

# CHAPTER 1

## Introduction

### 1.1 General Background of the study

Profit is the return on investment or the return of hard work or the return of labor exercised over a business enterprise. Profit is the primary measure of success of any business organization. To sustain in a competitive environment, a business firm must make a proper profit. But merely investment or hard work doesn't generate profit rather profit should be planned. Usually profit don't just happen, profit is managed. Whenever an enterprise is operated according to the basic objective we expect the profit. Thus profit is the main goal of any business organization. If a firm cannot make profit, it cannot obtain or hold capital for long period.

Profit is the element that helps to sustain the enterprises in the long run. Profit helps the enterprises to exist as well as expand in this competitive environment.

Profit is a necessary for every business whether it is of service motive too. Profit may be defined differently as benefit obtained from doing something or the excess of return over outlay. Economists define profit as the reward for entrepreneurship for the risk taking. Accountants define it as the excess of the firm revenue over the expenses of producing goods or services over a given fiscal year.

The effective operation of a business concern resulting into the excess of income over expenditure fully depends upon as to what extent the management follows proper planning, effective co-ordination and dynamic control.

Business managers are continuously involved in organization, planning and controlling the operation of both large and small business organization. Profit planning is one of the most important management tools used to plan and control business operation.

Planning is the first essence of management and all other functions are performed within the framework of planning. Planning is a method of course of action throughout in advance. Planning is the process of developing enterprise's objectives and deciding in advance what is to do in future. Planning start form forecasting and predetermination of

future event. The procedure of preparing plan in respect of future financial and physical statements to indicate the intention of the management in respect of the various aspects of the business.

Thus planning includes (i) establishing enterprise's objective (ii) developing premises about the environment in which they are to be accomplished (iii) selecting a course of action to accomplish the objective (iv) initiating activities necessary to translate plan into action (v) current re-planning to current event deficiencies.

Budgeted profit plans are flexible and depend upon the size and nature of the firm. Generally, two types of profit plans are generated. For long – term objectives, strategic plans are prepared and short – term objectives, tactical plans are developed. The type of budget depends upon the nature of business entity. Generally, for a product manufacturing concern, following budgets are prepared.

- 1 Sales budget 2 Production budget 3 Raw material budget 4 Purchase budget,
- 5 Labor hours and cost budget 6 Manufacturing over head budget,
- 7 Administrative and sales expenses budget 8 Cash budget
- 9 Capital expenditure budget 10 Flexible expenditure budget

But in case of non – manufacturing enterprises a merchandise budget usually includes planning and sales reduction markdown, employee discount, stock shortages, purchases and gross margins. Other functional budget such as production, material, labor hour, manufacturing overhead budget etc. are not formulated.

Profit planning / Budgeting is an artistic work. Budget formulation starts from sales forecasting. Business forecasting is an important element of budgetary control. The budgeting will be on ultra failure if it is not initiated and supported by Top Management. The support of the Top Management for the budgeting system implies that it is confident about its capabilities to plan the future course of action and run the enterprises successfully. Another main thing is that the goals of organization should be clear and realistic. Budgeting will not succeed if the goals to be achieved are not clear.

"Having prepared a plan, it is equally important to watch performance difference between actual results and the budgeted. It may indicate the necessity for corrections, so as to assure the realization of the forward plan."(Willsmore, A.W :1960:1).

"Further, as the enterprise grows, it changes and becomes more complex. There is the continuing problem of discarding less useful approach and replacing them with more appropriate ones. Both, budgeting and the accounting system must be revised as the enterprise change. It is not uncommon to find a situation where these two systems are internally inconsistent and do not effectively serve the needs of the enterprise. This result usually occurs when a 'system' developed in one other enterprises is literally transplanted without change. It is doubtful that any two profit planning and control should be identical because two companies are not identical." (Welsch, G.A. : 1986 : 14).

### **Evolution of Industries in Nepal:**

In ancient time, Handicraft & Cottage Industries played significant role. During Lichhibi period industries like weaving, mining, handicraft, metalidols, food products were encouraged. Prithvi Narayan Shah has made policy to protect cottage industries by discouraging imports. At that time, Nepal becomes self dependent in textiles. The development of modern industries was started after 1935 A.D. In 1935 an industrial board named "Udhyog Parishad" was formed with a view to produce goods under medium & large industry. The first company Act. was promulgated in 1936 A.D. & in the same year Biratnagar Jute mill, the first joint stock company was established in Biratnagar. To provide financial assistance to industries& trade, Nepal Bank Ltd. was established in 1994 B.S.

During ten year (1936-1946 A.D.) altogether 63 industries like established Morang Sugar Mills, Raghupati Jute Mills, Judha Match Factory, Nepal Plywood & Babbin Company were established beside Paper, Soap, Furniture, Oil, Rice Industries were also established with a total investment of Rs. 7.20 crores. However, most of them went into liquidation due to lack of proper management.

### **1.2 Brief introduction of J.Bs' Industry**

J.Bs' Industry is a fruit and vegetable processing industry. It is located in Itahari municipality of Sunsari district and is stablished in 2047 B.S.

It manufactures the “Sagarmatha” branded fruit and vegetable products like orange squash, lemon squash, tomato ketchup, chilly sauce, jam, pickles, canned fruit juice, soybean sauce, vinegar etc. All products are nutritious, delicious and better priced.

The company has implemented cleaner production practises with the technical help from SEAM/N Nepal project since the year 2006. After implementation of the project the lay out of plant was modified. The modified layout of plant is more convenient, generation of population load has been reduced, housekeeping practises are improved, sanitation, neatness and tidiness of industry have improved. All the product and processes are manufactures and processed by using sophisticated equipment and machineries under clean and hygienic environment.

A quality circle has established in the industry. All the employees are the member of the circle. It monitors the effectiveness and performance of machineries, processing and processing lines. It also monitors cleanness and tidiness of working environment sand gives solutions to keep it better.

**Objectives of J.Bs’ Industry:**

- a) To manufacture and market the quality products at better price.
- b) Manufacture and process the goods at sound environmental conditions.
- c) First priority is given for the quality of goods then the price.
- d) Wastage minimization and minimization of pollution load (solid, liquid, gas).
- e) Social important by giving jobs for orphanage and poor villagers.
- f) It has given positive motivation for the local farmers to grow more crops by purchasing bulk quantity of crops (tomato, chilly, papaya etc.) at better price.

### Capital of the J.Bs' Industry:

The capital of the industry during the last five fiscal year was as follows: in Rs.

Capital\Year	2064	2065	2066	2067	2068
Fixed Capital	9,81,500	9,81,500	9,81,500	9,81,500	9,81,500
Working Capital	28,60,000	28,60,000	28,60,000	28,60,000	28,60,000
Reserve & Surplus	8,90,443	11,06,884	15,94,627	23,02,759	28,98,069
<b>Total</b>	<b>47,31,943</b>	<b>49,48,384</b>	<b>54,36,127</b>	<b>61,44,259</b>	<b>67,39,569</b>

**Source: J.Bs' Industry, Annual Report 2064-2068**

Total capitalization fund of the industry was in increasing trend. Industry has not added additional capital because it has sufficient reserve and surplus.

### The Major Products of the J.Bs' Industry:

1. Orange/Lemon Squash
2. Winner Orange/Lemon Squash
3. Vinegar
4. Soybean Sauce
5. Mixed Fruit Jam
6. Orange Marmalade
7. Pineapple Jam
8. Orange Jam
9. Mixed/Mango/Chilli/Lemon Pickle
10. Mixed Pickle
11. Pouch Pickle
12. Tomato Ketchup/Chilli Sauce
13. Tomato /Chilli Sauce
14. Orange Juice
15. Pineapple Juice
16. Mango Juice
17. Pineapple Slice
18. Pineapple Titbit
19. Mango Slice
20. Tomato Puree
21. Fruit Cocktail
22. Juice Nectar
23. Jack Max

### **1.3 Statement of the Problems**

Budgeting includes planning and preparation of financial and physical target, appraisal and reporting. Profit plan is one of the most important management devices that plays a key role for the effective formulation and implementation of strategic as well as tactical plans of an organization. PPC requires the effective co-ordination between various functional budgets of an organization like sales plan, production plan, material plan, labor plan, cash budget and capital expenditure plan. Profit planning is a systematic and formalized approach for performing significant phases of management planning and control system. Generally, a manufacturing enterprise prepares different plans and budget following headlines like, sales plan, production plan, purchase plan, material plan, labor plan, and cost budget etc. it is very essential for manufacturing company but it depends upon the flexibility and size of the firm. In PPC, budget is to specify a clear-cut process to develop a formal approval policy. In some special circumstances, it is said that PPC is applicable only to large and complex organization.

This research attempts to show the relationship between the various functional budgets, their achievement and their effective application within the conceptual framework of profit planning for solving the problems that have accrued in PE.

The study here has tried to answer the following research question,

- a) What are the main problems faced by the enterprises in developing and implementing profit plan?
- b) To what extent is there the base prepared for applying profit plan?
- c) What are the fundamental principles adopted in short-term and long term planning?
- d) What is the situation of sales and production activities?
- e) What steps should be taken to improve profit-planning system in the PE?

### **1.4 Objectives of the Study**

The main objective of the study is to examine and evaluate the profit planning practises of J.Bs' industry and recommend for maximization of profit. The sub objectives are as follows:

1. To analyze the various functional budgets that is prepared in J.Bs' Industry.
2. To examine the practices and effectiveness of profit planning in J.Bs' Industry.
3. To examine the cost structure.
4. To evaluate the panned and actual variance of the enterprise.

## **1.5 Significance of the study**

The main importance of the present study lies in the role of budgeting profit planning process, that can play not only in the profitability of enterprises but also the overall managerial performance, financial performance and there by improvement in the industrialization process of a country.

PPC is a major instrument that minimizes future risks and maximizes the output from the scarce resources. Budget or profit plan defines the goals or objectives of the firm in a clear manner so as to avoid confusion and to facilitate their attainability. It also provides a detail and clear course of action to be performed so as to reduce uncertainty and for the proper direct individual's and groups effort to achieve goals. Hence J.Bs industry is very useful to entrepreneurs, decision-makers and future researchers.

In context of Nepal very little study has been made in the fields of profit planning. This study highlights about the application of detailed and systematic approach of profit planning on budgeting in Nepalese Public Enterprises. It also studies the problems, effectiveness and significance in budget application and implementation.

## **1.6 Limitations of the Study**

The study was not free from the following limitations:

1. This study is focused mainly on profit planning of J.Bs' Industry.
2. The period selected for study covered the five fiscal years from the FY2064 to 2068.
3. This study focused on certain profit plans.

4. The study was based on primary as well as secondary data provided by the accountant of the industry.

## **1.7 Organization of the Study**

The whole thesis will be organized as the following forms:

### **Chapter 1:- Introduction**

This chapter dealt on general historical background of development of industries in Nepal, Overview of J.Bs. Industry. introduction to profit planning, statement of the problem, objective of the study & limitation of study.

