchers and investors, stakeholder of the company.

Laxman Sharma Paudel [31] studied about the PPC of Gorakhali Rubber Industry Ltd. using different budgets as a tool of PPC.

The conclusion of the study regarding the performance of GRIL showed that:

i. GRIL did not prepare the long term strategic profit plan but it prepared tactical short-term profit plan which is usually referred as budget. The time period covered by the budgets was one year generally detailed by interim time periods.
ii. Industry was able to maintain a minimum level of coordination between the staffs and department.

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[31] Laxman Sharma Paudel**, A study on profit planning and control** (A case study of Gorakhali Rubber Industry Limited) Unpublished Master degree thesis T.U. June 1996.Ministry of Finance Economic Survey, 2003, Page 130.

iii. The plans were prepared from top level and later it was communicated to the lower level.

iv. Nepalese manufacturing enterprises lacked planners and budgeting experts. Budgets were prepared on traditional and adhoc basis.

v. The short term sales budget of industry was prepared by products, by time periods, and by sales territories.

vi. The sales budget was more ambitious. The actual sales achievement was about 63% of the budgeted sales. The export sales come down furthermore than domestic sales. This showed that sales budgets were not prepared by considering all variables affecting sales.

vii. Industry was found to be flexible production policy. The theoretical formula (Planned Production = Planned Sales + Desired Ending Inventory – Opening Inventory) for production budget was adopted while formulating the production budget.

viii. Actual production was made in accordance with the actual sales. Therefore, production activities were not done according to the budgeted production but this was done according to the recent data of actual sales.

ix. Budgets were prepared just to fulfill the formalities but these were nto used effectively for the profit planning process.

After the detail analysis of profit planning of GRIL, Paudel's study recommended the company as follows:

i) GRIL should develop specific goal for the coming budget year.

ii) Industry should develop the long term strategic plan for every aspects of its operation.

iii) The objectives of the industry should be clearly stated.

iv) Cost, volume and profit relationship should be prepared while pricing the products.

v) Production budget should be prepared by interim time periods also.

vi) Industry should have in-depth analysis of the industry's strengths and weakness.

vii) Sales budget should be prepared on realistic ground.

viii) Variance analysis should be effective.

ix) A systematic approach should be made towards comprehensive profit planning.

x) Role of budgets should be understood by every managers of the industry.

The implementation of above recommendations can considerably contribute to increase the profitability of industry.

Radha Devi Ghimire[32] has submitted a dissertation on the topic Profit Planning: A case study of Harisiddhi Brick and Tiles Factory Ltd. in 1999. The study has covered a span of eight years from FY 2046/47 to FY 2053/054. The basic objectives of the study were to examine how far HB & TF Ltd. has applied the profit planning system in their organization and analyze the trend of profit of 10 years. In addition, the study also aimed to analyze the variances, between targeted actual profit and pointing gout suitable suggestion and recommendations.

Ghimire concluded that HBTF Ltd. had not adequately considered controllable and non-controllable variables affecting the company. Furthermore, it has no in depth analysis of the company's strengths and weakness. She further added that there was no well developed system of performance evaluation for employees, neither any broad objective to operate with positive and dynamic philosophy of management. The companies' performance also did not reveal satisfactory achievement of specific goals that were targeted. The company also lacked coordination and budgeting and planning experts.

The positive sides of the company which she highlighted were:

i. Adaptation of the Chinese technology to product of high standard products.

ii. Stable after privatization

Although there were some positive practices, the company in totality was found to be decreasing. So, she recommended as follows:

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[32] Radha Devi Ghimire**, Profit Planning** (A case study of Harisiddhi Brick and Tiles Factory Ltd.)

i. Company should clearly define its board objectives.
ii. Company should have major programs to accomplish formulated objectives.
iii. Profit planning manuals should be communicated from top to lower levels.
iv. Company should have to utilize its capacity to meet the target production which will provide encouragement to get profit.
v. Company should have to consider break even analysis while preparing sales plan.
vi. The company should decide and make policy about research and development, factory productivity, capacity utilization and cost control.
vii. Sales forecasting should be made on realistic ground.
viii. Volume of inventories should be reduced to optimum level.
ix. A systematic approach to comprehensive profit planning is essential to adopt in the factory. To adopt this approach planning experts should be hired or existing planners should be trained.

In the same line, Agnidhar Parjuli[33] in his articles pointed out features and problems of profit planning in Nepalese context of manufacturing enterprises. He selected Bansbari Leather and Shoe Factory and Dairy Development Corporation as a sample among Nepalese enterprise. From the study he pointed out that both enterprises were adopting profit planning in a realistic premise. He again added that resources were not utilized in best manner, and the management was occupied by false perception.

2.17 Research Gap

A brief review of above mentioned dissertations, it is seen that most of the enterprises are not operating effectively and they have also not applied the full concept of budgeting, profit planning and control. Most of the studies have only highlighted

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[33] Agni Dhar Parajuli, "**A study of profit planning in manufacturing public enterprises in Nepal** (with a special refrence to Bansbari Leather and Shoe Factory abd Dairy Development Corporation) Unpublished Master Degree dissertation submitted to T.U- 1991

correlation, regression, percentage etc for analyzing the variables. But this research paper has also applied t-test analysis between targeted sales and actual sales with other tools of analysis. Likewise, most of the studies have analyzed the data less than ten years. But this study is designed to highlight the performance report of manufacturing industry of Terai Region. Another important thing to note is that no one has made an effort to study the performance of SDB Chinese Brick Industry. The present study made an effort to analyze private manufacturing industry. And it also assesses the financial position of private manufacturing industry.

The study includes regression analysis to examine the extent of relationship between the variables. This study is also believed to be useful for investors, researchers, management of SDB Chinese Brick industry (P) Ltd. and any other stakeholders of the company.

CHAPTER THREE

RESEARCH METHODOLOTY

3.1 Introduction:

Following the research problems and objectives to attain the design of the study includes analysis of financial performance, in terms of various financial ratios and profit planning and control adopted by the enterprises. The study also included method of data collection processing and tabulation for analyzing different aspects of the study.

As the main objectives of this research is to analyze, examine and interpret various profit planning techniques and effectiveness of the enterprise the study compares planned financial targets with actual performance with the help of various annual financial statements.

Analysis has also been done on profit planning concept used in SDB including sales realization in respect to budgeted previous and examine the cost structure.

3.2 Sources of Data

Primary and secondary have been used in this study. The data and information used in this study were collected from the following sources:

(1) Published data and records in respect of SDB Ltd.
(2) Annual reports published by the factory.
(3) Annual programme and budgets published by the factory.
(4) Primary data was collected by questionnaire and personal interviews from the experts.
(5) Magazine publications.

3.3 Methods of Data Collection

Primary data was collected with the prior appointments with the concerned authorities of the factory. A series of factory visit was done for interview with officials and to collect other necessary data from the office records maintained by various departments of the factory.

3.4 Questionnaire Preparation

A questionnaire was administered to interview with departmental heads and collected official records as maintained by the departments of the factory. The questionnaire includes background information and information regarding administration, production, marketing and finance.

3.5 Research Hypothesis

1. Hypothesis regarding targeted sales and actual sales.
   - Null hypothesis (H_o): There no significant differenced between targeted sales and actual sales.
   - Alternative hypothesis (H_1): There is significant difference between targeted sales actual sales.

2. Hypothesis regarding financial performance and market price of share.
   - Null hypothesis (H_o): There no significant impact of financial performance on market price of share.
   - Alternative hypothesis (H_1): There is significant impact of financial performance on market price of share.

The measure of the impact of financial performance on its market price has used regression analysis. The financial performance of the factory has been proxied by the earning per share. The regression analysis included financial performance as independent variable and market price of share as dependent variable one the assumption that improvement in financial performance leads to increase in share price.

3.6 Research Tools Used

Appropriate statistical tools and techniques have been applied such as correlation, regression, percentage, average, analysis of t-test graph etc. The above tools have been used for analyzing SDB's sales production, inventories profit and loss, expenses balance sheet etc.. A simple regression equation has been specified to examine the relationship between actual sales as dependent variable and time as independent variable, specifying as $y = a + bx$ where, y represents for actual sales and x represents for time, a represents for constant and b represents for coefficient. This equation has also been used to analyze the relationship between time and profit/ loss assuming time as independent and profit/ loss as dependent.

Similarly, the hypothesis regarding financial performances and market per share has also been tested using simple regression analysis, specifying: Mps = a – b Eps.

Where,
Mps = market price per share and
Eps = Earnings per share

The equation has tested the relationship between financial performance (i.e. earning per share) and market price of share through regression analysis assuming that earning per share (EPS) as independent affects market price of share (Mps) as dependent variable. Likewise Karl pearson's coefficient of correlation ® and probable error (for this) between actual sales and actual production has been calculated by the formula as follows:

i) $$(r)=\frac{\sum dx\times dy}{\sqrt{\sum dx^2}.\sqrt{\sum dy^2}}$$

Probable error, P.E. = $PE=0.6745\times\frac{(1-r^2)}{\sqrt{N}}$

ii) Calculation of mean

$$(\bar{x})=\frac{\sum X}{n} \qquad , \ (\bar{y})=\frac{\sum y}{N}$$

iii) Calculation of combined mean

$$(\bar{X}_{12})=\frac{\overline{X_1}N_1+\overline{X_2}N_2}{N_1+N_2}$$

iv) Calculation of standard deviation

Individual standard deviation $(\delta) = \sqrt{\frac{\sum dx^2}{N}}$

Combined standard deviation (δ_{12})

$$= \sqrt{\frac{N_1\delta x_1^{\ 2} + N_2\delta x_2^{\ 2} - (N_1 + N_2)\overline{X}^2{}_{12} + N_1 x_1^{\ 2} + N_2 x_2^{\ 2}}{N_1 + N_2}}$$

v) Calculation of coefficient of variation

$$\text{C.V of } x = \frac{\delta x}{x} 100\%$$

In order to examine whether there is a significant difference between targeted and actual sales, the t-test as specified below has been used assuming that actual and targeted sales are independent to each other.

Formula for the calculation of t-value of targeted sales and actual sales,

$$t = \frac{\overline{X_1} - \overline{X_2}}{\delta_{12}\sqrt{\frac{1}{N_1} + \frac{1}{N_2}}} with (N_1 + N_2 - 2) d.f.$$

CHAPTER FOUR
ASSESSMENT OF PROFIT PLANNING AND CONTROL SYSTEM

Introduction

This chapter examines profit planning system of SDB Chinese Brick factory. It analyzes the various functional budgets and their actual accomplishment. Profit Planning as conceived in the study indicates for planning of sales production, inventories and different costs for making higher profit. Profit is necessary for survival and increasing organizational reputation. Profit plan is the pre-plan of revenue and expenditures of the company.

Budgeting is a tool for measuring the profit of any organization. It is as a tool of planning which relates to the broader system of planning in an organization. Planning involves the specification of the activities translated from the basic objectives that the organization intends to meet.

Sales Planning in SDB

Sales is one of the most important factors for manufacturing enterprises. It affects not only in the profits and its planning but also in the preparation and planning of other factors. When sales is increased, profit is also regarded to increase and vice-versa. It helps in the effective operation of the enterprises. The profit plan or budgeting process begins with the preparation of sales plan or budget.

Preparation of sales plan is the first and important step in developing the overall profit planning process of an enterprise. The volume of quantity of final products to be produced is determined by the sales. So development of realistic sales plan is essential for making the provision of other elements of profit plan.