### **Chapter 2:- Review of Literature**

This chapter dealt with literature review covering of profit planning and control, and also includes brief review preview research works so far.

### **Chapter 3: Research Methodology**

This chapter consisted of the research designed, nature of data collection, period covered, tools used and research variable.

### **Chapter 4:- Data Presentation, Analysis & Finding**

This chapter made presentation & analysis of data collected from various sources by using various financial & statistical tools. This chapter also include & major findings of the analysis.

### **Chapter 5:- Summary, conclusions and recommendation.**

This chapter consisted with summary, conclusions and recommendations.



## CHAPTER 2

### Review of Literature

#### 2.1 Profit

The Main objective of every business firm is to maximize profits. So profit is primary measure of success of every firm. Profit is the focal point of the every firm's performance. Every organization needs to earn profit. The term profit has been defined in different way. An economist may say that profit is the reward for entrepreneurship for risk taking. A labour leader might say it is a measure which can be used to examine the efficiency of labour, because profit is produced by the labors and profit provides a base for negotiating a wage increase. An investor will view it is a gauge of return on his or her money. An internal revenue agent might regard it as the base for determining taxes. The accountant will define it simply as the excess or the firm's revenue over the expenses in a given fiscal period. Using the accountant measuring stick management thinks profit as.

- A tangible expression of the goals it has set for the firm.
- A measure of the performance toward the achievement of its goals.
- A means of maintaining the health, growth and continuity of the company (Robert, 1999:1-100).

A business firm is an organization designed to increased profits. "Profits are the acid test of individual firm's performance. (Dean, 1982:3) Almost all the business decisions are judged in relevancy to the profits. Profit is the primary objective of business. "Profit is the signal for the allocation of resources and yard stick for judging managerial efficiency" (Kulkarni, 1981:187)

Profit is the amount of revenue earned above the expenses incurred to operate the business. The word profit implies as comparison of the operation of the business between two dates, which are usually separated by an interval of one year. It should be noted that profit are residual income left after the payment of the contractual reward to other factors of production (Joshi, 2057:276).

The accounting concept of company is a concept of net business income. The sales transaction of a period are regarded as bringing new asset into the business and profit result if there in excess of the assets leaving the business in the same period. Profit is thus the surplus income that remains after paying expenses and providing for that part of capital that has been consumed in producing revenue.” (More, 1986:28),

Hence profit is obtained by subtracting the total cost from total revenue. Profit occurs according to the structure of the market. Such as in the perfect competition market profit is earned with the help of innovation, attraction of goods and selling art of the sales person.

Finally, profit is the primary measure of every business success. Therefore each and every enterprise needs profit in monetary form. For this they need to adopt systematic planning for realizing planned profit.

## **2.2 Planning**

The word “planning” is concerned with thinking and deciding what is to be done in advance. Planning describes what a manager intends to do.

Planning means arrangement of doing or using something or considering in advance. It is a determination of action to achieve a desired result. It operates as the brain center of an organization. It includes establishing objectives, developing premises about the environment, selecting course of action, initiating necessary activities and re-planning. Planning is the first phase of the five functions of management and followed by organizing, directing, coordinating and controlling. Planning is the foundation of business safety. It is the means by which business enterprises assure tomorrow’s solvency.

Many firms and companies use planning, which determines long range and short range decision for running the overall business. The terms and conditions are evaluated in terms of their financial impact in the business organization and plans are expressed in financial terms. It is the statement of organization and overall activities for coming period. It is developed by top executives considering general economic conditions, anticipated conditions of industries, competitive considerations etc. Plan is the projection of activities of all functional departments. It is developed in detail by specifying timing of activities of

execution. “To plan is to look ahead and chalk out future course of operation. It is the determinations of a course of action to achieve a desired result.” (Kulkarni, 1985:87)

“Planning means setting goals for the firm, considering various ways of meeting those goals and picking out what appears to be the best way to meet the goals.” (Lynch, 1993:18). In planning management is concerned with laying down objectives and determining the courses of actions to be followed out of the several alternatives available to meet those objectives.

It is sometimes said that planning is the primary managerial functions which logically procedures out other functions, since without planning, a manager would not have activities to organize, would not require a staff, would have no one to direct and would have no need to control.

According to John J. Hampton, planning is the specific process of setting goals and developing way to reach them. Planning represents the firm’s effort to predict future events and be prepared to deal with them.

“Planning is directed toward the establishment of desirable future objectives and the formation of an organizational structure to be followed in achieving them. Control results from the evaluation of individual and group effort in terms of the predetermined goals. The effective discharge of these functions is essential to sound business management and successful operations.” [Niswonger & Fess, 1965:515]

From the above definitions and analysis of planning concepts, the following features can be drawn.

- Planning is a primary function of management.
- Planning is intellectual process of management.
- Planning is goal-oriented task.
- Planning is used to reduce the uncertainty about future.
- Planning is directed towards efficiency.
- Planning includes both short range and long range time span.
- Planning includes the managerial activities.

So planning is concerned with setting goals, establishing strategy for achieving these goals and developing a comprehensive hierarchy of plans to integrate and coordinate activities. It is concerned with both ends (what is to be done) and means (how it is to be done).

## **2.2.1 Types of Planning**

### **2.2.1.1 Strategic or Long Term Planning**

It is a planning in board terms. So it is a top level function in which organization's purpose, mission and overall objectives and policies are developed to positions the organization advantageously in its operating environment. It is closely concerned with the concept of the corporation as a long living institution. It usually encompasses three or more years in future. The strategic or long range planning is directly involved with motivation and to provide direction to the employees and make the strategic.

The main purposes of long term planning are as follows:-

- a) To provide a clear picture of how the company is handled.
- b) To keep enterprise in strong position.
- c) For evaluating management personnel.
- d) To expedite new financing.
- e) To being attentive on to new techniques.
- f) To focus on long term opportunities.

“The long range profit plan covers all the key areas of anticipated activity: sales, expenses, research and development, capital expenditures, cash, profit and return of investment.”(Welsch ,1998:132)

### **2.2.1.2 Tactical or Short Term Planning**

Short term planning is for one year or less. It is prepared to fulfill the short term objective by management. It is done at all levels and involves directing the Organization's activities.

“Short term planning is synonymous with the classical budgetary period of one year. Short range planning is made after freeze is taken as the considerations of the possible alternative course of action. Such courses are outlined for the medium range plan which doesn't concern implementation. Its aim is weeding out a plethora of possibility which is for the most part long on promises and short on feasible, tangible results”. (N.D, 1990:65)

Therefore, short range planning is concerned with limited time period. Usually it covers one year time period. It is used by management as substantial part of long range and medium range plan.

The main purposes of tactical planning are:-

- To acquire and facilitate, personnel and raw materials.
- To control cost through planned acquisition and avoid higher cost purchasing.
- To create new opportunities through assessing the environment and evaluating resources.
- To provide general understanding of annual profit plan.
- To provide detail classification by month, responsibility and products.

### **2.2.1.3 Medium Term Planning**

Medium term planning is normally prepared for two to three years. Main purpose for using it is to establish interim objective between long term goals for use in the development of annual programme and budgets. Medium term planning is used mainly to determine the allocation of resources among competing activities to revise long term plans in view of more recent developments. Medium range planning often takes the form of budgeting in which each division department or unit is allocated certain resources during the coming years. In medium term plan more details is involved than long term plans but less than short term plan. In practice this planning is less used in comparison with short and long term planning.

## **2.3 Forecasting**

Forecasting is the future decision made at present based on the analysis of relevant factor of past and present. Its main aim is to reduce uncertainty and risk in future and to achieve desired objectives as possible. “A large number of forecasting methods are available

to management today. These range from the most native method such as use of the most recent observation as forecast to highly complex approaches such as econometric system of simultaneous questions. The wide spread in introduction of computers has made programmes readily available for all quantitative forecasting techniques. (Saksena, 1999:100)

Forecasting is an integral part of decision making activities of management. An organization establishes goals and objectives seek to predict the environmental factors then selects actions that its hopes will result in attainment of goals and objectives. The need of forecasting is increasing as management attempts to decrease its dependence on chance and become more scientific in dealing with its environment. Since each area of an organization is related to all others, a good or bad forecast can effect the entire organization. (Bratt Elmer, 2000:1)

“Forecasting is the prerequisite of planning. Forecasts are the statements of expected future conditions. It is an attempt to find the most probable course of events or at the best a range of probabilities. (Kuchhal, 1976:6)

A forecasting system must establish a mutual relationship among forecasts made by different management areas. There is a high degree of interdependence among the forecasts of various divisions or departments, which can not be ignored if forecasting is to be successful. For examples error in sales projections integrate a series of reaction affecting budget forecasts. In projecting the amount of money available to each division will affect project development, modernization of equipment. This in turn will influence if not determine, the level of sales, operating costs and cash flows clearly. There is a strong interdependence among the different forecasting areas in an organization.

### **2.3.1 Planning vs. Forecasting**

Forecasting is prerequisite essential elements of planning. A forecast is as prediction of future event condition or situation, what will happen in a near future is assumed by analyzing the present and past situation is called forecast where as planning includes a program of intended future action and desired results. Forecast are statements of expected future condition, these expectations depend up on the assumption made. If assumptions are plausible, the forecast has better chance of being useful. Forecasting assumption and techniques vary with the kind of planning needed.

“When estimates future conditions are made on systematic basis, the process is referred to as forecasting and the figure or statement obtained is known as forecast.”(Gupta, 1993:73)

Forecasting predicts the future event in such a way that the planning process can be performed more accurately. “A forecast is not a plan rather it is a statement or quantified assessment of future condition about a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should always state the assumptions upon which it is based. A forecast should be viewed as only one input in to the development of sales plan. The management of a company may accept modified or reject the forecast” (Welsch, 1998:172)

So forecasting is concerned with what will happen in the future whereas, planning includes programme of intended future action and describe results. Forecasting is a technical activity, usually assigned to technically trained staff specialists. Its purpose is to predict a probable outcome from a given set of circumstance for a specified period in the future. A forecast rests upon specified assumptions made by the forecaster. Forecasting often provides some of the basic data that are useful in the planning process.

## **2.4 Overview of Profit Planning**

Profit Planning means looking ahead for future. The budgetary scheduling is communicated to each operating supervisor who is affected. When correctly applied, the budgetary system can be a means of motivating employees to more efficient operations or to improved individual performance. [Seller, 1964:655]

“Profit planning has to resolve a number of conflicting issues before expressing the established directions & decisions made by top management. Conflicting aims should be brought to produce more sales & profit out many investors also increase the investment in working capital & the risk of bad debt”(Holmes & et; 1970: 682).

A profit planning is an advance decision of expected achievement based on the most efficient operation. It is established goal which actual accomplishment is regularly compared. Profit is an outcome of effective & efficient management which is effected by various factors. Profit planning is that tools which manage all the factors efficiently & effectively.

Profit planning is therefore fundamental part of the over all management function & is vital part of total budgeting process. The management determines the profit goals & prepared goals. Profit planning can be done only when the management has the information about the cost of the products both fixed variables & the selling price at which it will be in a position to sell the products of company. (Maheshwari; 2001:171)

Thus a budget is a plan for the future expressed in financial terms. In business units, budgets represent an operating plan with two primary objectives: (1) to provide a financial forecast of future operation and (2) to provide standards for the measurement of performance. A company budget is, therefore, both a plan for the future and a means of comparing actual results with the standards established in the budgets.

“Profit planning or budgeting is a forward planning & involves the preparation in advance of the preparation in advance of the quantitative as well as financial statements to indicate the intention of management in respect of the intention of management in respect of the various aspects of business. Profit planning, in fact, is a managerial technique and it is written plan in which all aspects of business operation with respect of definite future period are included. It is a formed statement of policy plan objective & goal established by the top management in respect of some future period. Profit planning is a predetermined detailed plan of action developed and distributed as a guide to current operations and as a partial basis far the subsequent evaluation of performance. Thus, we can say that profit planning is a tool which may be used by the management in planning the future course of action and controlling actual performance. (Gupta, 1992:521)

Profit planning is a systematic formal means of decision making and attaining organizational objectives & goals at a specific future period of time by the application of diversified managerial tools for utilization of available resources at a reasonable manner.

To plan profit intelligently, Lynch suggests that a management needs to know.

- the economic characteristic of the firms operation,
- the nature of the market for its product;
- the nature & severity of its competition;
- the cost of its factors of production the material,



- the labour, productive capacity, the capital)
- the sound & intelligent planning of profit,
- cost & sales are important in the age of rapid technological change.(Lynch 1999:100)

Profit planning is the work involved in attaining the objectives where a firm hopes to realize through the use of a complete budgetary system. Such planning includes budget conference with executives and department heads, analysis of past performance, analysis of expected future conditions, study of pricing policies determination of break-even points, coordination of departmental activities, control of cost by measurement of result, and of course, the actual forecasting in financial terms. [Newton, 1958:374]

#### **2.4.1 Processes of Profit Planning**

The planning process should periodic consistent and in-depth re-planning so that all aspects of operations are carefully reexamined and reevaluated. These prevent a budget planning approach that involves only justification of increases over the prior period. The concept of reevaluation and necessary of justify all aspects of the plans periodically finds its strongest support in what has been called ‘zero base budgeting’. (Peter, 1973:98)

The major processes of profit planning are:

##### **a) Identification and evaluation of external variables:**

The variables identification phase of profit planning process focuses on identifying and evaluating the effects of the external variables. Identification also involves separate consideration of non-controllable and controllable variables. This means that management planning must focus on manipulating the controllable variables and non-controllable variable. Relevant variables mean those that will have a direct and significant impact on the enterprises.

##### **b) Development of the Broad Objectives of the Enterprises:**

Development of the broad objective of the enterprises is a responsibility of executive management. Based on realistic evaluation of the relevant variables and an assessment of the strength and weakness of the organization, executive management can specify or restate this phase of the profit planning program.

The statement of broad objectives should express the mission, vision and ethical character of the enterprises. Its purpose is to provide enterprises identity, continuity of purpose and definition.

**c) Development of Specific Goals:**

To bring the statement of broad objectives into sharper focus and to move from the realm of general information to more specific planning information is the purpose of specific goals phase of the PPC process. It provides both narrative and quantitative goals that are definite and measurable. These specific goals should be developed by the executive management as the second component of the substantive plan for the upcoming budget year and also should exercise leadership in this planning phase. Moreover, the specific goals provide a basis for performance measurement.

These goals must be developed for both long range and short range plans. This statement of specifics that enterprise goals should define such operational goals as expansion or contraction of product and service lines, geographic areas share of the market by major products service lines, growths trends, production goals, profit goals, profit margins, and return on investment measure are quantified and specified. They are measurable for the areas of operation that are critical to long-run successes of the enterprise.

**d) Development and Evaluation of Strategies:**

Strategies are the basic thrusts way and tactics 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.

- I. Increase long-term market penetration by using the technology to develop new products and improve currents products.
- II. Emphasize product quality and price for the top of the market.
- III. Expand market to all sectors.
- IV. Market with low price to expand volume.
- V. Use both institutional and local advertising programs to build market share.

VI. Improve employee moral and productivity by initiation behavior management process.

**e) Executive Management Planning Instruction:**

This phase involves communication of the substantive plan to middle and lower management levels. It explains the broad objective enterprises goals, enterprises strategies, and tactical profit plans. It also is called the statement of planning premises or the statement of planning guidelines.

**f) Preparation and Evaluation of Projects Plans:**

Projects plans encompass such items as plan for improvement of present products, new industries; exist from products and industries into new technology and other major activities that can be separately identified for planning purpose. The nature of projects is such that they must be planned as separate units. In planning for the projects, the time span considered must normally be the anticipated life span of the project.

**g) Development and Approval Strategic and Tactical Profit Plan:**

After the preparation of evaluation and project plans management has to develop, strategic and tactical profit plan. It is possible that executive management or the chief financial executive will develop the strategic and tactical plans. Certain approach is seldom advisable because it defines full participation on the planning process by the middle managers. Lack of participation can cause unfavorable behavioral effects. Participatory planning and receipt of the executive management instructions, the manager of the each responsibility center will immediately initiate activities within his responsibility center to develop a strategic long-range profit plan (say five year) and harmony with the five year plan, a tactical short-range profit plan (say one year).

**h) Implementation of Profit Plan:**

Implementation is most important to attain goals and objectives of the enterprise. The chief executive should communicate the objectives, goals strategies and policies of enterprise for subordinates. In management leadership, many facts are involved. However, a comprehensive profit planning program may aid substantially in performing this function.

Plans, strategies and policies developed through significant participant establish the foundation for effective communication.

**i) Use of Performance Reports:**

Performance reports which are prepared by accounting department of any company may be prepared on the monthly or half yearly or annual or as needed basis. These reports compare the actual and planned performance and show the difference of each item as a favorable or unfavorable performance report.

**j) Use of flexible Expenses Budgets:**

The flexible expenses budget is also referred to as the variable budgets, sliding scale budgets; expenses control budgets, and formula budgets. The flexible budget concept applies only to expenses. It is completely separated from the profit plan, but it is used to complement it. Many companies do not use flexible budget procedure.

Flexible budget gives realistic information about expenses make it possible to compute budget amounts for various output volumes of rates of activity in each responsibility center.

**k) Implementation and follow up:**

A flexible expenses budget shows the favorable or unfavorable situations. Follow up is an important part of effective control as performance reports are based on assigned responsibilities they are the basis for effective follow up actions. It is important to distinguish between cause and effect. The identification of causes is primarily a responsibility of line management. Analysis to determine the underlying causes of both favorable and unfavorable performance variances should be given immediate priority. In the case of unfavorable performances variances, after identifying basic causes, as opposed to the results, alternatives for corrective action must be selected. Thereafter corrective action must be implemented.

In the case of favorable performance variances, the underlying causes should also be identified. This case shalom requires corrective action. Rather, the underlying causes of favorable variances often provide valuable information for improving efficiency and for developing positive reinforcements to the less-successful operations and employees.

## 2.5 Profit Planning and Control

Profit planning and control is an important approach, mainly in profit-oriented organizations. Profit planning is merely a tool of management. It is not an end of management. It facilitates the managers to accomplish managerial goals in a systematic way.

A systematic approach that facilitates effective management performance is profit planning and control. In modern age, profit planning and controlling is a very important tool of management and decision making for any business organization.

“Comprehensive profit planning and control is a systematic and formalized approach of accomplishing the planning, co-ordination and control responsibility of management” (Welsch, 1998:35)

Concept of a comprehensive budget covers its use in planning, organizing, and controlling all the financial and operating activities of the firm in the forth coming future. ). The comprehensive profit planning & control is defined as a systematic & formalize approach for performing significance phase of the management planning and control functions. Specially, it involves.

- The development and application of broad and long range objectives for the enterprises.
- The specification of enterprise's goal.
- A long range profit plan developed in broad terms;
- A short –range profit plan detailed by assigned responsibilities (division, products projects.)
- A system of the periodic performance report detailed by assigned responsibilities; and
- Follow –up procedures

The concept of comprehensive budgeting course it's use in planning organizing & controlling all the financial and operative activities of the forth coming period (Richard & Williamson, 1995 :142).

A profit plan or budget is the formal expression of the enterprises plans and objectives stated in financial terms for a specified future period of time. Profit plan is defined as an estimation and predetermination of revenues and expenses that estimate how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operation in presents a plan for spending income in a manner that does not result in a loss.

Profit planning represents an overall plan of operations, covers a definite period of time and formulates the planning definitions of management. Profit planning and control refers to the organization techniques and procedures, where by long and short range plans are formulated, considered and approved, responsibility for execution is delegated, flexibility to meet changing condition is provided, progress in working the plan is reports, deviation in operation are analyzed and corrective action required to reach the desired objective is taken. A profit plan is an advanced decision of expected achievement based on the most efficient operation standard in effect or in prospect at the time it is established, against which actual accomplishment is regularly compared. The primary plan of profit plan is to assist in accruing the procurement of the profit planned and to provide guide for assisting in establishing the financial control policies, including fixed assets, inventories and the cash position. The adoption of a correctly constructed profit plan provision provide opportunity for a regular and systematic analysis of incurred or anticipated expenses, organization future planning, fixing of responsibilities and stimulation of effort. In short, it provides a tool for more effective supervision of individual operation and practical administration of the business as a whole.

The profit planning and control is used for the development and acceptance of objectives and goals and moving an organization efficiently, systematically and timely to achieve the predetermined objectives and targeted goal. It is not a separate technique that can be thought of and operated independently of the total management process. Rather the broad concept of profit planning entails integration of numerous management approaches and techniques. Profit planning and control can be reviewed as one of the major valuable approaches that have been developed to facilitate effective performance of the overall management process.

Comprehensive profit planning and control is a new term in the literature of business. Though it is a new term, it is not a new concept in management. The other terms, which can be used in the same context, are comprehensive budgeting, managerial budgeting and simply budgeting. The profit planning and control can be defined as process/techniques of management that enhances the efficiency of management.

### **2.5.1 Fundamental Concept of Profit Planning and Control:**

The fundamental concept of PPC includes the underrating activities and tasks that must generally be carried out to attain maximum usefulness form. These fundamentals have never been fully codified. The mechanics of PPC involve such activities as the design of budget schedule, routine and repetitive computations and clerical activities related to PPC program.

As a basis for discussion an outline of the fundamental concepts of PPC are:

- i. A management process that include planning, organizing, staffing, leading and controlling.
- ii. .A managerial commitment to effective management participation by all levels in the entity.
- iii. An organization structure that clearly specifies an authority and responsibility at all org. level.
- iv. A management planning and control process.
- v. A continuous and consistent co-ordination of all the management functions.
- vi. Continuous feed forward, feedback, follow up and re-planning through communication channels both down to up and up to down.
- vii. Strategic and tactical profit plan.
- viii. A responsibility accounting system.
- ix. A continuous use of the exception principle.
- x. .A behavioral management program.