Generally, it is thought that sales forecasting is the sales plan but sales forecasting is not a sales plan. It is one of the major elements of the sales plan. The sales plan must represent the opinion of all departments in the organization. The sale estimate must be revised and adjusted according to the changing market conditions.

SDB is adopting the time period basis (i.e. monthly basis) for developing a sales budget. It is prepared on the basis of sales forecasting. The basis of sales forecasting is the sales achievement of previous year. Sales officer is directly responsible for sales forecasting and preparations of sales budget but chief executives should also participate in the process.

The factory is adopting cost plus pricing method for selling its products. It has only one distribution channel indicating direct link from producer to consumer. It is because all the production of the company is sold by company itself. The factory is facing competition with other local brick factories. They are Bhaktapur Brick Factory and Yati Brick Factory etc. The main market of the factory is local market. However, it sells its products all over Nepal. From the interview with concerned department it came know that it is also trying to export its products especially bricks to Japan. The selling price of its different products is shown in the tables below:

Table no. 4.1

Price of Bricks :

Types of Bricks	**Price Per Brick**
Normal Bricks	4.29
D.D Bricks	4.84
Ridge	24.97
Special Brick	10
Chinese Brick	10

Source: Field survey, 2008

Table no. 4.2

Long term sales plan of SDB (P) Ltd.

Fiscal Year	Sales Target	Index	Sales Achievement	Index	Achievement as Percentage of Target
2051/52	17901	100 %	21289	100 %	119 %
2052/53	28186	157	27837	131	99
2053/54	27792	155	25907	122	93
2054/55	67307	376	37327	175	55
2055/56	112405	628	42790	201	38
2056/57	157957	882	47439	223	30
2057/58	187383	1047	41491	195	22
2058/59	193037	1078	42440	199	22
2059/60	193057	1078	40210	189	21
2060/61	193307	1080	51031	240	26
2061/62	199307	1080	60810	286	31
2062/63	113605	635	54085	254	48
2063/64	40242	504	-	-	-
2064/65	89796.4	502	-	-	-

Source: i) SDB Chinese Annual Report and Annual Programme and Budget

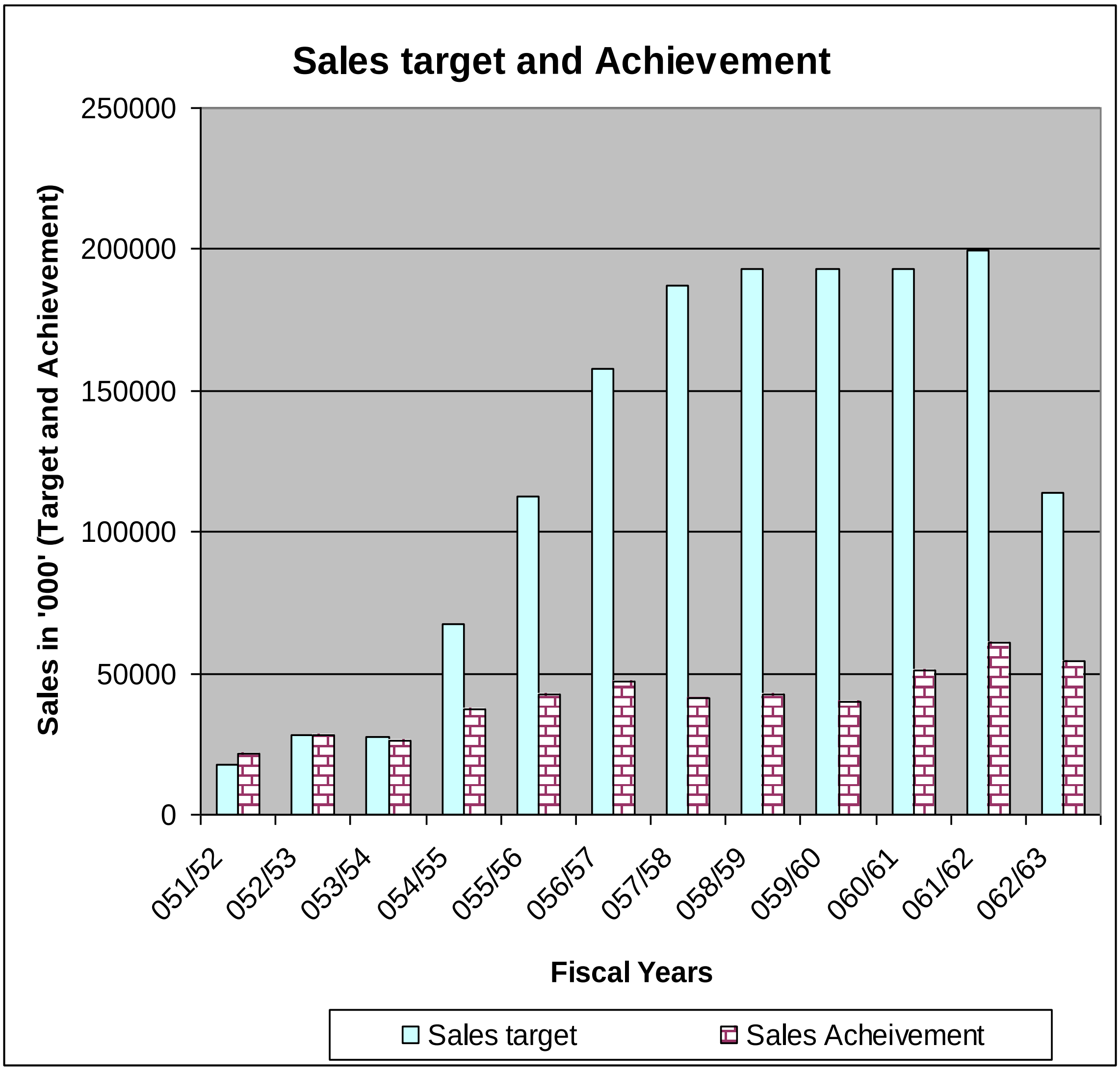
The above table shows the long term sales target and its achievement. From comparison of actual sales and targeted sales, it shows that there is a big gap between target and actual performance. The sales achievement as percentage of target sale is declining over in period of time. In first three years the achievement percentages are satisfactory in comparison to next seven years. It is seen that the achievement percentage are decreasing from the fiscal year 2054/55 to fiscal year 2060/61. After the fiscal year 206061 the achievement percent was gone up. That is actual performance in 2061/62 and 2062.63 are 31% and 38% respectively. The improvement can be noticed in the fiscal year 2061/62 and 2062/63. However there is wide gap between sales plan and achievement for the success of organization.

The achievement should be near to target set. This shows a very poor performance of company in the marketing of its products and also in efficiency of management of the company in preparing the sales budget in realistic ground. The management should consider the previous year's sales achievement for preparing the sales target for current year.

Figure No. 4.1

Sales Target and Achievement :

The above sales target and achievement can be presented by the bar graph:

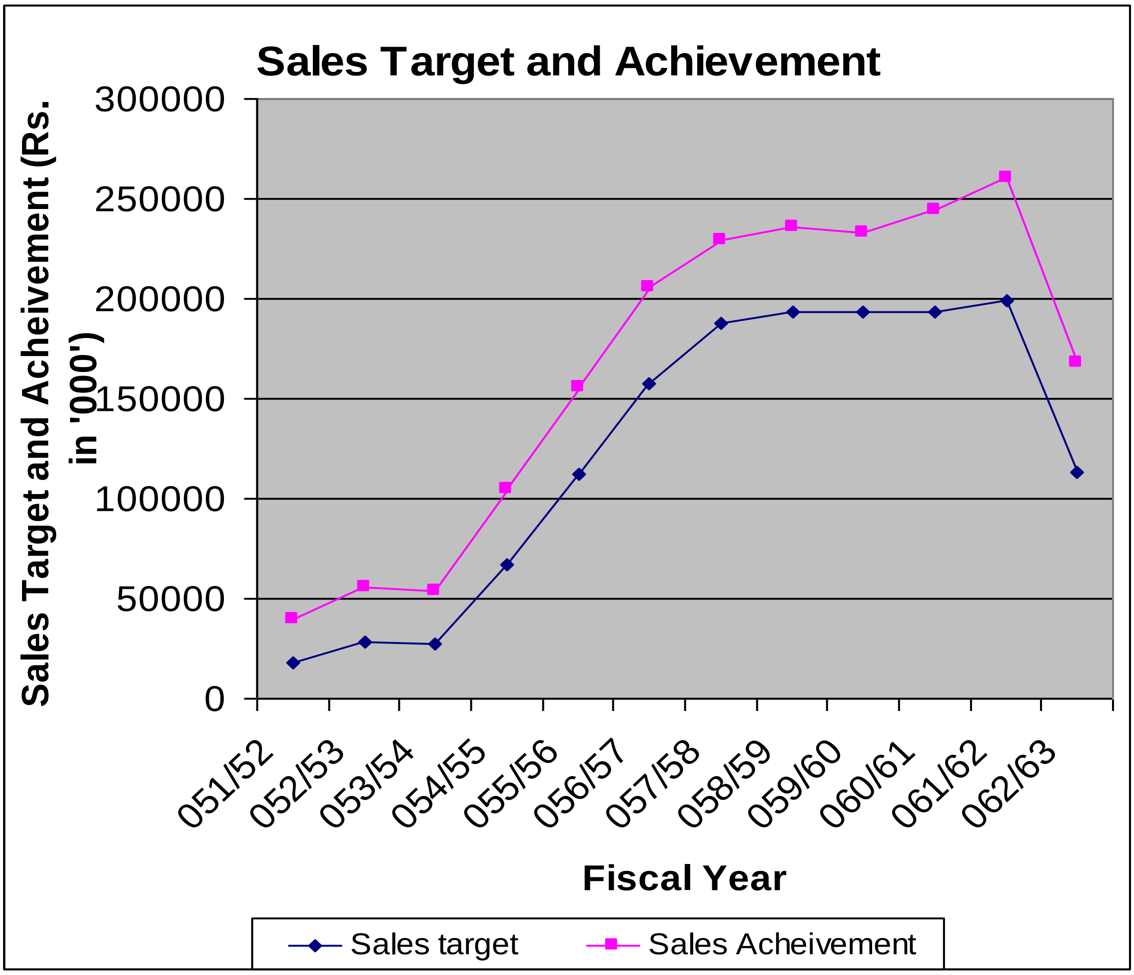


The above bar graph shows a wide gap between can targeted sales achievement sales of the company. However there is improvement after 2062/63.

The same gap between target sales and actual achievement can be presented in line graph as below:

Figure No. 4.2

Sales Target and Achievement :



The line graph also shows a wide gap between the target and actual sales. There is no more deviation in first five years, then after there is huge deviation between the sales target and sales achievement in the year 2059/60 and 2060/61. This figure indicates that the company has not met the sales budget. There is a small deviation between the sales target and sales achievement in last 32 years. It is the sign of good performance of the company. The smaller gap shows efficiency of the company in the preparation of sales plan. In order to test the null hypothesis, there is no significant gap between sales plan and actual performance.