The basic objective of profit planning & control are: [Vinayakam & Sinha, 1992:17]

1. It's a plan of action and serves on a declaration of policies.
2. To coordinate the various division of a business, namely production, marketing, financial and administrative divisions, by consultation among the divisional heads and mutual agreement on company policies.
3. To decentralize responsibility on to each manager involved.
4. To plan and control income and expenditure so that maximize profitability is achieved.
5. To operate most efficiency the divisions, departments and cost centers of a plant.
6. To smooth out seasonal variations in production by developing new 'fill-in' products and there by accomplishing once phase of economic planning.
7. To aid in controlling cash.
8. To obtain a more economic use of capital.
9. Only the exceptions are reported to the management so that corrective action can be taken in order to achieve the objectives laid down by the management.

Thus the above fundamentals are concerned with effective application of the theory at management process. A successful PPC system is based upon certain prerequisites i.e. management attitude, organizational structure and managerial approaches necessary for the effective and efficient application of PPC system.

### **2.5.2 Components of Profit Planning and Control Program:**

PPC process necessarily integrates the planning leading and control functions of management. A PPC program includes more than the traditional idea of periodic or master budget. "Consistent with the PPC process, the typical components of ppc program far a particular year are outlined as." (Welsch, 1998: 74)

#### **A. The Substantive Plan:**

The substantive plan represents—

- (i) Broad objective of enterprise
- (ii) Specific enterprise goal



- (iii) Enterprise strategies
- (iv) Executive management planning instructions

B. The Financial Plan:

Generally financial plan are two types.

- (i) Strategic/long range profit plan:

Strategic profit plan consists:

- (a) Sales cost and profit projections
- (b) Major project and capital additions
- (c) Cash flow and financing
- (d) Personnel requirements.

- (ii) Tactical/short range profit plan:

Following plans are include in tactical profit plan.

- a) Operating Plan: Operating plan includes sales plan, production or merchandise purchase plan, administrative expense budget, distribution expenses budget and appropriation type budget (i.e. research, development, promotion, and advertising) through planned income statement.
- (b) Financial Position Plan: Financial position plan includes, assets, liabilities owners' equity through planned balance sheet.
- (c) Cash flow plan

C. Variable expenses budget:

Output expenses formulas.

D. Supplementary data:

(e.g. CVPA, Ratio analysis)

E. Performance report - each month end and as needed.

F. Follow up, corrective action and re-planning reports.

### **2.5.3 Advantage of Profit Planning:**

Although many viewers say that profit planning and control can be applied only in a profit making big organization. But profit planning is applicable in all organizations (profit or non profit, service or manufacturing) regardless of size, special circumstances or conditions.

It helps organization to generate more profit by operating efficiently and effectively. The following main arguments are usually given for profit planning and control.

1. It forces early considerations of basic policies.
2. It requires adequate and sound organization structure that is there must be a definite assignment of responsibility for each function of the enterprise.
3. It compels all members of management, from the top down, to participate in the establishment of goals and plans.
4. It compels departmental managers to make plans in harmony with the plans of other departments and of the entire enterprise.
5. It requires that management put down in figures what is necessary for satisfactory performance.
6. It requires adequate and appropriate historical accounting data.
7. It compels management to plan for the most economical use of labour material and capital.
8. It instills at all levels of management the habit of timely, careful and adequate consideration of the relevant factors before reaching important decisions.
9. It reduces cost by increasing the span of control because fewer supervisors are needed.
10. It frees executives from many day-to-day internal problems through predetermined policies and clear-cut authority relationships. It there by provides more executive time for planning and creative thinking.

11. It tends to remove the cloud of uncertainty that exists in many organizations, especially among lower levels of management, relative to basic policies and enterprise objectives.
12. It pinpoints efficiency and inefficiency.
13. It promotes understandings among members of management of their co-workers problems.
14. It forces management to give adequate attention to the effect of general business conditions.
15. It forces a periodic self-analysis of the company.
16. It aids in obtaining bank credit; bank commonly require a projection of future operations and cash flows to support large loans.
17. It checks progress or lack of progress towards the objectives of enterprise.
18. It forces recognition and corrective action (including rewards).
19. It rewards high performance and seeks to correct unfavorable performance.
20. It forces management to consider expected future trends and conditions.

#### **2.5.4 Purpose of Profit Planning and Control:**

A comprehensive profit planning and controlling is a systematic and formularized approach for stating and communicating the firm's expectation and accomplishing management in such a way to maximize the use of profit plan and to achieve the maximum benefit from the resources available to an organization over a particular span of time. It serves as a tool for management control. The objective of the profit planning and control is to assist in systemic planning and controlling the operations of an enterprise. So it is the best sources of communication and an important tool in the hand of management.

The main purpose of the profit planning and controlling are as follows:

- To states the firm's goal in formal terms clearly to avoid confusion and facilitates their attainability.

- To provide a realistic estimation of income and expenses for a period and of the financial position at the close of the period, detailed by areas of management responsibility.
- To co-ordinate the activities and efforts in such a way that the use of resources is maximized.
- To communicate expectation to all the concerned with the management to the firm so that they are understood, supported and implemented.
- 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.

### **2.5.5 Limitations of Profit Planning and Control:**

Profit planning and control is an important tool for management. However, each tool suffers some limitation and its use is fruitful within these limits. Profit planning and control is also not limitless tool, so it is essential that the user of profit planning and control must be having a full knowledge of its limitations. The limitations of budgeting are as under.

- Based on estimates: Profit planning is not an exact science. Its sources depend upon precision of estimates. The success of profit planning and control depends to a large degree on the accuracy with which the basic estimate will be made. Therefore, estimates should be made on the basis of all the facts available. Using correct and modified statistical techniques and management can make the accurate estimates.
- Danger of rigidity: Profit planning and control is an estimation and quantitative expression of all relevant data. So there can be tendency to attach some sort of rigidity or finality to them. So profit planning and control programme must be dynamic.
- Application for long period: Profit planning and control is not possible in short period.
- Execution is not automatic: A skillfully prepared profit planning and control will not itself improve the management of enterprise, unless it is properly implemented. For successful profit planning and control it is essential that all the related persons inside the enterprise should understand it.

- Not a substitute for management: Profit planning and control is a management tool. It is not a substitute for the management. It is totally wrong to think that the introduction of profit planning and control is along sufficient to ensure success and to guarantee future profits. It is only for achieving the end.
- Costly: Mostly, the installation of profit planning and control system should take high cost. It is so costly that in general small company cannot afford it. So the system should be adopted only when benefits exceeds the cost.
- Proper evaluation: In absence of proper evaluation, budgeting will hide inefficiencies. So there should be continuous evaluation of actual performances, standards also should be re examined regularly.
- Lower morale and productivity: Unrealistic target should not be set and used as a pressure tactic. By doing it profit planning and control will lower morale and productivity. To some extent, profit planning and control may be used as pressure device but its extent must be carefully determined.

#### **2.5.6 Application of Profit Planning and Control:**

Some say that comprehensive profit planning and control is applicable only to large and complex organizations. Also, a not unusual comment is that "Comprehensive budgeting is a fine idea for most business, but ours is different" or "it is impossible to project our revenue and expenses," and so on. Sometimes specific industries are viewed as not amenable to profit planning and control. These views are comment regarding non-manufacturing enterprise, service companies, financial institutions, hospital, certain retail business, constructions companies and real estate enterprises. To the contrary, PPC can be adapted to any organization (profit on non profit, service or manufacturing) regardless of size, special circumstances or conditions. The fact that a company has peculiar circumstances or critical problems is frequently a good reason for the adoption of ppc procedures. In respect to size when operations are extensive enough to require more than one or two supervisory personnel, there may be a need for PPC applications. The smallest company certainly has different needs in this respect than a large one. As with accounting, a single PPC system that is appropriate for all enterprises can not be designed. A profit planning and control system must

be tailored to fit the particular enterprise and it must be continually adopted as the enterprise and its environment change.

### **2.5.7 Budgeting, as Tools of Profit Planning:**

Budgeting is a tool of profit planning which plays the vital role to manage the profit plan of any enterprise. It is an estimate of future needs calculated for a definite period. It anticipates income for a given period and cost as well as expenses. A business budget is a plan covering all phases of operations for a definite period in future. It is a formal expression of policies, plans, objectives and goals laid down in advance by top management for the undertaking as a whole and every sub division there of.

Budgeting, as a tool of planning and control is closely related to the broader system of planning and control in an organization. Budgets may be formulated for the organization as a whole or for any sub-unit. A budget is a written plan for the future. The managers of firms, which use budgets, are forced to plan ahead. Thus these firms tend to do well because they anticipate problems before they occur. A firm without financial goals may find it difficult to make proper decisions. A firm with specific goals in the firm of budget helps a firm to control its costs by setting guidelines for spending money for needed items because they know that all cost will be compared to the budget. If real costs exceed the budgeted costs, an explanation will be required. Frequently exceeding the budget may even be a ground for dismissal. A budget helps to motive employees to do a good job. This is particularly true when employees help in setting up the budget (Bajracharya, 2004: 345).

While originally the budget constituted a financial document, which generally covers the area of revenues and expenditures. It is now concerned with devising a coordinated programme of operation, providing an effective means of communication among managerial personnel for the purpose of evaluation proposed plans of action, directing the diverse activities towards the accomplishment of predetermined goals and obtaining all requisite approvals. There is an increasing trend towards extending the frontiers of business budget to include planning, coordinating and controlling of the entire operations of a business. This has transformed budgets into a valuable tool of purposeful management.

Budget encourages cogent thinking and help in the avoidance of vague generalization as all executives have to quantity plans to examine their feasibility in terms of profit

potential. They place the problems of profit in proper prospective by emphasizing that the only means of safeguarding the desire margin of profits lies in adopting costs to precedes which are beyond the control of enterprise. Then by maintain the various activities of a concern in proper relation to one another, business budgets bring a sense of balance and direction in the affairs of an undertaking. Budget is also a psychological device that obtains results. It makes these responsible for the implementation of the budgets proposals ever conscious of its existence with the consequence that through no monetary reward is their achieving the budget goals than in the absence of predetermined targets. To that extent, budgets act an impersonal policeman that maintains ordered and brings about efficiency in results.

### **2.5.8 Development of Profit Plan:**

Master budget preparation is major event in any organization. Profit plan and control includes the preparations of various functional budgets, analysis of variance and presentation of projected income statement and balance sheet. Top level management with the help of others involves in the development of profit plan. Developing of profit plan begins with the preparation of master budget following steps are followed to prepare a master budget. (John R. Schermerhorn)

- Step – 1            forecast demand for products or services.
- Step – 2            identity cost patterns for responsibility centers.
- Step – 3            estimate production cost.
- Step – 4            specify operating objectives.
- Step - 5            develop sales budget.
- Step - 6            develop a production budget.
- Step - 7            develop a purchasing budget.
- Step - 8            develop budget for responsibility centers.
- Step - 9            formulate a profit plan.
- Step - 10          compare profit plan with operating objective.

Step - 11     formulate a projected cash budget.

Step - 12     prepare a projected statement of financial position.

So, profit plan starts with preparation of sales budgets and sequentially preparation other budget and at the end it projects the statement of financial position.

## **2.6 Sales forecasting**

Sales forecasting is one of the inputs in sales plan, of critical steps in the budgeting process. Sales forecast is not a plan; rather it is a statement and/or quantified assessment of future condition about a particular subject based on one or more explicit assumptions. The forecast always states the assumption upon which it is based. Sales forecast are merely the sales estimates. For the specific future period based upon environmental assessment. The management of the company may accept, modify or reject the forecast.

The following forecast should be considered when forecasting the sales.

1.     Past sales level and trends.

- For the firm developing the forecast.

- For the entire industry.

2.     General economic trends.

3.     Economic trends in company's industry.

4.     Political and legal events.

5.     The intended pricing policy of the company

6.     planned advertising and promotion.

7.     expected actions of competitors.

8.     New products contemplated by the company or other firms.

9.     Market research studies.

10.    Other factors expected to affect sales in the industry. (Goet, Bhattarai, Gautam, 2062:2, 2.2)



### **2.6.1 Sales Plan/Budget:**

In most cases, profit planning is not only the most difficult to prepare. Sales plan provides basic management decision about marketing and based on these decisions, it is an organized approach for developing as comprehensive sales plan (Fago and Koirala, Keshav, 2003:55).

Preparation of sales budget is basic of foundational of task. Sales in primary sources of cash and other functional budgets are prepared on the basis of sales budget. The sales plan is key step of other financial plan.

Sales plan basically depends upon sales forecast. Different tools and techniques are used to estimate sales. It can be forecasted in both units and Rs. The sales plan is backbone of profit planning. If the sales plan is not realistic then all the other parts of the overall profit plan also are not realistic.

The sales plans have three distinct parts:

1. The planned volume of sales at the planned sales per unit or each product.
2. The sales promotional plan (personal, advertising and sales promotion).
3. The sales or distribution expenses plan.

"The primary purpose of sales plan are" (Welsch ,1998:75)

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

### **2.6.2 Sales Planning and forecasting:**

It is important to make distinction between sales planning and Forecasting because they are often confused. A forecast is not a plan they have different purposes but related. Forecast is a statement of future conditions about particulars subject based on one or more assumptions. It is only one input in to development of sales plan. The management of a

company may accept, modify or reject the forecast. But sales plan incorporates management decisions that are based on the forecast, other inputs and managerial judgment about such related items as sales volume, price, production and financing. In this way it can be said that sales plan are formulated by top executives which is not conditional but forecast in conditional it is also technical staff functions.

### **2.6.3 Components of Sales Plan:**

The major components of sales plan are:

- 1) Managerial policies and assumptions.
- 2) Marketing plan.
- 3) Advertising and promotion plan.
- 4) Selling expense or distribution plan.

### **2.6.4 Strategic and Tactical Sales Plan:**

According to time range of planning a comprehensive sales plan includes strategic and tactical sales plan. Both sales plans must be developed in profit plan.

#### **2.6.4.1 Strategic Sales Plan:**

It is also known as long rang sales plan. Long term sales plans are usually developed as annual amounts for five or ten years. It usually involve in depth analysis of future market potentials, which may be built up from a basis foundation such as population changes, state of economy, industry projections and finally company objectives. It affects long term Pricing policy, development of product and innovations of product, direction of marketing effort, expansion of distribution channel and cost patterns.

Components of strategic sales plan:

- Broad and general.
- Annual amounts; major groups.
- Total fixed and total variable expenses; by year.

#### **2.6.4.2 Tactical Sales Plan:**

It is to be developed for future twelve months detailed by months and quarters. So it is known as short range sales plan. Tactical sales plan are usually subject to review and revision on a quarterly basis. It includes a detailed plan for each main product and for groupings of minor products. Short term sales plan are usually developed in terms of physical units and in sales revenue. It also be structured by marketing responsibility for planning and control purpose.

Components of tactical sales plan are;

- Detailed and specific for the year.
- Detailed; by product, time and responsibility.
- Fixed and variable expenses; by month and by responsibility.

#### **2.6.5 Developing the Sales Plan:**

The following key steps are necessary to develop comprehensive sales plan.

- Step – 1        Developed management guidelines specific to sales planning including the sales planning process and planning responsibilities.
- Step - 2        Prepare one or more sales forecast consistent with specified forecasting guidelines including assumptions.
- Step - 3        Assemble all the other data will be relevant in developing a comprehensive sales plan.
- Step - 4        based on the above 1, 2 and 3 steps, apply management evaluation and judgment of develop a comprehensive sales plan.
- Step - 5        Consideration of alternatives.
- Step - 6        developing pricing policies.
- Step – 7        developing product line consideration.
- Step – 8        price- cost- volume consideration.

## 2.7 Inventory Budget

Inventory means closing balance of any materials which are used to production. Inventories may be grouped in to three classes: a) raw materials b) work in process c) finished goods. As is true of account receivable, inventory level depend heavily upon sales. However, whereas receivables buildup after sales have been made, inventory must be acquired ahead of sales. Inventory budget focuses on three questions.

-How many units of each inventory item should the firm hold in stock?

-How many units should be ordered at given time?

-At what point should inventory be ordered?

Inventory policies and methods are depending upon the size, nature, and seasons (time) of the business. (a) moving average method (b) turn over ratio method (c) simple average method, (d)first in first out method (FIFO),(e)last in first out method(LIFO) (f) stable inventory policy (method)

## 2.8 Production Budget/Plan

After developing the sales budget, manufacturing enterprise needs to develop a production budget. Production should be planned properly because production function consumes maximum percent of cost. The production plan includes the development of policies about efficient production level, use of production facilities and inventory level.

A production budget is quantity budget, which lay down the quantity of units to be produced during the budget period. The main purpose of this budget is to maintain optimum balance between sales, production and inventory position of firm; it is based on estimated sales.

The annual sales budget and the inventory requirement provide the Framework for the production budget. Production budget can be formulated in the following way.

Production requirements =Planned sales volume + ending inventory –beginning inventory

### 2.8.1 Development of Production Budget:

The following step should be followed to develop a production budget.

- (a) To establish policies for inventory level.
- (b) To plan the total quantity sales of each product during this period.
- (c) To schedule this production policies produce by production department.

### **2.8.2 Responsibility for Production Planning:**

Production function is concerned with production department. So Planning, scheduling and dispatching of the actual production through out the year are functions of production department. Production manager is responsible for these planning and control functions and he is also responsible for translating the marketing plan in to production program consistent with managerial policies and subject to certain constraints. These managers have first hand knowledge of the plant and personnel capacities, availability of material and production process. The production manager must plan an optimum co-ordination between sales, inventory and production levels.

### **2.8.3 Pre-requisites Required of Production Plan:**

Pre-requisites required developing the production plans are as follows.

1. Total production requirements (by product) for the budget period.
2. Inventory policies about levels of finished goods, work in progress, and the cost of carrying inventory. Text Box: Sales Plan Text Box: Finished goods inventory change Text Box: Production Plan Text Box: Direct material Budget Text Box: Direct labour Budget Text Box: Manufacturing Overhead cost
3. Plant capacity policies, such as the limits of permissible departures from a stable production levels through out the year.
4. Adequacy of manufacturing facilities.
5. Availability of direct material, purchase components and labour.
6. Length of the processing time.
7. Economic lots or runs.
8. Timing of production throughout the budget period by product and responsibility centre.

#### **2.8.4 Production Policies:**

There may be three types of production policies which are presented below.

(A) Stable production policies Vs unstable inventory policy:

In this policy fixed units are to be produced equally in every month or specified period, there by cause inventory to fluctuate inversely with the seasonal sales pattern. Therefore the budgeted sale of the period is unequal.

(B) Unstable Production Vs stable inventory policies:

In this policy units of inventory are to be stable at the end of each period and the production units are to be fluctuating in budget period. The number of unit produced and budgeted sales are directly related.

(C) Flexible in both inventory and production:

In this policy unit produced and final inventory both are flexible in specific budget period. This policy tries to develop the optimum coordination among sales, inventory and production.

### **2.9 Material Budgets**

Raw material budget is prepared after the planned production. Material means the input of production process. Material budget is co-ordination of required raw material and parts, inventory level of raw material and parts and level of raw material and parts that must be purchased.

Calculation of desired raw material quantity is.

Raw material to be purchased = Raw material consumption + closing inventory of raw materials - opening inventory of raw materials.

Planning raw materials and parts usually requires the following four sub-budgets:

1) Material and parts budgets: This budget specifies the planned quantity of each raw material and part required for planned production. It should specify quantities of each raw material and part by time, product and responsibility center.

2) Material and parts purchase budget: It specifies the quantities and timing of each raw material and component part needed: therefore a plan for purchase must be developed. This budget specifies the plan quantities of material and part to be purchased, the estimated cost and the required delivery dated.

3) Material and parts inventory budget: This budget specifies the planned levels of raw material and parts inventory in terms of quantity and cost so that inventory cost could be minimized. The difference in units between the requirements as specified in the material budget and purchase budget is shown as planned increase or decrease in this budget.

4) Cost of material and parts used budget: This budget specifies the cost of raw material being used. Budget should be prepared to show the product-wise time-wise, responsibility center-wise performance.

### **2.9.1 Objective of Material Budgets:**

Without the keeping the use of raw material there is no possible of profit planning. So the main objectives of material budget are:

- 1) To provide quantity data for purchase.
- 2) To provide quantity data to compute marginal cost per unit.
- 3) To establish effective inventory policy.
- 4) To prepare effective cash budget.
- 5) To introduce effective control system on material use.

### **2.9.2 Material and Parts Inventory Policy:**

The timing of raw material purchase will depend upon finished goods of raw material and raw material inventory policies. Management policy with respect to purchase and inventory should be specified. The two basic timing factors are, how much to purchase at one time and when to purchase of most of material.

Well-known approaches to purchase are follows:

- 1) Economic order quantity (EOQ): It determines optimum purchasing quantity.

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

## 2) Just in time (JIT)

A recent development in material and parts inventory control is called just in time purchasing and manufacturing. In this approach material and parts are not purchased until need for production, thereby minimizing inventory holding costs.

### **2.10 Direct Labour Budget**

Labour cost, in a broad sense, are composed of all expenditures incurred for employees: top executives, middle management personnel, staff officers, supervisor, foreman, skill workers, and unskilled workers. It is necessary to considered separately the different types of labour costs.