Arithmetic mean, standard deviation and co-efficient of variation of the budgeted and actual sales figure of SDB Ltd are calculated. Summarized results of these statistical tools are presented below: (see appendix 1 for detailed calculation)

Table no. 4.3

Statistical Result of Targeted and Actual Sales:

Statistical tools used	**Targeted Sales (X_1)**	**Actual Sales (X_2)**
Mean $(\overline{X})$	$(\overline{X_1})$= 123772	$(\overline{X_2})$ = 41055
Standard Deviation (δ)	δX_1 = 69247	δX_2 = 11240
Co-efficient of variation (C.V)	55.95 %	27.38 %
Combined mean	$(\overline{X_{12}})$ = 82414	
Combined Standard Deviation	δX_{12} = 64585	

Source: Computed from Appendix – 1

The above result shows that the targeted sales is more variable than actual sales. The mean of actual sales is lower than targeted sales. Similarly, Standard Deviation of targeted sales is higher than that of actual sales which indicates the higher variability in targeted sales. Likewise, coefficient of variation (C.V) of targeted sales is also higher than actual sales. The greater value of C.V, the less will be the uniformity (or greater the variability). So, standard deviation shows the greater variability of targeted sales than actual sales. The test of hypothesis was done with the computation of (+) value and comparing it with that of table value.

T-test has been made to know the nature of variability of the give variable.
All the data taking from appendix-1, the value of:

$$t = \frac{123.772 - 41.055}{64.585\sqrt{\frac{1}{12} + \frac{1}{12}}}$$

$$= \frac{82.72}{64.585 \times 0.708}$$

$$= \frac{82.72}{26.367}$$

$$= 3.137$$

Tabulated value of t at 1% level of significance for 22 d.f. (=12+12-2) is 2.508. Since the calculated value of /t/ (=3.137) is greater than the tabulated value of /t/ (=2.508), the null hypothesis that there is not significance difference between the sales plan and performance is rejected in favour of alternative hypothesis that there is significant difference between targeted sales and actual sales.

Time is also an important factor. With the passage time, the sales achievements get changed and this can be analyzed with the use of time series analysis. "A time series is defined as an arrangement of statistical data taken at its time of occurrence. In other words, if the value of the variables are recorded at different period of time, then the series formed is called time series. [34] It is used to measure the changes of economical and commercial data of the given variable. A straight line trend by the method of least squares $Y_t = a + bx_t$ will show the relationship between years (time) and actual sales, which is given in appendix – 3.

From the appendix – 3, the equation of trend line is $y = 41054.667 + 2939.853X_t$. The trend line shows that future sales will increase by Rs. 2939.853 every year, if sales trend of past years continues in future. From the above equation, we can estimate the sales for FY 2063/64 and 2064/65.

The value of X_t is 6.5 and 7.5 for F.Y 2063/64 and 2064/65 (assumed) being that of FY 2061/62 and 2062/63 is 4.5 and 5.5 respectively.

Then,

Sales for FY 2063/64 :

$$y = 41054.667 + 2939.835 \times 6.5$$
$$= \text{Rs. } 60163712$$

Sales for FY 2064/65 :

$$y = 41054.667 + 2939.853 \times 7.5$$
$$= \text{Rs. } 63103565$$

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[34] Silwal, Dhruba Prasad**, Text Book of Business Statistics**, Talaju Prakashan Bhotahiti, Kathmandu, 1st edition 2053, Page 309..

If trend equation doesn't change, the actual sales will be Rs. 60163712 and Rs. 63103565 for FY 2064/65 respectively.

From the above analysis of actual and target sales, the following points can be drawn.

- The sales targets are highly ambitious so actual sales is significantly lower than planned sales.
- The actual sales are highly fluctuated.
- The mean of targeted sales is higher than that of actual sales.
- The standard deviation of targeted sales is also higher than that of actual sales.
- The T-test shows that there is significance difference between the targeted sales and actual sales.
- Straight line trend shows the positive sales figure for the future.

Planning of Production

Planning of production is another important element of developing PPC plan. Planning of production means determination of production level needs to meet required sales and inventory. Production planning can be understood by the mathematical formula as under:

Volume of production = planned sales + closing inventory - opening inventory

If there is enough inventory position in an enterprise, it will be able to fulfill the demand of market and it can also provide regular supply in the market. It helps to meet required inventory position by the effective planning of value of production.

Planning of production can be achieved by preparing production budget. Production budget depends upon the capacity of enterprise and required volume of sales and inventory position.

"A production budget is a quantity budget which lays down the quantity of products to be produced during the budget period. The main purpose of the budget is to maintain optimum balance between sales, production and inventory position of the firm".[35]

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35 Fago (limbu), Ghanendra and Koirala Keshab, Application of **Profit Planning anc Control**, K.P Pustak Bhandar Kathmandu, Page 22.

Note:-Green production means the bricks and tiles not heated in the fire.

As being a manufacturing company, SDB Ltd is producing three types of products, bricks, roofing tiles and flooring tiles which are in green ad red form. The factory is producing five types of bricks (i.e Normal bricks, DD bricks, Ridge bricks, special bricks and Chinese bricks) and varieties of tiles. The SDB Chinese factory has recently added the standard quality testing machine for quality control.

It has sufficient raw materials for all types of productions. Many of the types of raw material is specially clay is found in local market (or from its own land). But other fuels especially coals are imported from India. The factory is adopting seasonal production policy due to rainfall in the month of Ashad, Shrawan and Bhadra which creates the problems for drying bricks and tiles. [36]

Table no. 4.4

Actual Production:

(Rs. In '000')

Fiscal Year	Actual Sales	Desired ending Inventory	Total	Opening Inventory	Actual Production
2051/52	21289	1643	22932	1759	21173
2052/53	27837	758	28595	1643	26952
2053/54	25907	1257	27164	7758	26406
2054/55	37327	8107	45434	1257	44177
2055/56	42790	11894	54684	8107	46577
2056/57	47439	10800	58239	11894	46345
2057/58	41491	13633	55124	10800	44324
2058/59	42440	14708	57148	13633	43515
2059/60	40210	23858	64068	14708	49360
2060/61	51031	27385	78416	23858	54558
2061/62	60810	16375	77185	27385	49800
2062/63	54085	24263	78348	16375	61973

Source: Auditors Report and Annual Report of SDB Ltd.

[36] The information's are collected by the questionnaire filled by Shanti Shrestha, Officer of the factory.

The table above shows the flexible production policy of SDB, which is seen by unstable production of the factory. Actual production is achieved by the formula:

Actual quality of production = Actual Sales + desired ending inventory – opening inventory

Table no. 4.5

Percentage of Actual Sales on Actual Production:

(Rs. In '000')

Fiscal Year	Actual Production	Actual Sales	Actual Sales as % of Actual production
2051/52	21173	21289	100.55
2052/53	26952	27837	103.33
2053/54	26406	25907	98.11
2054/55	44177	37327	84.49
2055/56	46577	42790	106.90
2056/57	46345	47439	102.02
2057/58	44324	41491	93.61
2058/59	43515	42440	97.53
2059/60	49360	40210	81.46
2060/61	54558	51031	93.54
2061/62	49800	60810	122.11
2062/63	61973	54085	87.27

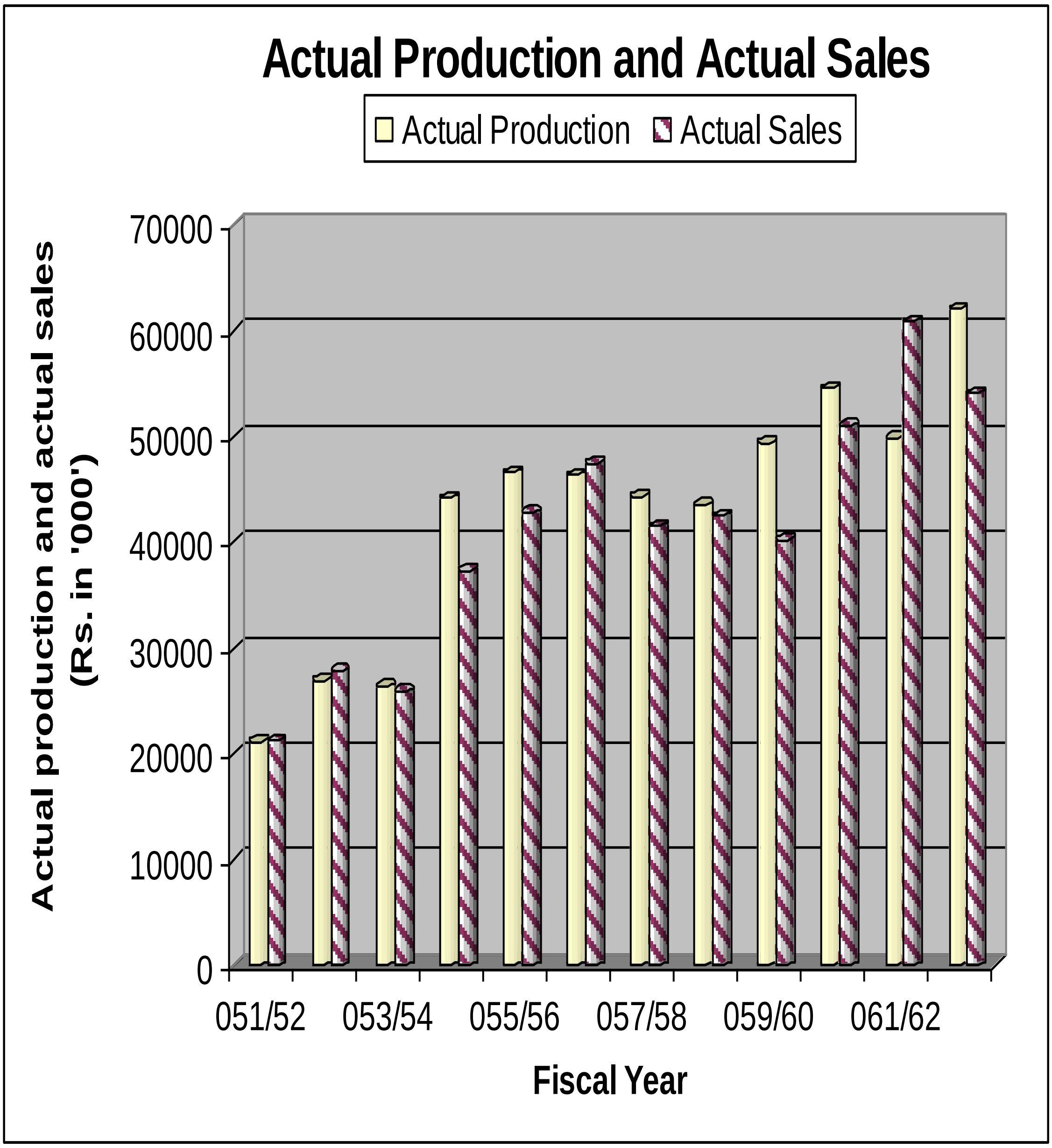
Source: Auditors Report and Annual Report of SDB Ltd.

It is seen from the table that the actual sales as % of actual production in the years of pre- privatization was satisfactory as it was 100.55 %, 103.33 % and 98.11 % in 2051/052, 2052/53 and 2053/54 respectively. According to above table the actual sales percentage is increased in the year 2061/62 to 122.11 %. Again it is decreased to 87.27% in the year 2062/63.

The above actual sales and actual production can be presented by the bar graph.