Labour cost generally is classified as direct including the wages paid to employees who work directly on specific productive output. But indirect labour cost involve personnel, storekeepers etc. the direct labour budget includes the planned labour requirement necessary to produce the types and quantities of outputs planned in the production budget should be development by responsible centers, interim periods and products wise. The responsibility for preparing the direct labor budget should be assigned to exclusive responsible for the manufacturing function. The cost accounting and personnel departments provide support and supplementary information when the direct labor budget provides support and supplementary information. When the direct labour budget is completed by the manufacturing managers it should be given to the budget manager for review and submitted to executive committee. When the direct budget is tentatively approved it becomes the part of profit plan.

#### **2.10.1 Approaches Used in Developing Direct Labour Budget:**

Generally, three approaches are used to develop the direct labour budget which are based or depended on the method of wage payment, type of production processes involved, availability of the labour times and adequencies of accounting records relating to direct labor costs. Those approaches are given below.

1) Estimate the direct labour hours required for each unit of each product; then estimates the average wage rates by departments, cost center or operation. Multiply the standard time per unit of product by the average hourly wage rate, giving the direct labour cost per unit of output for the department, cost center or operation. Multiply the units of out put planned for



the department, cost center, or operation by the unit direct labour cost rate to obtain the total direct labour cost by product.

2) Estimate ratios of direct labour cost to some measure of output that can be planned realistically.

3) Develop personnel tables by enumerating personnel requirements (including costs) for direct labour in each responsibility center.

These approaches are depends on the:

(a) Method of wage payment.

b) Types of production processes involved.

(c) Availability of standard labour times.

(d) Adequacy of the cost accounting records relating to direct labour costs.

### **2.10.2 Objectives of Direct Labour Budget:**

The objectives of direct labour budget are:

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

### **2.10.3 Components of Direct Labor Budget:**

Generally, there are three components of direct labour budget:

- Direct labour hour budget: Direct labour hour budget estimates the total direct labour hours required for each product by time and responsibility. It is computed as, total direct laour hours required=Planned production × Standard time required per unit of output.

- Manpower budget: Manpower budget estimates the number of each kind of manpower by each department and time.  $\text{Number of labours} = \frac{\text{Total labour hours required}}{\text{working hours per person per month}}$ . Working hours per person per month = Normal working hours per person per day  $\times$  working days in a month
- Direct labour cost budget: Direct labour cost budget estimates the total direct labour costs by product, time and responsibility. To get direct labour costs budget, first, estimate the average wage rates by department, cost center, or operation. Then multiplication of the standard time per unit of product by the average wage rates gives the labour cost per unit of production for the department, cost center, or operation. The multiplication of the department's, cost center's, or operation's total units by the unit labor cost rate gives the total direct labor costs for each product.

## 2.11 Manufacturing Overhead Budgets

Manufacturing overhead is the part of total production cost which can not be directly traced out with the specific product or jobs. It includes different costs with different in nature and elements, such as mainly indirect materials, indirect labours and other miscellaneous factory expenses such as taxes, insurance, depreciation, supplies utilities and repairs. So allocation of these expenses to the products generally causes problems.

The manufacturing overhead budget provides a schedule of all costs of production other than direct material and direct labour. While developing this budget, the following steps should be followed:

- i. Translate the requirements specified in the production plan into output of activity in each department.
- ii. Plan departmental overhead expenses.
- iii. Allocate the planned departmental expenses to the producing department.
- iv. Allocate the producing department expenses to the products then compute the overhead cost per unit.

Manufacturing overhead is that part of production cost not directly identifiable with specific product or jobs. Manufacturing overhead consists of (i) indirect material (ii) indirect

labour and (iii) all other miscellaneous factory expenses: such as taxes, insurance depreciation, supplies, utilities and repairs. Manufacturing overhead includes many dissimilar expenses:

Therefore it causes problems in the allocation of these costs to products. So control responsibility is often widely diffused. There are two distinct types of responsibility centers in most manufacturing companies: producing and service. Producing centers work directly on the product manufactured but service department furnish service to the producing departments and to other service departments.

The following measures of output for the two basic types of factory department are frequently used.

1) Producing departments:

- (a) Unit of output (is single output) (b) Direct labour hours
- (c) Direct machine hours (d) Direct labour cost
- (e) Raw material unit consumed (f) Process time.

2) Service departments:

- (a) Repairs and maintenance- DRH
- (b) Power department- KWH
- (c) Purchase department-Net purchase cost
- (d) General factory administrations- Total DLH or number of employee in the factory.

## **2.12 Selling and Distribution Expense Budgets**

Selling and distribution expenses include all costs related to selling and distribution and delivery of products to customers. In many companies, this cost is significant percentage of total expenses. Careful planning of such expenses affects the profit potential of the firm. The top marketing executive has the overall responsibility for developing the distribution expense budgets. The distribution expense budgets should separately identify controllable and non controllable expenses and these budgets should be detailed by interim time period.

Profit planning views sales, advertising and distribution expenses as one basic problem rather than as three separate problems because of the interrelationship between them.

Selling and distribution expenses include.

- (i) Home-office expenses.
- (ii) Field expenses.

The two primary aspect of planning distribution expenses are as follows:

- (a) Planning and co-ordination
- (b) Control of distribution expenses.

### **2.13 Administrative Expense Budget**

Administrative expenses include those expenses other than manufacturing and distribution. They are incurred in the responsibility centers that provide supervision and service to all functions of enterprise the rather than in the performance of any one function. Each administrative expense should be directly identified with responsibility center, and the center management should be responsible for planning and controlling the expenses. Most of the administrative expenses are fixed rather than variable, they can not be controlled. Budgeted administrative expenses should be based on specific plan and programs. Past experience, adjusted for anticipated change in management policy and general economic condition is helpful. Because of most administrative expenses are fixed, an analysis of historical record will often provided a sound basis for budgeting them.

### **2.14 Flexible Expenses Budget**

It is related to expenses. The budget focuses on both planning and control of expenses (or cost) in the organization. The fundamental concepts of flexible budgets for expenses is that all expenses are incurred because of

- The passes of time
- out put or production activity or
- A combination of time and out put or activity.

Flexible expenses budget is complementary to tactical profit plan. They help to provide expenses plans for the tactical profit plan and to provide expenses plans adjusted to actual output for comparison with actual expenses in periodic performance report. It is prepared for a range, rather than the single level of activity. It recognizes that revenues and variable costs differ for various activity levels, where as fixed cost do not.

Some features of flexible budget are:

- Expenses must be identified as to their fixed and variable components when related to productive activity.
- Expense must be reasonably related to output.
- Output or productive activity must be reliably measurable.
- Flexible expenses budgets for each expense must be for a specified time period and for a specified relevant range of output.
- For planning and control purposes, flexible budget formulas must be developed for each expense in each responsibility center.

#### **2.14.1 Purpose or Function of Flexible Expenses Budget:**

Concept of flexible expenses budget is complimentary to tactical profit plan. The primary purpose of flexible budge is to enhance expenses control. Other purposes or functions are as follows;

-to provide expenses plans for the tactical profit plans and

-to provide expenses plans adjusted to actual output for comparison with actual expenses in periodic performance report.

#### **2.14.2 Use of flexible Expenses Budget:**

- It is use to control expenses.
- Provide expenses goals for the managers.
- Provide budget expenses amounts adjusted to actual activity for comparison in the monthly performance report.

### 2.14.3 Steps for Preparing Flexible Budget:

-Identification of cost behavior: - for this cost segregation is done to identify whether the cost is fixed or variable.

-Selection of activity based: - there must be selection of an appropriate measure of out put for each responsibility centre.

-Defining relevant range: - we should know the appropriate relevant range.

-Selection of format: - In order to prepare flexible budget an appropriate format should be selected i.e. Table format, formula format, graphical format.

Methods of segregation of costs:

For segregation of costs there are mainly two methods;

a) High- Low point method

This method considers out put and costs at two different levels i.e. high or low point.

The differences in amount of expenses incurred at these two extreme periods are compared with the different in level of out put. This method segregates semi- variable costs by using exactly two points i.e. high and low point of costs and out put.

For formula: Variable cost per unit (vcpu) =  $\frac{\text{cost at high activity level} - \text{cost at low activity level}}{\text{High activity level} - \text{low activity level}}$

Fixed cost per period = total cost – (vcpu × activity level)

b) Least – square regression method

Regression is an equation that expresses the relationship between two variables and estimates the value of the dependent variable Y based on a selected value of the independent variable X. regression line is an equation that defines the relationship between two variables.

Regression equation is;

$$Y = a + b X$$

Y= total cost

a= total fixed cost for the period (fc)

b= variable cost per unit (vcpu)

X= any value of the independent variable that is selected.

To calculate the independent value of 'a' and 'b' the following formulas can be use.

$$Vcpu(b) = \frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$$

$$Fc(a) = Y - b \cdot x/n$$

## 2.15 Planning for Non Manufacturing Concern

There is an elementary difference between manufacturing and non manufacturing enterprise that influences the application of sales planning and material purchase planning.

A non- manufacturing enterprise (i.e., wholesale and retail) purchases and sales a number of dissimilar products that vary in major ways, such as usage, size, weight, price, style etc.( Welsch,2000:187). The term merchandise budget is used in non manufacturing companies. It usually includes planning of sales, inventory, markdowns, employees discounts, stock shortage, purchases and gross margins. The sales plan is the first merchandise budget in a merchandising company. After completion of the sales plan, three other plans must be developed.

- Inventory plan: the amount of merchandise that should be on hand at the beginning of the month (BOM).
- Purchase plan at retail price: the amount of merchandise that should be purchased each month. It also shows the ending inventory (EOM).
- Purchase at planned cost: the expenditures are required to pay for the planned purchase of merchandise.

To compute the planned purchase of retail value, the following formula is applied:  
Planned purchase (at retail value) =planned net sales + planned reductions + planned EOM stock- planned BOM stock.

Where

BOM= beginning of the month,

EOM = ending of month

## **2.16 Other Sub- Budgets are required for Completion of Profit Plan**

To compute the annual profit plan of an enterprise, the following sub budgets are required:

- Planned statement of cost of goods manufactured.
- Planned statement of cost of goods sold.
- Planned income statement.
- Planned balance sheet.

When these sub budgets are assembled with other functional budgets, the complete plan is referred to Master budget as an ending point of profit plan.

## **2.17 Brief Review of Previous Research**

For any research and study the review of literature is very important. The main purpose of the literature review is to find out what work have been done in the area of the research problem under the study and what has not been done on this fields. There are some studies made on the topic of profit planning in Nepalese manufacturing Enterprises. Most of them are studies for the partial fulfillment as required for master's degree in commerce. The research in the areas of profit planning have been made are also not in depth and in detail because of time, information and resources constraints. Some study and dissertations have been made review submitted in topic of profit planning in context of manufacturing enterprises are presented below.

**Khangendra Prasad Ojha (1995)** has conducted a research on the topic of "Profit Planning in Manufacturing Public Enterprises in Nepal", on two enterprises Royal Drugs and Herbs production and processing co. Ltd (HPPCL) had been following major finding and recommendations.

Mr. Ojha has point out various major findings in HPPCL are:



- Lack of Budgeting Experts and skilled planner, plans are formulated on traditional adhoc basis.
- Decision making and planning process delays due to lengthy bureaucratic process.
- Lack of Entrepreneurship and commercial concept in overall operation of HPPCL.
- Theoretically, production plan should be based on sales plan, but there is no proper co-ordination between sales, production and inventories.
- Inadequate evaluation of external and internal variables in HPPCL.
- HPPCL have not any effective programme to increase profitability but have a number of social objectives.
- To improve the profit planning system of this enterprises. Mr. Ojha's recommendations are:
  - HPPCL should decide and make policy about research and
  - Development on factory productivity, capacity utilization and cost control.
  - System of periodic performance report should be strictly followed.
  - Identification and evaluation of external and internal variable to know the company's strength and weaknesses.
  - A systematic process of comprehensive profit planning should be adopted.
  - Price-volume-cost relationship should be taken in to consideration while developing sales plan and pricing strategies.
  - Effective supervision, cost reduction, effective marketing policy, participation in decision making and planning process, define authorities and responsibilities among line and staff managers etc should be applied for effective operation of these enterprises.

**Keshab Bahadur K.C. (2000)** had submitted a research on the topic of "Profit Planning in Herb's production and processing company ltd., had the following major findings and recommendations.

Major findings are:

- There is lack of proper co-ordination system between the various responsible departments.
- Specific goals and objectives are not conveyed to lower level of staff, it denotes absence of MBO principle of management.
- HPPCL unable to define duties and responsibilities of theirs' employees properly.
- HPPCL do not give emphasis on pricing policy and marketing promotion strategies.
- Company was suffering from low contribution margin and high fixed costs.
- Lack of entrepreneurship in operation of HPPCL.
- Company do not identified opportunities, strength, threats and weaknesses.
- Actual sales are very low than budgeted sales.
- Lack of skilled and experience man power in budgeting section of the company due to this reason company unable to prepare systematic further plan.
- Overhead are not classified proper way in company, it creates problems to analyze its expenses properly.

The main recommendations were.

- For sales expansion company should develop effective marketing policy.
- Company should prepare material requirement, purchase budget and adequate inventory management system; company should apply EOQ approach for purchase.
- Company should operate on commercial basis, research and development program should be operated.
- Company should considered factory productivity, capacity utilization and mainly costs control, through the systematic policy.
- Cost-volume-profit relationship should be considered while developing sales and pricing strategies.
- Company should maintain optimum balance of inventory, company should reduce it's liabilities from the sales of unnecessary inventories and fixed assets.

- Information should be flow among various level of management employees and stakeholders.

Company should formulated profit planning calendar and given full authority for planning department to formulate various new plans.

**Mr. Prashant Kumar Jha (2001)**, "Application of profit planning tools to improve the profitability of Hetauda Cement Industries Limited had been following findings and recommendations.

Major findings are:

- The overall responsibility of preparing profit planning HCIL is under budgeting section.
- The goals and objectives of an industry are not clearly communicated to lower level of management.
- The industry has a lack of long range plan.
- The profit trend of industry is not satisfactory.
- There is no any plan to reduce cost. This is lack of effective cost control programmes.
- Nepalese manufacturing enterprises are unable to fulfill the national demand due to under utilization of their available capacity.
- The industry doesn't apply appropriate and effective sales forecasting.
- The industry has no any advanced programmes and policies for the development of new product.

Jha's recommendations are:

- HCIL should develop realistic strategy plan as well as tactical plan regarding sales, production, and overhead expenses plan.
- To implement the profit plans effectively, the concept of profit planning and control should clearly understood by all levels of management.

- To achieve profit or to improve the profitability, the industry should utilize its ideal capacity (which reduces cost production) by introducing new product or by expanding existing products by reaching new resources of raw materials.
- HCIL should develop its overhead expenses budget in all well classified and systematic way.

**Narayani Poudel (2003)** made research on "Relationship between Sales, Budget & Profit Planning & Control". Dabur Nepal Private Limited." had the following major finding & recommendation.

Major findings are:

- Although the company has set the sales target, it has no practice of preparing production budget. Sales budget is treated as production budget. The company is following just-in-time production policy.
- The company doesn't have practice of preparing direct labour cost budget though most of labours are engaged in producing and progressing.
- Expenses trend of DNPL is increasing year by year. The cost of materials is higher than other expenses in a year. The cost of material is more than 70% of total cost.
- The cost of DNPL is classified into fixed and variable. There is no practice of identifying semi-variable cost.
- The capacity utilization of DNPL is not satisfactory because it is operating below capacity. Average capacity utilization is 40.15% only.
- Total assets turnover ratio of the firm is satisfactory and it is in increasing order. This ratio concludes overall performances of the firm. Optimal utilization of the assets (fixed assets, current assets, total assets) automatically increasing the profitability of the firm.

Miss Poudel's research recommendations are:

- The company management should look carefully into the basis of setting target for sales and achieving those targets meaningfully. Thus, the realistic long range, medium range and short range forecast should be made.

- The company should prepare production budget. The production plan depends on availability of raw material so DNPL should consider about the raw material also.
- DNPL should prepare material purchase budget considering the final inventory of raw material and parts and initial inventory of raw materials and parts. Alternative supply sources of raw material must be developed.
- DNPL should focus on the relationship between expenditure and benefit. Expenses planning and controlling is necessary to obtain company's goals.
- Production is based on sales (demand) forecasting in the market, so the firm should not need to keep excess idle inventory.
- DNPL should make proper manpower planning.
- Capital expenditure should be planned in detail for evaluation purpose.
- Classification of an expenses item as controllable and non-controllable must be made with and specific framework of responsibility and time.
- Cost-volume profit analysis should be considered while formulating profit plan.
- To get the idea of further cash requirement and application of the firm, it should make cash budget (projected cash flow statement), the statement could be made only after the preparation of the sales budget, production budget, labour budget, raw material purchase budget, manufacturing overhead budget etc. DNPL prepares sales budget only. Therefore to know the actual cash application, the other remaining budgets should also be prepared.
- A systematic approach should be made towards comprehensive profit planning. This can contribute to increase the profitability of the company.
- Profit planning manuals should be communicated from top level to lower levels.
- Firm's present output is not the optimal level, it could increase this level but main problem of the marginal product is availability of marketed.

**Mr. Lekh Prasad Panta's (2006)** made research on "A study on revenue planning in manufacturing enterprise: A case study of Royal Drugs Limited" had the following major findings and recommendations.

- Organizational goals and policies are set up by the top executive level management board in accordance with plan and policies of the RDL.
- Short range production achievement is poor and it ranges from 21.49% to 80.62% which has high difference or gap. In average it has achievement of 42.2% which is not satisfactory for RDL the tactical production has unfavorable variance in the fiscal year 2059/60.
- RDL has fluctuating inventory in respect to sales. Its inventory turnover ratio is also in decreasing trend. It shows no specific inventory planning.
- RDL has started to plan for capital expenditure. It is good sign for managing fixed assets and controlling investment in fixed assets. It has no fund for investment in fixed assets due to heavy losses since last several years.
- RDL is being unable to utilize all its assets optimally because although sales and production decreased over the years, its current assets have not decreased.
- It has not classified all its costs into variable and fixed portion. Due to this it is impossible to monitor the costs incurred in RDL. All the cost has been classified on the basis of personal decision as manufacturing costs are variable costs and administrating costs are fixed costs.
- Cost volume profit analysis showed that at 30.57% of its capacity company will be at breakeven point at current fixed costs and average 90% of variable expense.
- Manpower planning of Royal Drugs Limited is week because its ratio of actual sales per employee is decreasing over last five year.
- It is not using all of its assets optimally. It has investment in non-productive assets because capacity utilization is very low.
- It is not monitoring all of is costs. Sales and production is decreasing whereas expenses are increasing compared to change in sales and production.
- Poor achievement of sales budget over past years has indicated that its planned sales budget is lacking continuous evaluation and monitoring.

Mr. Pant's research recommendations are:

- Royal Drugs Limited should clearly define its objectives, policies and strategies for achievement of its long term plan and policies.
- Royal Drugs Limited should follow a comprehensive budgeting taking all the functional budgets in accordance with plan and policies.
- Cash flow analysis should be made so that contribution of different operating, financing and investing activity can be analyzed and evaluated.
- Current assets and current liability should be managed well to improve in poor liquidity condition.
- Governmental intervention should be controlled for the smooth and continuous operation of Royal Drugs Limited.
- It should look for another option for utilizing available large idle space as alternative source of revenue.

**Harihar Pokharel (2008)** had submitted the research on the topic of “Revenue Planning and Management of DABOUR NEPAL PVT.LTD”, had been following findings and recommendations.

- DNPL used to prepare short term budget only.
- The revenue trend showed that the actual sales were in fluctuation but the
- Budgeted sales were increased in each fiscal year.
- DNPL sales forecast depends on export demand & sales trend.
- DNPL could achieve its target sales the sales achievement ranges from 74.73% to 89.15% during F/Y 2000/01 to F/Y 2005/06.
- Mean standard deviation of sales achievement was lower than budgeted sales but there was putative correlation between budgeted & actual sales.
- The actual sales of company decreased with decrease in export sales.
- The sales of Real Fruit Juice were increasing trend. It contributes 17.94% at beginning period of study & 49.34% in final year.

- DNPL did not prepare production budget as represent. The company assumed budgeted sales it's self is the production budget.
- Domestic sales of company were increasing trend. Domestic sales contribute only 6.24% in 2000/01 & it increase to 19.72 in 2005/06.

The recommendations were

- DNPL sales forecast should be made on realistic ground. Forecast should includes strategic & tactical forecast that are consistent with the time clemencies. The process of developing a realistic sales plan should unique according to requirement of the company.
- DNPL should be consider certain management technical & financial issues organization, participation of employees, coordination with in organization, participation of employees. They can be accountable for their authorities & responsibilities rather than blame to each other.
- The budgeted sales should be prepared by analyzing the past achievement & considering demand determinates such as size of customers, market regiments etc. budget must be prepared by product, time & in total.
- The company should prepare separate production budget. Production plan depends on sales so market strategic should be improved.
- DNPL should be increasing its nursery in different part of country which can fulfill its raw material requirement & helpful to reduced its variable cost.
- The cost classification system of DNPL is not reliable. Cost is classification into fixed & variable. There is no practice of identifying semi variable cost.
- DNPL should try to scheme borrowing which helps to scheme the cost of interest & financial charges.
- Finally a systematic approach should be made towards effective implementation of planning of DNPL contributed more than 805 by export sales.