Figure No. 4.3

Actual Production and Actual Sales :

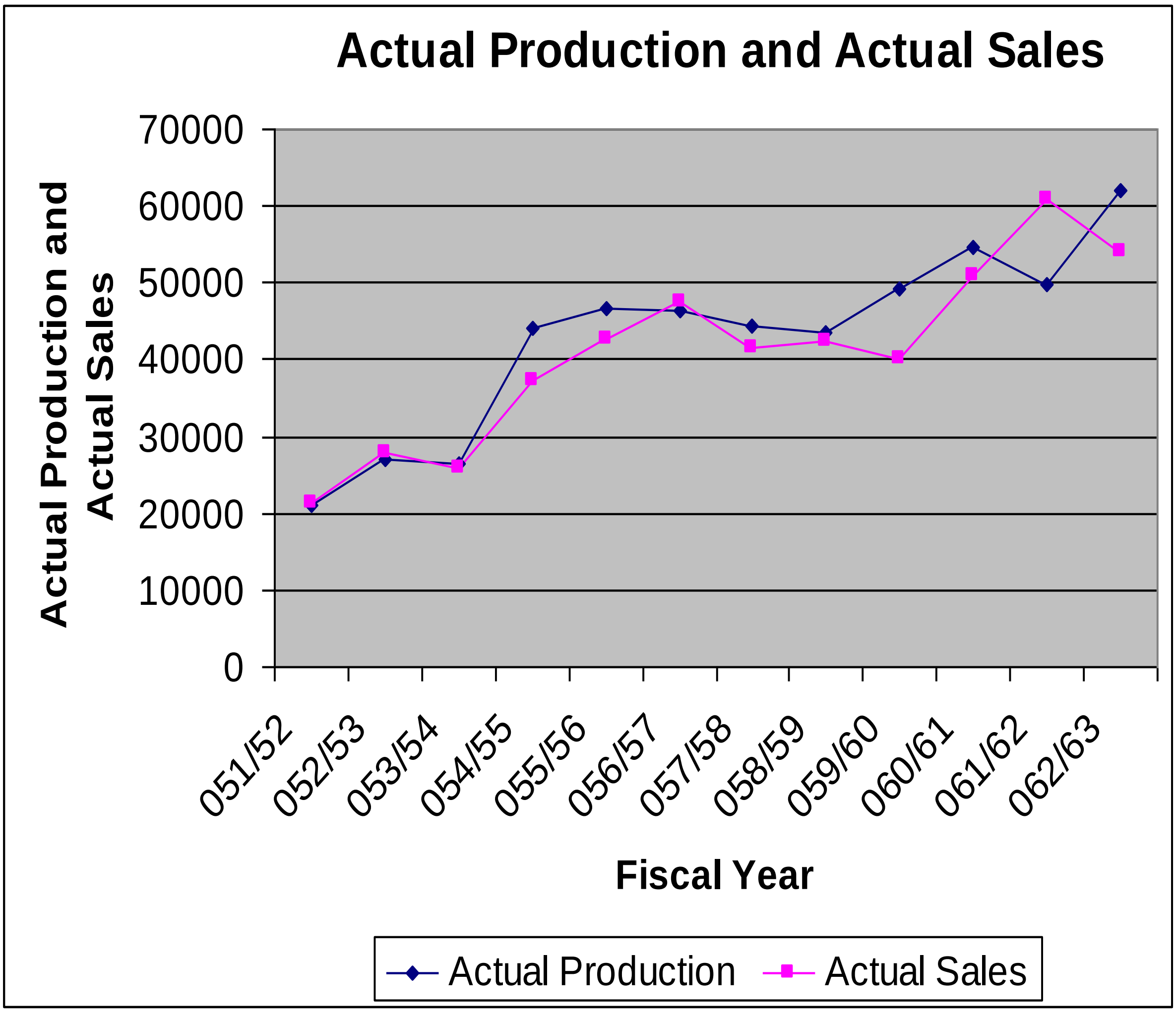


Looking at the bar chart shown above, the height of the bars of actual sales in FY 2051/52, 2052/53, 2053/54, 2054/55 and 2061/62 are higher than actual production. Likewise, there is lower than actual production in rest of the years. It is the cause of inventory situation. If the inventory is increased, actual production get declined higher and vice-versa.

The data of actual production and sales can also be presented in the line graph:

Figure No. 4.4

Actual Production and Actual Sales :



The line graph shows closer relationship between actual production and actual sales in the previous years of 2051/52, 2053/54 and 2054/55. But it is also seen that there was fluctuation in both sales and production moreover, it is also visualized that there is a wider gap in sales and production in years. In the FY 058/59 there was closer relationship between both the variables which is the year after the year 2057/58.

Arithmetic mean, standard deviation and coefficient of variation of the actual production and actual sales figure of SDB Ltd, are calculated to find out the nature of variability. Summarized result of these statistical tools are presented below (See detailed calculation in appendix – 2)

Table no. 4.6

Statistical Result of Actual Sales and Production:

Statistical tools used	Actual Sales in Rs. (X)	Actual Production in Rs. (Y)
Mean $\left(\overline{X}\right)$	41055	42930
Standard Deviation (δ)	11236	11608
Co-efficient of variation (C.V)	27.37	27.04

Source: Computed from Appendix – 2

The above result shows that actual production is quite variable than actual sales. The mean of actual production is higher than actual sales. Similarly, standard deviation of actual production is higher than that of actual sales which indicates the higher variability in actual production. Likewise C.V. of actual production is less than actual sales. The lower the value of C.V, the more will be uniformity (or less variability). So, the C.V shows the lower variability of actual production than actual sales.

Now, it is necessary to see that whether there is close relationship between actual production and actual sales or not. The result is obtained with the help of "Karl Peason's coefficient of correlation" technique.

Karl Pearson's Correlation:

i) $$(r) = \frac{\sum dx \times dy}{\sqrt{\sum dx^2 . \sqrt{\sum dy^2}}}$$

Probable error, P.E. = $$PE = 0.6745 \times \frac{(1-r^2)}{\sqrt{N}}$$

From the calculation of coefficient of correlation given in the appendix-2, the result of correlation shows (0.9) which is positive high degree of correlation. The result of correlation may be varied 0 to 1. If there is zero correlation, it means that there is no correlation between the variables (actual production and actual sales). But if it is 1, it is said that there is perfect correlation between them. If it is between 0.01 to 0.29, there is low degree of correlation. If it is between 0.30 to 0.64, there is moderate degree of correlation and if it is between 0.70 to 0.99, there is high degree of correlation between them. If the result is positive sign (+), it indicates positive correlation and negative (-) sign indicates negative correlation.

In our calculation coefficient of correlation is 0.90 which indicates positive high degree of correlation. With the calculation of probable error of the coefficient: if r > 6×P.E, the value of r is significant (i.e. correlation is certain) otherwise insignificant. In the calculation 6×P.E is 0.22, which is less than r. Therefore coefficient of correlation between actual sales and actual production is significant.

Table no. 4.7

Production plan and achievement in FY 2058/59

Green Production

(units in '000')

Description	Target		Achievement		Percentage Achievement	Short/ Excess	
	Days	Production	Days	Production		Days	Quantity
1. Brick	-	-	-	-	-	-	-
Brick shop No. 1	199	7370	146146	5176	70.23 %	-53	-2194
Brick shop No. 2	199	7370	141499	4523	61.37 %	-50	-2847
Sub Total (a)	-	14770	-	9699	65.80 %	-	-5041
Brick shop No. 3	203	4046	141	2888	71.38 %	-62	-1158
Brick shop No. 4	203	9012	135	4530	50.27 %	-68	-4482
Sub total (b)	-	13058	-	7418	56.81 %	-	-5640
Total (a + b)	-	27798	-	17117	61.58 %	-	-10681
2. Tiles	-	-	-	-	-	-	-
Roofing Tile	203	915	142	660	72.13 %	-61	255
Flooring Tile (6×6)	94	300	52	823	274.33 %	-42	523
Flooring Tile (8×8)	46	460	46	360	78.26 %	0	-100
Dry press Tile	279	748	290	728	97.33 %	11	-20
Total	-	2423	-	2571	106.11 %	-	-

Red Production

Normal Brick	265	8702	197	6807	78.22 %	-68	-1895
Deaired Brick	265	11223	197	6289	56.04 %	-68	-4934
Total	-	19925	-	13096	65.73 %	-	-
Tiles							
Roofing tile	265	836	197	510	61%	-68	-326
Flooring Tile (6×6)	265	400	197	556	139.00%	-68	156
Dry press Tile	-	550	-	665	120.91 %	0	115

Source: SDB Ltd. Annual programme and Budget.

The above table shows that SDB had higher achievement in green production of brick. It was 106 % as compared to 61.58% of bricks. Similarly, the company has achievement 65.73 % of target production. It is the sign of good performance of SDB Chinese company.

Table no. 4.8

Comparative Trend of Production and Sales : (units in '000')

Fiscal Year	Production	Index	Sales	Index
2051/52	21173	100 %	21289	100 %
2052/53	26952	127 %	27837	131 %
2053/54	26406	125 %	25907	122 %
2054/55	44177	209 %	37327	175 %
2055/56	46577	220 %	42790	201 %
2056/57	46345	219 %	47439	223 %
2057/58	44324	209 %	41491	195 %
2058/59	43515	206 %	42440	199 %
2059/60	49360	233 %	40210	189 %
2060/61	54558	258 %	51031	240 %
2061/62	49800	235 %	60810	286 %
2062/63	61973	292 %	54085	254 %

By the comparative analysis of production and sales of SDB Ltd, it can be seen that there is increasing trend of both actual production and actual sales in FY 2052/53. But there is fluctuation in the variables after the 2052/53. The production of the factory has drastically increased after 2052/53.

Inventory Consideration

For smooth Sales activities and running of any organization, a certain level of inventory is needed. If there is optimum level of inventory in any organization, it will able to fulfill the market demand regularly. When production is greater than sales, it increases the level of inventory. The inventory level will decrease when sales exceed production.

Theoretically, there are three types of production and inventory policies, stable production policy versus unstable inventory policy, unstable production policy versus stable inventory policy and flexible in both production and inventory. Stable production Vs. unstable inventory policy adopts fixed production in specified period while final inventory o finished goods are to be unstable.

In the policy of unstable production Vs. stable inventory. Final inventory must be stable at the end of each period and production may be fluctuated. In the third policy, flexible production as well as flexible inventory policy can be adopted for the specified budget period.

The SDB (P) Ltd. is adopting the flexible production and flexible inventory policy because there is fluctuation in both production and inventory in each year. The actual inventory level of SDB (P) Ltd. is presented in the following table:

Table no. 4.9

Level of Inventory in Different Years :

(units in '000')

Fiscal Year	Opening Inventory	Closing Inventory
2051/52	1759	1643
2052/53	1643	758
2053/54	758	1257
2054/55	1257	8107
2055/56	8107	11894
2056/57	11894	10800
2057/58	10800	13633
2058/59	13633	14708
2059/60	14708	23858
2060/61	23858	27385
2061/62	27385	16375
2062/63	16375	24263

Source: SDB (P). Ltd., Annual Reports:

From the above table, it is clear that inventory level is fluctuating nature. The limit of inventory ranges from Rs. 758000 to 27385000 in the study period. It seems that final inventory was found to be very high in FY 2061/62 and low in FY 2052/53. It is also seen that the inventory level was lower in the fiscal year 2051/52, 2052/53 and 2053/54. That is Rs. 1643, Rs. 758 and Rs. 1857 in 2051/52, 2052/53 and 2053/54 respectively. Similarly there is fluctuation in inventory level after the year 2052/53.

Planning of Expenses

Expenses are the main determinants of profit in any enterprises which should be planned and controlled to increase the profit. If the expenses are higher, it automatically decreases the profit. So, the management should think for higher performance by lower cost of manufacturing, distribution and administrative etc.

Table no. 16 shows various expenses such as administrative, production, selling and distribution, manufacturing overhead, depreciation etc of SDB Ltd.

The table shows expenses of SDB Ltd. Under various items of expenditure from FY 2051/52 to 2062/63. It is seen that there were limited and lower expenses. Most of the expenses were covered by production expenses in those years. Al the other costs were negligible. But, after the FY 2054/55 the cost of production are seen to be increased. Above 50 % expenses were covered by production expenses.

The increment in the expenses may be the cause of increment in production and sales. From the FY 2060/61 to 2062/63, the interest and financial charges were higher. It shows that the factory had higher borrowings in those years.

Higher the costs reduce the profit of the factory so the factory must try to reduce the costs.

Table No. 4.10

Expenses on various items of expenditure of SDB (P) Ltd. (in '000')

Fiscal Year	Administrative Cost		Cost of Production		Manufacturing Overhead		Depreciation		Miscellaneous expenditure		Selling and Distribution		Interest and Financial charge		Total	
	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
2051/52	-	5	-	94	-		-	1	-	-	-	-	-	-	-	100 %
2052/53	-	5	-	94	-		-	1	-	-	-	-	-	-	-	100
2053/54	-	7	-	93	-		-	-	-	-	-	-	-	-	-	100
2054/55	2599	8.7	20973	70.6	-	-	771	2.6	-	-	1497	5	3894	13.1	29734	100
2055/56	7809	16.6	3155775	67.2	-	-	1556	3.3	3530	7.5	2247	4.8	255	0.6	46972	100
2056/57	7125	13.13	36905	67.2	-	-	1510	2.7	4189	7.6	2429	4.4	2788	5.1	54946	100
2057/58	10437	15.6	41801	62.5	-	-	1668	2.5	4189	6.3	2138	3.2	6641	9.9	66874	100
2058/59	8171	12.3	39537	59.3	-	-	1825	2.7	4189	6.3	2026	3.0	10953	16.4	66701	100
2059/60	6610	8.2	37006	46	-	-	5682	7.1	4189	5.2	1743	2.2	25240	31.4	80470	100
2060/61	6026	6.0	-	-	40466	40.3	8515	8.5	-	-	5476	6.6	39904	39.7	100387	100
2061/62	7174	5.8	-	-	40069	32.3	8435	6.8	15622	12.6	2265	1.8	50476	40.7	124048	100
2062/63	13855	12.2	-	-	42724	37.7	8449	7.5	-	-	2738	2.4	45440	40.1	113226	100

Source: SDB (P) Ltd. , Annual Reports

Note: In depreciation expenses of FY 2060/61, 2061/62 and 2062/63, it includes amortization expenses of Rs. 659,000, Rs. 1733,000 and Rs. 1933,000 Respectively.

Profit & Loss Trend of SDB Ltd.

After the planning of all the expenses and incomes and recording them, each and every enterprise should prepare profit and loss account at the end of every fiscal year to know the situation of profit and loss of any enterprises. Profit and loss account is such a tool in accounting system which comprehensively represents the operating efficiency of the organization in the relevant period. Profit is the major element of every business enterprise for survival, future growth and development and fulfilling social expectation:

Table no. 4.11

Level of Inventory in Different Years :

(units in '000')

Fiscal Year	X	Net profit (Y)	$x = X - \overline{X}$	X^2	XY
2051/52	0	-157.664	-5.5	30.25	867.152
2052/53	1	-73.841	-4.5	20.25	332.285
2053/54	2	-1568.253	-3.5	12.25	5488.886
2054/55	3	8330.045	-2.5	6.25	-20825.113
2055/56	4	2238.513	-1.5	2.25	-3357.77
2056/57	5	-7946.261	-0.5	0.25	3973.131
2057/58	6	-20274.602	0.5	0.25	-10137.301
2058/59	7	-200053.970	1.5	2.25	-30080.955
2059/60	8	-28781.265	2.5	6.25	-71953.163
2060/61	9	-47334.305	3.5	12.25	-165670.068
2061/62	10	-58244.305	4.5	20.25	-162100.354
2062/63	11	-23916.306	5.5	30.25	-131539.683
N = 12	$\sum X = 66$	$\sum y = -197782.432$	$\sum x = 0$	$\sum x^2 = 143$	$\sum xy = -593815.5$

Source: SDB, Annual Report

$\overline{X} = 5.5$

The above table shows that SDB has earned profit in only two years (i.e 2054/55 and 2055/56). And the factory was in loss in rest other years. It is also seen that the factory got loss for many years. Out of nine years, the factory has found successful to earn profit in FY 2054/55 and 2055/56.

The factory has incurred loss due to the huge borrowing trend (Which charges huge amount of income as interest) and the increment in the items of the title of expenses which can be seen by the table no. 4.10. The loss may be the cause of depreciation which is non-cash expenditure, administrative cost and other fixed costs.

Using straight line trend, which shows the relationship between time (year) as independent variable and profit (loss) as dependent variable:

Now, the equation of trend line is y = a + bx where, y = profit, x = time.

As $\sum$ x = 0,

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

$$= \frac{-197782432}{12}$$

$$= -16481.864$$

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

$$= \frac{-5938155}{143}$$

$$= -4152.556$$

Hence, the trend line is y = -5452316481.869 – 4152.556x

Analyzing the characteristics of profit and loss trend of SDB Ltd. by least square method (Straight line trend) it can be concluded that the factory has still to incur negative profits in future. It means loss will go on increasing unless and until the corrective measures are not applied.

Trading and Profit and Loss account of the factory for the FY 2062/63 is presented in the following table.

Table no. 4.12

Manufacturing, Trading and P/L Account for the period Shrawan 2062/63:

Particulars	Amount (Rs.)
(a) Income from sale of brick	54084948.25
(b) Cost of sales	
(i) Opening Stock	11252361.94
(ii) Manufacturing Expenses	42724128.41
(iii) Closing Stock	(21095655.85)
Total (b)	**32880834.50**
(c) Gross Profit (Loss) (a-b)	21204113.75
(d) Administrative expenses	(13855359.49)
(e) Selling & distribution expenses	(2738305.90)
(f) Depreciation	(6515669.80)
(g) Operating Profit (loss) c – d – e- f	(1905221.44)
(h) Other income	1942337.13
(i) Profit on sales of land	23419086.01
(j) Financial charges	(45439921.87)
(k) Amortization expenses	(1932585.53)
(l) Net Profit (loss)	(23916305.70)
(m) Balance of profit (loss)	(179875875.71)
(n) Profit (loss) transferred to B/S	**(203792181.41)**

Source: SDB Ltd., Annual Report.

Table 4.11 shows a loss of Rs. 23916305.70 in Fiscal Year 2062/63. The main cause of high loss is that of high administrative cost. Selling and distribution cost and financial charges. So if the factory wants to go in profit, it should reduce these types of costs.

Identification of Cost Variability:

For increasing the profit of any enterprise, the cost should be planned and controlled It needs identification of different cost variability to plan and control.

Classification of cost into fixed and variable is very important for planning and controlling the cost. It helps to determine the volume of operation desired to maintain by the industry.

But SDB has not maintained any clear-cut boundaries about cost classification as fixed and variable components. There is rough practice of classifying the expenses into fixed and variable. The assumption of fixed and variable cost in Rs. Based on the profit and loss account is shown in the table no 4.12.

Table no. 4.13

Cost structure in SDB (P) Ltd. in 2062/63

(Rs. In '000')

Details	Fixed Costs	Variable Costs
Manufacturing expenses	-	42724
Administrative expenses	13855	-
Selling and distribution expenses	-	2378
Depreciation	6516	-
Financial charges	45440	-
Amortization expenses	1933	-
Total	67744	45462

Source : SDB Ltd. Annual Report.

(Note: Figures are rounded to nearest thousand)

Break Even Analysis

The relationship between cost, volume and profit is called cost volume profit (CVP) analysis. When the volume of sales increases or decrease, cost and profit is automatically increased. Therefore, there is direct relationship between cost, volume and profit.

Breakeven point (BEP) is an effective tool for the study of CVP. BEP is that point of equilibrium, where no profit no loss. In the level of breakeven, the volume of sales revenue is equal to total cost. If the sales revenue is higher than the BEP, there will be profit. Likewise, if the sales revenue is less than the BEP, there will be loss. "BEP is a point at which neither profit nor loss is made. It is concerned with the study of revenues and costs in relation t sales volume and determination of that volume of sales at which the firm's revenues and total cost will exactly be equal." [37]

The following are the assumptions of SDB Ltd. upon which break even analysis made.

i. The costs can be classified as fixed and variable.
ii. It is based on the accounting data of FY 2062/63.
iii. Other types of income and expenses (i.e. non operating) are not included in the analysis.
iv. Activity base is selected in terms of sales revenue.
v. Selling price, variable cost volume ratio and fixed costs per annum are assumed to be remain constant.
vi. Opening and closing stock are not changed.
vii. The efficiency and productivity will not change in short run.

To present the cost volume profit analysis based on the accounting data of FY 2062/63, costs are classified into fixed and variable from P/L account shown below:

Particulars	**Amount**
Total Sales revenue	54085
Total Fixed cost	67744
Total variable cost	45462

i) Variable Volume Ratio (V/V Ratio)

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

[37] Munakarmi Shiva Prasad**, Management, Accounting**, Buddha Academic Publishes and Distributors Pvt. Lte. Kath 2nd edition -2002, Page. 125.

$$= \frac{45462}{54085}$$

$$= 0.84$$

ii) Profit Volume Ratio (P/V Ratio)

P/V Ratio = 1 – V/V Ratio

= 1- 0.84

= 0.16

iii) Break Even Point in Rs. (BEP)

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

$$= \frac{67744}{0.16}$$

= Rs. 423400

Since the figure is in '000' the required BEP is Rs. 423400000.

To reach break even point, the sales revenue should be Rs. 423400000. But the actual sales is very low of the BEP which is Rs. 54085000. The above figure shows that 84 % of total sales revenue is occupied by variable cost and the remaining 16 % is available to cover all the other costs and make a profit but the fixed cost is higher than variable cost which can not be covered by the 16% of the sales. So, the above figure automatically shows the loss trend of SDB.

Flexible Budget of SDB

A flexible budget is prepared for the estimation of costs is more than one level of activity. The essence of flexible budget is the concept of expense variability. The concept focuses on the effect on expenses of the passage of time and output or productive activity. It shows costs and profit (loss) at the various levels of budgeted activity. "A flexible budget is one which is designed to provide information as to sales, expenses and profit for different levels of activity which may be attained. A budget prepared in a manner so as to give the budgeted cost for any level of activity is known as flexible budget." [38]

SDB (P) Ltd. doesn't prepare flexible budget. The flexible budge is helpful to analyze on what level of sales SDB will run in profit based on the data of FY 2062/63. Flexible budget of SDB (P) Ltd has been prepared. To prepare the budget the assumption are given below:

i. All costs are separated into fixed and variable.
ii. Sales revenue in each activity level has been assumed to remain in the same ratio as it is in FY 2062/63.
iii. Fixed cost remains constant and variable cost changes proportionately with the change in volume of production.

Flexible budget is presented in the table given below to show the level of activity from 60 % to 80 %:

Table no. 4.14

Flexible budget of SDB (P) Ltd.

(In '000')

Particulars	Levels of Activity				
	60 %	80 %	100 %	120 %	800 %
Sales revenue in Rs. (100 %)	32451	43268	54085	64902	432680
Less: variable cost (84 %)	27258.84	36345.12	45462	54517.68	363451.2
Contribution Margin	5192.16	6922.88	8623	10384.32	69228.8
Less: Fixed Cost	67744	67744	67744	67744	67744
Net Profit (loss)	(62551.84)	(60821.12)	(59121)	(57359.68)	1484.8

Source: SDB, Annual Report

The flexible budget shown above indicates the loss in every level of activity from 60% to 120 %. But, it shows the profit in 800 % capacity which is impractical because the fixed cost of Rs. 67744000 can not cover the sales volume of Rs. 432680000. It should be increased the fixed cost to increase the production for

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[38] Ibid, Page no. 321

making the sales of Rs.43268000. But it is impractical. The flexible budget so for prepared shows the weakness and inefficiency of the factory.

The flexible budget can also be presented in the diagram for different levels of activity from 60 % to 120 %. Capacity is not shown in the graph because it is computed only to know to which level of capacity the factory will be able to reach at no loss no profit level.

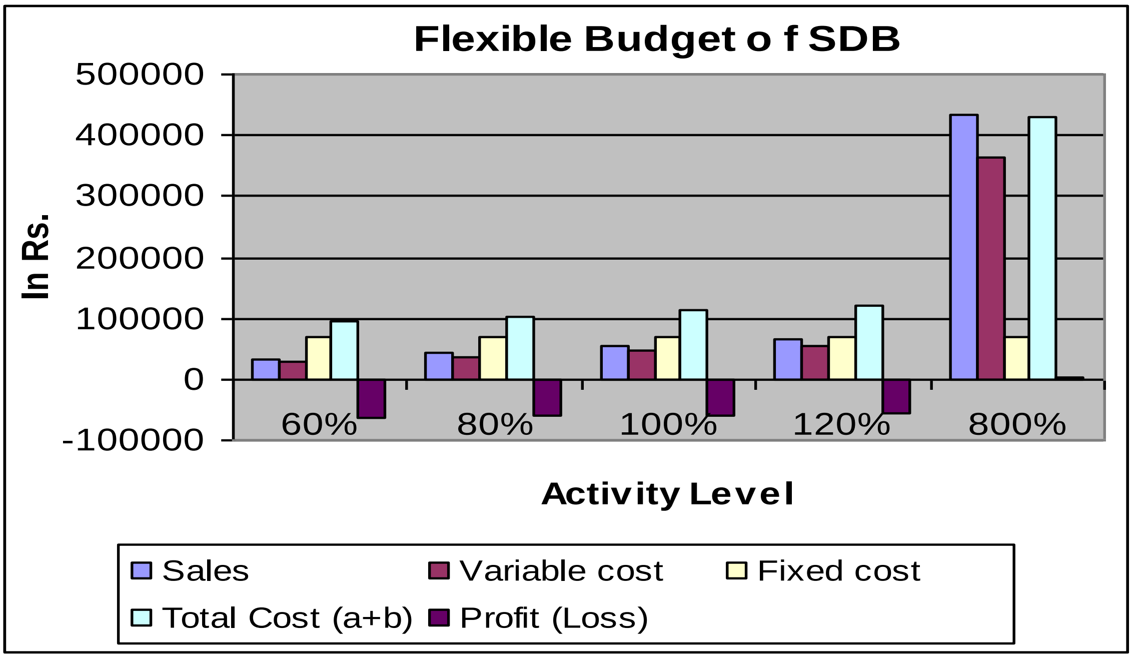
Table no. 4.15

Flexible budget of SDB (P) Ltd.

(In '000')

Level of Activity	Sales	Variable cost	Fixed cost	Total Cost (a+b)	Profit (Loss)
60%	32451	27258.84	67744	95002.84	-62551.84
80%	43268	36345.12	67744	104089.12	-60821.12
100%	54085	45462	67744	113206	-59121
120%	64902	54517.68	67744	122261.68	-57359.68
800%	432680	363451.2	67744	431195.2	1484.8

Figure No. 4.5



The above figure shows there is loss in all levels of activity except 800%. It is because of higher level of fixed cost. It is also higher than sales, so, the factory must increase sales and production to absorb fixed cost. Moreover, an attempt is also necessary to reduce fixed cost.

Planning of Cash Flow in SDB.

Analysis of cash flows is also a major aspect of profit planning and control. The development o fan annual profit plan ends with the planned income statement, the planned balance sheet and planned statement of cash flows.

Cash is a major part of organization. It always needs adequate cash for successful running of any organization. It always needs adequate cash for successful running of any organization.

So, the controlling of cash, it needs cash budget, which shows cash inflows, outflows, opening and closing balance of cash. Higher the cash balance shows the strengths and good liquidity position and non-balance indicates weakness of organization.

While developing cash budget, any organization should consider other functional budgets .The organization should keep sufficient cash neither less nor more. Cash shortage will disturb the enterprises' manufacturing operations, while excess cash will simply remain idle, without contributing anything towards the enterprises profitability. So, any enterprises should keep the sound cash position.

To know the major cash application sources, cash flow statement is shown in the table no 4.15

Table no. 4.16

Comparative Cash Flow Statement of SDB Chinese Brick Factory (P) Ltd. (In '000')

S.No.	Particulars	Amount	
		2061/62	**2062/63**
A.	**Cash flows from operating activities**		
	Net profit (loss) during the year	58244522.97	(23916305.70)
	Adjustment:		
	Depreciation	6509245.52	6515669.80
	Assets written off		1055769.28
	Amortization	1932585.53	1932585.53
	Operating loss before working capital changes	**(49802691.92)**	**(14412281.09)**
	Adjustment for working capita changes :		
	Decrease (increase) in inventories	11009838.47	(7888143.24)
	Decrease (increase) in sundry debtors	(16236929.46)	34101816.93
	Increase in loans and advances	(208543.24)	8680324.54
	Increase other current assets	(565956.78)	(1418724.17)
	Increase in current liabilities	19446320.65	-
	Decrease in Bank Overdrawn	-	(9233454.87)
	Increase in other payable	-	24848576.15
	Net Cash from operating activities:	**(36357962.28)**	**17317465.17**
B.	**Cash flows from investing activities:**		
	Fixed Assets	13288114.89	17181017.75
	Capital work in progress	(1748731.61)	(22253262.26)
	Advance for retirement benefit to the labour share	(9662927.63)	-
	investment	-	(4950000.00)
	Advance for capital WIP	(2007634.35)	1098142.35
	Net cash from investing activities	**(131178.70)**	**(8924102.16)**
C.	**Cash flow from financing activities:**		
	Secured Loan	37006053.82	(14642961.28)
	Net cash from financing activities	**37006053.82**	**(14642961.28)**
	Increase/ decrease in cash and cash equivalent	516912.84	(6249598.27)
	Opening balance of cash and cash equivalent	6084699.86	6601612.70
	Closing balance of cash and cash equivalent	**6601612.70**	**352014.43**

Source : SDB Annual Report:

Cash flow statements are used here to check liquidity position of the factory accurately. The factory has left with final balance of Rs. 352014.43 in FY 2062/63. Above table shows that the factory has been highly liquid in 2061/62 than 2062/63.

Balance Sheet of SDB Chinese Brick Industry

After the analysis of various different functional budgets, annual profit plan ends after making balance sheet. The balance sheet reports the effect of plan of operations on the assets, liabilities and capital of the factory. It also shows the overall financial condition of the factory. The following table shows the balance sheet of SDB at the end of FY 2062/63:

Table no. 4.17

Balance Sheet as on Ashad 31, 2062/63

Capital & Liabilities	**Amount**	**Assets**	**Amount**
Share Capital	18750000.0	a. Fixed Assets Gross value 250960116.05 Less: Depreciation (32519674.01)	218440442.04
Secured Loan	308528708.31	Capital Work in Progress	49320942.01
Current Liabilities	58922306.22	Advance for Capital WIP	1984492.00
		Goodwill	12716286.53
		Total (a)	282462162.58
		b. Current Assets	
		Sundry Debtors	13531361.35
		Inventories	24263060.85
		Cash and Bank Balance	352014.43
		Loans and Advances	13411110.12
		Other Current Assets	9591367.22
		Total (b)	61148913.97
		c. Miscellaneous Expenditure to the extent not written off	5797756.57
		d. Profit and Loss A/C	203792181.41
	553201014.53	Total (a + b + c + d)	**553201014.53**

Source: SDB, Auditors Report:

Performance Evaluation Through Ratio Analysis:

There are various tools and techniques to evaluate performance of any business organization. Ratio analysis is one of them. Financial ratio is an arithmetical relationship between two figures of financial statement. To evaluate the performances of an organization by creating the ratios from the figures of different accounts consisting in balance sheet and income statement is known as ratio analysis." [39]

Information provide by the ratio analysis with the help of financial statement are very useful for making decision on financial matters. These ratios also communicate the strengths and weakness of the organization. It is also helpful for effective control of the business.

Some important financial ratios of SDB (P) Ltd. for twelve years starting from FY 2051/52 to 2062/63 including their position have been shown below:

4.12.1 Current Ratio

Current Ratio is the relationship of current assets and current liabilities. It is analyzed to find out the extent of SDB's position to pay short to pay short term obligation from it's current assets. This ratio indicates the short-term financial strength of the organization. It is calculated by dividing the total of current assets by total current liabilities. This ratio can be obtained by the following formula.

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

[39] Dangol, Ratna Man**, Management Accounting, Principle and practice**. Taleju Prakashan, Bhotahity, Kathmandu, Re-print, 2000 Page no. 369.

Table no. 4.18

Current Ratio in Different Years

Fiscal Year	CA	CL	Ratio = CA/CL
2051/52	12737000	13363000	0.95 : 1
2052/53	16589000	15993000	1.04:1
2053/54	15924000	24040000	0.66:1
2054/55	16656953	26375818	0.63:1
2055/56	21681538	32945470	0.66:1
2056/57	36957163	24203141	1.53:1
2057/58	73183041	26622086	2.77:1
2058/59	81243896	27518059	2.95:1
2059/60	72094033	26200008	2.75:1
2060/61	70384997	24406418	2.88:1
2061/62	78563137	43307185	0.81:1
2052/63	61148914	58922306	1.04:1
	Average CA	Average CL	Average Ratio
Average before 2054/55	15083333.33	17798666.67	0.85:1
Average after 2054/55	56879296.89	32277832.33	1.76:1

Source: SDB, Annual Report

For many types of business organization 2:1 is considered to be standard ratio. Higher current ratio indicates the better liquidity position. If the current ratio of a firm is less than the standard, the liquidity position of the organization does not indicate well for organization, it means that the cash may not be able to pay current liabilities. If the ratio is more than the standard, the firm may have an excessive investment in current assets. Higher the current ratio indicates the strength of the firm. But if the actual ratio equal to the standard, it shows an efficiency of the firm.

The current ratio from FY 2051/52 to 2056/57 was found to be below the standard. But it was above the standard from FY 2057/58 to 2060/61. It was also noticed below the standard in last two years of the study period. It can also be seen that the liquidity position in the years before 2051/52, 2052/53 and 2053/54, was not so good but the years after 2057/58 to 2060/61, it was greater the standard which showed the excessive investment in current assets. Likewise, average current ratio after the FY 2057/58 can be seen higher and near standard than that of the FY 2054/55. In conclusion, it can be said that the liquidity position of SDB after the Fy 2057/58 is better than that of the FY 2054/55.

4.12.2 Inventory Turnover Ratio

Inventory turnover ratio indicates an extent to how fast the goods are sold. It can be obtained by dividing the total sales by closing inventory (or dividing the cost of goods sold by the average inventory for the period). A high inventory turnover is indicative of good inventory management. A low inventory turnover implies excessive inventory levels than warranted. Inventory turnover ratio can be obtained by the following formula:

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

Table no. 4.19

Inventory Turnover Ratio in Different years:

Fiscal Year	Sales	Inventory	Ratio	Average Inventory Turnover
2051/52	21289000	1643000	12.96 times	Turnover = 23.43 times
2052/53	27837000	758000	36.72 times	
2053/54	25907000	1257000	20.61 times	
2054/55	37727000	8107000	4.65 times	Turnover = 3.12 times
2055/56	42790000	11894000	3.60 times	
2056/57	47439000	10800000	4.39 times	
2057/58	41491000	13633000	3.04 times	
2058/59	42440000	14708000	2.89 times	
2059/60	40210000	23858000	1.69 times	
2060/61	51031000	27285000	1.87 times	
2061/62	60810000	16375000	3.71 times	
2062/63	54085000	24263000	2.23 times	

Source: SDB, Annual Report

The above table shows that there is higher inventory turnover in FY 2051/52, 2052/53, 2053/54. This indicates strength of the factory. The trend of the ratio is decreasing over the period of time after the FY 2053/54. Average inventory turnover ratio is also decreasing. So, the factory must try to increase the ratio. Before the FY 2053/54 the ratio was 23.43 times as compared to 3.12 time of after the FY 2053/54.

4.12.3 Net Profit Margin Ratio

It establishes a relationship between net profit and sales. It can be obtained by dividing net profit by total sales. The formula for finding net profit margin ratio is as follows:

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

Table no. 4.20

Net profit Margin Ratio in Different Years:

Fiscal Year	Net Profit (Loss)	Total Sales	Net Profit Margin Ratio (%)
2051/52	-157664	21289000	-0.74
2052/53	-73841	27837000	-0.27
2053/54	-1568253	25907000	-6.05
2054/55	8330045	37727000	0.22
2055/56	2238513	42790000	0.52
2056/57	-8946261	47439000	-0.19
2057/58	-20274602	41491000	-0.49
2058/59	-20053970	42440000	-0.47
2059/60	-28781265	40210000	-0.72
2060/61	-47334305	51031000	-0.93
2061/62	-58244523	60810000	-0.96
2052/63	-23916308	54085000	-0.44

Source: SDB

A higher ratio is the indication of overall efficiency of the business and better utilization of resources. Poor financial planning and low efficiency is the indication of lower and negative ratio. The net profit margin ratio can be seen positive only in beginning three years. While in the rest of the years, it is negative both for the period and after the FY 2056/57. So, the factory should reduce and control the non manufacturing expenses to make the profit margin ratio favourable.

4.12.4 Total Assets Turnover Ratio

It shows the effectiveness of investing on total assets in relation to sales. This ratio is calculated by dividing sales by total assets. A high assets turnover indicates that the total resource has been well managed and lower assets turnover ratio indicates over investment in assets. Generally, a higher assets turnover is desirable. This ratio can be calculated as follows:

$$\text{Total assets turnover ratio} = \frac{\text{Sales}}{\text{Total Assets}}$$

Table no. 4.21

Total Assets Turnover Ratio in Different years:

Fiscal Year	Sales	Total Assets	Total Assets Turnover	Average Assets turnover
2051/52	21289000	25263000	0.84 times	0.82 times
2052/53	27837000	27851000	0.9 times	
2053/54	25907000	36015000	0.72 times	
2054/55	37727000	217300630	0.17 times	0.12 times
2055/56	42790000	268585120	0.16 times	
2056/57	47439000	314595279	0.15 times	
2057/58	41491000	394261932	0.11 times	
2058/59	42440000	441703200	0.10 times	
2059/60	40210000	451244796	0.10 times	
2060/61	51031000	495776480	0.10 times	
2061/62	60810000	552228854	0.11 times	
2052/63	54085000	553201014	0.10 times	

Source: i) SDB (P) Ltd.

ii) Ram Karki Production manager, SDB (P) Ltd.

Assets turnover ratio was found to be decreasing year by year after the fiscal year 2054/55. The assets turnover ratio was good in first three years but it is in decreasing trend after the fiscal year 2054/55. The factory should increase the assets turnover ratio.

4.12.5 Earning Per Share Ratio

It is calculated by dividing earning available to equity shareholders by no. of shares. The position of earning per share is given below:

Table no. 4.22

Earning Per Share Ratio in Different Years:

Fiscal Year	Net Profit (Loss)	No. of shares	Earning Per Share (Rs.)
2051/52	-157664	-	-
2052/53	-73841	-	-
2053/54	-1568253	-	-
2054/55	8330045	18650000	0.45
2055/56	2238513	18650000	0.12
2056/57	-8946261	18650000	-0.48
2057/58	-20274602	18650000	-1.09
2058/59	-20053970	18650000	-1.08
2059/60	-28781265	18650000	-1.54
2060/61	-47334305	18650000	-2.54
2061/62	-58244523	18650000	-3.12
2052/63	-23916308	18650000	-1.28

Source: SDB (P) Ltd.

The above table shows the loss per share of SDB Chinese brick industry private limited. The data of EPS shown in table indicates that there is loss per share in all the successive years except two years (i. e. FY 2054/55 and 2055/56).

The trend of profit (loss) per share indicates the poor profitability of SDB Chinese brick (P) Ltd. That is the industry has to do many homework to perform better regarding the profitability. It needs to manage well in the entire department in terms of their performance.

4.12.6 Debt Equity Ratio

The relationship between borrowed fund and owner's equity is known as debt equity ratio. It is calculated in the following way:

$$\text{Debt-Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Shareholder's Equity}}$$

Or,

$$= \frac{\text{Total Debt}}{\text{Shareholder's Equity}}$$

[Total Debt = Long Term Debt + Current Liabilities]

Table no. 4.23

Debt Equity Ratio in Different Years:

Fiscal Year	Long Term debt	Share holders equity	Debt-equity ratio
2051/52	78343000	24375462	3.21
2052/53	78343000	11705495	0.67
2053/54	100581338	157364539	0.64
2054/55	134865128	165475398	0.82
2055/56	179969712	195696030	1.09
2056/57	197430653	156968735	1.26
2057/58	216871444	138415695	1.57
2058/59	39473042	127505477	0.31
2059/60	57689133	161833694	0.36

Source: SDB (P) Ltd. Annual Reports

Note: i) Long term loan is taken as long term debt

ii) Shareholders equity is shown by adding net profit, reserve and surplus and deducting loss with share capital.

A high ratio shows the large share of financing by creditors, as compare to that of owners. In the calculation, the ratio was higher in the year of 2051/52. But it is seen 67%, 64 % and 82 % in the fiscal year 2052/53, 2053/54 and 2054/55 respectively. This is increasing from fiscal year 2055.56. The trend of the ratio indicates that the borrowed amount is higher than that of shareholders equity. It may be the cause of huge loss of the factory every year. However, it is decreasing from 2058/59. So, the factory must try to further its borrowing amount.

In conclusion, the profitability position of SDB is not encouraging. From the analysis of various ratios it was found that there is a heavy management expenses and lower sales volume. As a matter of fact, the performance of SDB Chinese Brick factory is not favourable. Quick and current ratios are how ever found to be closed to standard. There is a serious problem in other ratios. So, overall financial performance of the company is weak and not satisfactory.

Major Findings

From the above analysis of accounting and financial data, observations; it can be concluded that SDB (P) Ltd. is suffering form the various problem in formulating and implementing the profit plans. The company seems to have done ambitious plans and budgets in implementing profit plan. The company should develop the profit planning and control loses to real life. Situation and also adopt systematic way for improving the profit performance. Some of the major findings are mentioned as follows:

i. Specific goals and targets are not clearly defined and developed based on the reality and to achieve the basic objectives of SDB Ltd.
ii. The company has not prepared the targeted annual programme and budgets systematically while implementing the profit plan.
iii. There is a wide gap between annual sales and targeted sales.
iv. Excessive fixed cost together will limit capability to increase sales are responsible for not operating at BEP.
v. The achievement of the company is very poor because of liability of management of control over financial charges.

vi. The performance of SDB is efficient in terms of additional investment, product diversification and capacity expansion but poor in terms of sales revenue maximization.

vii. The factory is suffering from poor profit planning due to lack of planning expertise in factory.

viii. The company is facing the major problems of shortages of funds, working capitals and also suffering from weak implementation system. The control system has not been developed at different level of authority the punishment and reward system should be strictly followed to improve the preference.

ix. An expense has not been classified systematically.

x. The company fails to maintain its periodic performance and there is not proper reward and punishment system to motivate employees.

xi. The future of the factory is not bright unless it attempts to use planning techniques, instructions etc. properly.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION:

5.1 Summary

Profit is essential for survival and growth of business organization. Regular profit keeps organization alive. It needs special planning and controlling of financial activities for regular profit. Planning of profit means planning and controlling of sales, production, different expenses items etc. Profit planning starts from planning of sales and ends with planned income statement and balance sheet.

In manufacturing enterprises, profit planning programme is the most important for the utilization of scarce resources efficiently and effectively and thereby achieve goals and objectives of sales planning, production planning, planning of direct labour, material building, service inventory distribution and promotional expenses, factory overhead expenses, administrative expenses, capital budgeting, cash flows, strategic tactical and manpower planning. The present study is an attempt to evaluate the performance in the formulation and implementation of above plans in SDB which was transferred from government ownership to private ownership with a view to obtain efficiency in SDB.

The factory was established in Jan, 1970 under the company Act, 1964. It is located at Ratnagar Chitwan in the area of 220449.503 sq.m (425-03-2 Ropani).

The study analyzed the practice and effectiveness of profit planning with the help of functional and financial plan include sales plan, production plan, various expenses plan etc. where as financial plans included cash flow, capital expenditure budget, projected income statement and balance sheet. The data and information were collected from both primary and secondary sources and analyzed with the help of statistical and financial tools. Statistical tools included were percentage, mean, standard deviation, co-efficient variation, correlation coefficient, least square trend, t-test etc. Similarly, as financial tools included in this study were flexible budget, break even analysis etc. Hence, research design of the study is analytical and descriptive.

The basic objective of this study is to examine how far the functional budgets are used as tools for profit planning and control process and to know the performance of SDB Chinese brick factory. In addition the study also examines whether various functional budgets are consistent to the basic objective. Furthermore, the study also assesses the effect of financial performance on its earning per share.

From the analysis of targeted sales and achievement of SDB, it is seen that sales target is highly ambitious. The actual sales is less than the planned sales and also fluctuated every year. There is significance difference between the targeted sales and actual sales. Correlation coefficient between actual production and actual sales is seen significant. It is also seen that the inventory level was low in first three years and it is higher after first three years.

The factory has heavy borrowing. As a matter of fact huge amount has to be paid as interest and financial charges. This has let to heavy loss in factory every year. Classification of cost into fixed and variable is very important for planning and controlling the cost. But there is poor practice of classifying the expenses into fixed and variable in SDB. Flexible budget shows that the sales should be increased by 80% to remove loss.

The profitability of SDB is not strong and satisfactory. From the analysis of various ratios it has been found that heavy management expenses followed by mobility to increase sales in desirable extent have led to the growth of negative profit. Quick and current ratios are however meet the standard, the other ratios are not near to standard.

5.2 Conclusion

Based on the analysis of the present practice of budgeting in respect of profit planning in SDB Ltd its financial performance, the following conclusion can be drawn.

1. SDB Ltd. prepares functional budgets like sales budget, production budget, expenses budgets on annual basis but the short term product wise production and sales budgets on monthly basis. But they are found to be far from real life situation.

2. Marketing manager is responsible for sales forecasting in SDB. Forecasting is said to be done keeping in view different situations and past records but it is not supported by necessary marketing strategy for promotion.
3. The sales target set with forecasting is highly ambitious. An actual sale is less than that of targeted sales. There is significant difference between targeted sales and actual sales. This shows look of promotional activities to increase sales.
4. Although, straight line trend shows the positive sales figure for the future. It is far below the volume of sales to operate at BEP level.
5. The poor financial performance of the factory has also led to decline in its earning per share. This confirmed by earning per share of each year. That is most of the earning per share ratios are found to be negative.

A. Strengths:

(i) SDB Chinese Brick Industry is successful to mobilize additional investment, technological improvement and product diversification.

(ii) Raw materials specially clay are found enough in th local market (or its own land).

(iii) The factory is producing special quality bricks and tiles with Chinese technology.

(iv) The shortest distribution channel (i.e producer to consumer) is being used by the factory.

B. Weakness:

(i) High amount of financial charges followed by in efficiency in absorbing fixed cost has led to the growth of negative profit. The factory is also seemed to be suffering from over capitalization.

(ii) The factory has to face keen competition with Bhaktapur Brick factory and Hari Siddi Brick and Tile factory.

(iii) Lack of communication and co-ordination between top local and lower level management has led to poor management in the factory.

6. Correlation coefficient between actual production and actual sales is significant.
7. The factory has adopted seasonal production policy because the production process is stopped in rainy seasons.

8. The factory is dependent on imported coal from India.
9. Major problems faced by the factory are weak implementation system and lack of accountability. There is no reward and punishment for motivating employees.
10. The factory has reduced its employees from about 600 to only 90 persons. The factory has started its production through introducing a contract system for hiring labours. But all the performance has not came to desired extent.
11. The inventory level of the factory was very small before privatization but it is seen higher and fluctuating nature and unstable.
12. The factory has high volume of borrowing and it has not been able to absorb fixed cost.
13. The factory is operation gin loss every year after the fiscal year 2054/55. Least square straight line trend for profit and loss of the factory shows that the future of SDB does not have encouraging picture.
14. Flexible budget shows that the sales should be increased by 800% to remove loss. This shows a challenging task for the factory.
15. Form the analysis of various ratios, it has been found that heavy management expenses and lower sales volume are the main reasons behind the unsatisfactory result. Quick and current ratios are with standard but al the other ratios are below the standard. Earning price per share of the factory is negative and decreasing continuously. So overall financial performance of the factory is not satisfactory.
16. The factory has no planning section, the factory also lacks of planning as well as budgeting experts. Budgets are prepared on traditional basis which can be seen by the unsatisfactory results of the factory. It is also found that the factory is not considering its future plans, objective, programmes and budgets properly while operating its regular activities. Budgets are prepared just to fulfill the formalities but these are not used effectively for the profit planning process.
17. There is lack of proper documentation. The records of previous years are not available at the time of requirement.
18. The factory is adopting cost plus pricing for pricing its products.
19. Breakeven analysis is not considered while developing the sales plan.
20. The wages are paid as daily, monthly and piece work basis because the factory has started its production through contract basis.

21. There were limited and lower expenses being the factory in private ownership. Production expenses were the major cost. All the other costs were negligible. But the heads expenditure has been increased.

22. SDB will not be able to eliminate loss and to make profit until and unless it adopts aggressive marketing strategy to increase sales and effectively implement the cost reduction programme.

5.3 Recommendation

From the detail analysis of accounting and financial data; it can be said that SDB is suffering from the various problems in formulating and implementing profit plans. SDB Chinese Brick Industry Ltd has not adopted the systematic and comprehensive profit plan. The factory should adopt the PPC in systematic way for making higher profit. Following suggestions can be recommended for the improvement in the formulation and implementation of profit plans.

(1.) SDB should clearly define the specific goals and targets and also make responsible concerned departments to achieve the basic objectives of the factory.

(2.) The factory should consider systematic and comprehensive targeted annual programme and budgets for implementing the profit plan.

(3.) The factory should analyze market conditions and make demand forecast and develop marketing strategy will due consideration of interest of the customers.

(4.) The sales budget should be taken into consideration while developing production plan and planning of expenses.

(5.) The management of the factory should try to minimize the gap between targets and actual of sales plan with proper promotional measures.

(6.) Sales forecasting should be made with the analysis of market conditions that affects the factory. A detailed market study should also be conducted to know. The actual demands of the products of the factory sales manager, sales representatives and marketing manager should participate in sales budget preparation.

(7.) Factory should consider break even analysis while preparing sales plan.

(8.) Participatory management in the preparation of annual profit planning and budgeting should be introduced and communicated to all levels of management for the improvement of the factory.

(9.) The factory should analyze SWOT (Strength and Weakness and Opportunity & Threats) to improve the companies capabilities.

(10.) Trained and qualified manpower who can handle budgeting ad planning properly should be hired and exiting manpower should be trained educated to develop and profit plan effectively.

(11.) The factory should decide and make policy about research and development factory productivity, capacity utilization and cost control.

(12.) The factory must try to reduce its borrowing and should attempt to reduce the cost of interest and financial charges which helps. The profitability of the factory is very poor due to the excessive burden of administrative costs and to remove the unproductive expenses.

(13.) The factory has to maintain clear cut boundaries about cost classification as fixed and variable components. Cost reduction programme should be formulated and applied. Present cost capacity structure should be changed and make efforts to reduce fixed costs. In this regards, cost control centre should be developed at various level of management.

(14.) The factory should adopt more effective advertising system to communicate the significance of products and their by increase sales and use idle capacity.

(15.) Effective inventory policy should be maintained to improve inventory turnover ratio and make regular supply and also increase customers' confidence.

(16.) The factory must try to increase debtors turnover ratio by providing extra facilities, rebates and promotional programmes to the customers for the prompt payment.

(17.) All the departments should be delegated with full authority and accountability to decide and create new ideas to formulate suitable policies. Communication and co-ordination between the departments should be made effective. Proper reward and punishment system for motivating employees should be developed.

Finally, a systematic approach should be made towards comprehensive and effective profit planning. Basic fundamentals of profit planning must be considered while formulating and implementing the PPC programme in SDB (P) Ltd.

APPENDIX- 1

Computation for T-test Between Targeted Sales and Actual Sales:
(In '000')

Fiscal Year	X_1	X_2	$dx_1 = X_1 - \overline{X_1}$	$dX_2 = X_2 - \overline{X_2}$	dX_1^2	X_2^2
2051/25	17.901	21.289	-105.871	-19.766	11208.669	390.695
2052/53	28.186	27.837	-95.586	-13.218	9213.312	174.716
2053/54	27.792	25.907	-95.98	-15.148	9212.160	229.462
2054/55	67.307	37.327	-56.465	-3.728	3188.296	13.898
2055/56	112.405	42.790	-11.367	1.735	129.209	3.010
2056/57	157.957	47.439	-34.185	6.384	1168.614	40.755
2057/58	187.383	41.491	63.611	0.736	4046.359	0.190
2058/59	193.057	42.440	69.285	1.385	4800.411	1.918
2059/60	193.057	40.210	69.285	-0.845	4800.411	0.714
2060/61	193.307	51.031	69.535	9.976	4835.116	99.521
2061/62	199.307	60.810	69.535	19.755	4835.116	390.260
2062/63	113.605	54.085	-10.167	13.03	103.368	169.781
N = 12	$\sum X_1 =$ 1491.264	$\sum X_2 =$ 492.656	$\sum dX_1 = 0$	$\sum dX_2 = 0$	$\sum dX_1^2 =$ 1515.92	1514.92

1. Calculation of arithmetic mean:

$$\overline{X_1} = \frac{\sum X_1}{N} = \frac{1485.264}{12} = 123.772 = \text{Rs.}123{,}772$$

$$\overline{X_2} = \frac{\sum X_2}{N} = \frac{492.656}{12} = 41.055 = \text{Rs.}41{,}055$$

2. Calculation of Standard deviation:

$$\delta x_1 = \sqrt{\frac{\sum dx^2{}_1}{N}}$$

$$= \sqrt{\frac{57541.041}{12}}$$

$$= \sqrt{4795.087}$$

$$= 69.247$$

$$= 69247$$

APPENDIX- 2

Computation of Mean and Standard Deviation of Actual Sales and Actual Production:
(Rs. In '000')

Fiscal Year	Actual Sales (X)	Actual Production (Y)	dx = X-$\overline{X}$	Dy = Y-$\overline{Y}$	dX^2	dy^2	dx.dy
2051/25	21.289	21.173	-19.766	-21.757	390.695	473.367	430.049
2052/53	27.837	26.952	-13.218	-15.978	174.716	255.296	211.197
2053/54	25.907	26.406	-15.148	-16.524	229.462	273.043	250.306
2054/55	37.327	44.177	-3.728	1.247	13.898	1.555	-4.649
2055/56	42.790	46.577	1.735	3.647	3.010	13.301	6.328
2056/57	47.439	46.345	6.384	3.415	40.755	11.662	21.801
2057/58	41.491	44.324	0.736	1.394	0.190	1.943	0.608
2058/59	42.440	43.515	1.385	0.585	1.918	0.342	0.810
2059/60	40.210	49.360	-0.845	6.430	0.714	41.345	-5.433
2060/61	51.031	54.558	9.976	11.628	99.521	135.210	116.001
2061/62	61.810	49.800	19.755	6.870	390.260	47.197	135.717
2062/63	54.085	61.973	13.03	19.043	169.781	362.636	248.130
N = 12	$\sum x$ = 492.656	$\sum y$ = 515.16	$\sum dx = 0$	$\sum dy = 0$	$\sum dx^2$ = 1514.92	$\sum dy^2$ = 1616.892	$\sum dx.dy$ =1410.865

1. Calculation of arithmetic mean:

$$\overline{X_1} = \frac{\sum X}{N} = \frac{492.656}{12} = 41.055 = \text{Rs.}41055$$

$$\overline{Y} = \frac{\sum Y}{N} = \frac{515.16}{12} = 42.93 = \text{Rs.}42930$$

2. Calculation of Standard deviation:

$$\delta \text{x} = \sqrt{\frac{\sum dx^2}{N}}$$

$$= \sqrt{\frac{1515492}{12}}$$

$$= 11.236$$

$$= \text{Rs. } 11236$$

APPENDIX- 3

Computation of Trend of Actual Sales :
(In '000')

Fiscal Year	(X)	$X = \overline{X}$	X^2	Actual Sales (Rs. In '000')	XY
2051/25	0	-5.5	30.25	21289	-117089.5
2052/53	1	-4.5	20.25	27837	-125266.5
2053/54	2	-3.5	12.25	25907	-90674.5
2054/55	3	-2.5	6.25	37327	-93317.5
2055/56	4	-1.5	2.25	42790	-64185
2056/57	5	-0.5	0.25	47439	-23719.5
2057/58	6	0.5	0.25	41491	20745.5
2058/59	7	1.5	2.25	42440	63660
2059/60	8	2.5	6.25	40210	100525
2060/61	9	3.5	12.25	51031	178608.5
2061/62	10	4.5	20.25	60810	273645
2062/63	11	5.5	30.25	54085	297467.5
N = 12	$\sum X_1 = 66$	$\sum X_2 = 0$	$\sum dx_1 = 0$	$\sum dx_2 = 0$	$\sum dx^2_1 =$ 1515.92

Now, the equation of Trend Line is :

$Y = a + bx$

$\sum X = 0$, $a = \dfrac{\sum Y}{N} = \dfrac{492656}{12} = 41054.667$

As,

$$b = \frac{\sum XY}{\sum X^2} = \frac{4203.99}{143} = 2939.853$$

Hence, the trend line is Y = 41054.667 + 2939.853X.