### **2.18 Research Gap:**

Most of the researchers had conducted their research work on comprehensive profit planning & control of various Public & Private Organizations. This study is based on profit planning system of J.Bs' industry which was born as a private limited industry. There is no research found of this of this type of industry before. Therefore it is new area of research in the context of Nepalese manufacturing industry.

## **CHAPTER 3**

### **Research Methodology**

#### **Introduction**

The main purpose of this chapter is to discuss the research methodology such as research design, population and sample. Data collection technique and analytical tools of the research study. It is widely accepted that research is simply the process of arriving at dependable solution to problem through the planned and systematic collection, analysis and interpretation of data. It is important tools for advancement of knowledge and accomplishment of purpose, thus research methodology is a way to systematically solve the research problem. It may be understood as science of studying how research is done scientifically. Research methodology, as a vital part of research study, describes the various sequential steps to be adopted by researcher in studying research problem along with the logical behind them.

#### **3.1 Research Design**

This study is a case study in nature. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. Recommendation is another important aspect of design strategy. The research design allows the researchers to take an appropriate measure and direction towards the predetermined goals and objectives. A research design is the arrangement of conditions for the collection and analysis of data in a manner to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy of investigation imagines obtaining answers to research questions and controlling various things. This study is an examination and evaluation of budget process in profit planning program of J.Bs industry. Various functional budgets and other related accounting information's and statement of J.Bs industry are to analyze and evaluate the profit planning system of the J.Bs industry. Descriptive as well as analytical research designs have been adopted in this research. This is a case study research.

## 3.2 Period Covered

The present research work covered a time period of 5 fiscal years 2064 to 2068. The data and information were taken from J.BS'. Industries limited and analysis was basically made on the basis of last five fiscal years data.

## 3.3 Nature of data Collection

The secondary sources of data were used but the primary data also were used in it. The secondary data were taken from the published documents, profiles, books, annual anniversaries books which are available from the account section, administrative section, planning section, store and purchase section of J.Bs' Industries limited. The primary data were collected through the individual talks with the executive, accountant and responsible staff of J.Bs'.

## 3.4 Tools used for Data Analysis

The different nature of data and information were collected from various sources and their analysis was presented in proper table and formats, such as tables, graphs and diagram. For the data analysis, the financial as well as statistical tools such as flexible budget, variance analysis, mean, correlation, regression, standard deviation, co-efficient of variation, etc were used.

We have analyzed the data by using various statistical, Mathematical and financial tools in this study.

### 3.4.1 Statistical and Mathematical tools:

We have analyzed the data by using following statistical and mathematical tools.

- Mean
- Standard Deviation
- Correlation of coefficient
- Regression analysis

**Arithmetic Mean Average:** The central values that represent the characteristics of the whole distribution or the values around which all items of the distribution tend to concentrate are

called average. Arithmetic mean or arithmetic average is one of the important statistical measures of average. The arithmetic mean of a given set of observation is their sum divided by the number of observation.

**Correlation of coefficient:** Correlation analysis is a statistical tool. It is used to find the relationship between variables. If two quantities vary in such a way that movement in one are accompanied by movements in the other these quantities are correlated. It shows the effect on other variable due to the change in one variable. The degree of relationship between the variables under consideration is measured through the correlation analysis. Thus correlation is statistical device, which helps us in analysis the co-variation of two or more variables. Karl Pearson's Coefficient of correlation is widely used in practice. The Pearson's coefficient of correlation is widely used in practice. The Person's Coefficient of correlation is denoted by the symbol "r". The formula for computing Person's "r" is:

$$r = \frac{\sum xy}{\sqrt{x^2} \sqrt{y^2}}$$

Where,

r= the correlation coefficient

x=  $X - \bar{X}$

y=  $Y - \bar{Y}$

X= Independent variable

Y= Dependent variable

Following general rules are applied to interpret the coefficient of correlation:

When  $r = +1$ , it means there is a perfect positive relationship between the variables.

When  $r = -1$ , it means there is a perfect negative relationship between the variables.

When  $r = 0$ , it means that there is no relationship between the variables i.e. the variable are uncorrelated.

**Regression Analysis:** Regression is the statistical tool which is used to determine the statistical relationship between two or more variables and to make estimation of one variable on the basis other variables in other words regression is that statistical tool with the help of which the unknown value of one variable can be estimated on the basis of known value of the other variable.

**Standard Deviation (†):** The standard deviation is the absolute measure of dispersion. It is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. The greater the amount of dispersion or variability, the greater the standard deviation, the greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series and a large standard deviation means just the opposite.

#### **3.4.2 Financial tools:**

Flexible budget has been used in this study as financial analytical tools.

### **3.5 Research Variables**

The research variable of this study are sales, production, purchase & inventory, manpower, cash flow statement, balance sheet, income statement, capital expenditure, etc relating to long term periods from the fiscal year 2064 to 2068 & short term period of the fiscal year 2068.

### **3.6 Population and sample**

This research aims to studying the profit planning aspect of commercial industry taking the case study of a single J.Bs industry, and data have been analyzed for five years. So the five years data have been taken as sample for this case study.

## CHAPTER 4

### Data Presentation and Analysis

#### 4.1 Long Term Sales Plan of J.Bs' Industry

Sale planning is the starting point in the development of comprehensive profit planning and control. Sales plan is the foundation for periodic planning in every firm. Every enterprise intends to maximize its sales because sales are the primary source of cash receipts.

J.Bs' industry has not realistic sales plan. The firm has no practice of preparing long-term sales plan. Sales plan preparation is not easy because it is normally affected by political, social, legal & economical factors.

The sales targets and achievements of the last 5 fiscal years of J.Bs' are as follows:

**Table no.1**

#### J.Bs' Industry

#### Long Term Sales Plan

#### Sales target and achievements

(Installed capacity Rs. 4, 00, 00,000)

Fiscal year	Sales target		Sales achieved		% Achieved of target
	In Rs.	%	In Rs.	%	
2064	1,80,00,000	45	1,08,53,575	27.13	60.30 %
2065	2,00,00,000	50	1,27,52,170	31.88	63.76 %
2066	2,25,00,000	56.25	1,57,93,132	39.48	70.19 %
2067	2,50,00,000	62.5	1,89,67,602	47.41	75.87 %
2068	2,50,00,000	62.5	1,68,45,022	42.11	67.38 %

**Source: J.Bs' Industry**

The above table indicates that there is a huge gap between sales targets and actual sales achievements. The percentage of sales achievement fluctuated from year to year, which reflected the short coming of management in J.Bs'.

In the fiscal year 2067 the sales targeted was Rs. 2,50,00,000 (i.e. 62.5%) of installed capacity but actual sales achievement gone up to 75.87% of the sales target which was a recorded remarkable results of sales achievement. A lowest sale achievement was in the FY 2064 was 60.30 of sales target. The percentage of sales achievement in the FY 2068 in comparison to the FY 2067 decreased by 8.49 %.

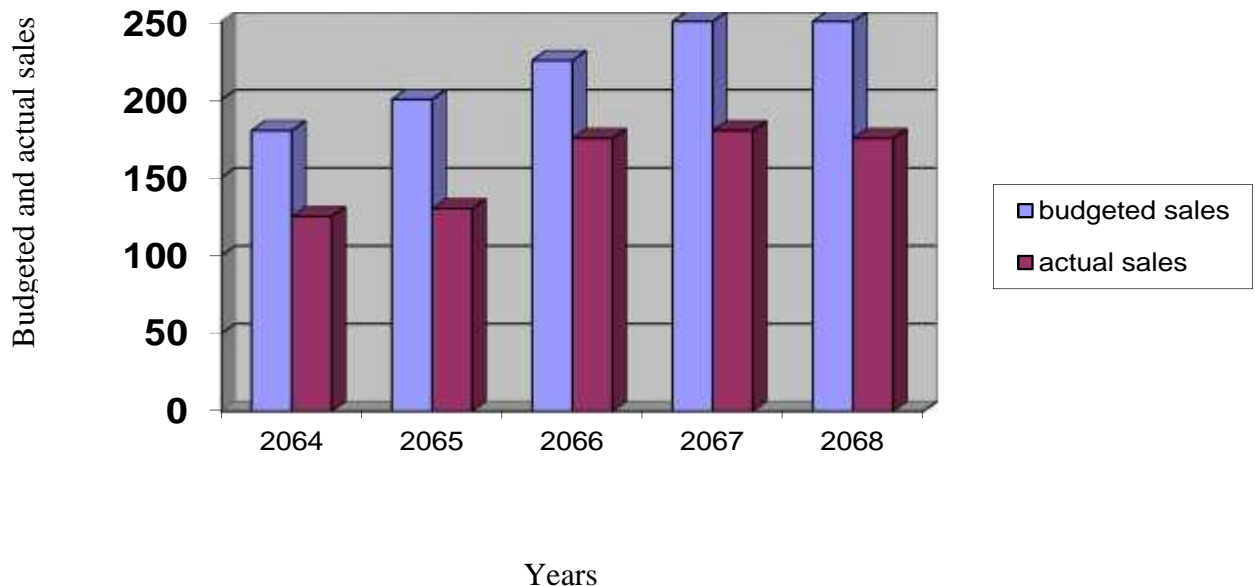
The deviation between sales target and actual sales achievements was the evidence or deficiency of experts & skilled planners. Sales targets were set in high expectation in J.Bs' Ltd. These were not determined on the basis of historical data of the previous year's sales performance.

The sales targets and actual achievements can also be effectively presented with the help of following diagram.

**Multiple Bar diagram no.1**

**J.Bs'Industry**

**Budgeted sales and Actual sales**



The above diagram shows that there is a gap between budgeted sales and actual sales achievement. Actual sales achievement declined in the FY 2068 in comparison with the FY 2067.

In order to find out the nature of variability of sales target (budget) and actual sales achievement of different years, the arithmetic mean, standard deviation, co-efficient of variation, correlation co-efficient between budgeted sales and actual sales achievement were calculated. The detailed calculation of these statistical measures is shown in Appendix – I

**Now summarizing the results from Appendix – I, We have:**

<b>Statistical tools</b>	<b>Sales budget in Rs. (lakh) 'x'</b>	<b>Sales achievement In Rs. (lakh) 'y'</b>
Mean	221	150.42
Standard deviation	27.64055	29.0116
Co-efficient of variation (c.v.)	12.51 %	19.29 %
<b>Correlation co-efficient (r) = 0.9714</b>		

The above table states that the actual sales were in fluctuating trend. The co-efficient of variation of actual sales as shown in the table was greater than the budgeted sales. So the actual sales were more variable or less stable.

The value of co-efficient of correlation (r) is 0.9714 which shows that there is highly positive correction between budgeted sales and actual sales.

A regression line can also be fitted to show the degree of relationship between the budgeted sales and actual sales and to forecast the achievement with the given targets. For this purpose actual achievement was assumed to depend upon dependent variable i.e., sales targets.

Here, the regression line of achievement y on target X or Yon X is as follows:



Statistical tools	Targeted sales 'x' (Rs. In lakh)	Actual sales 'y' (Rs in laks)
Mean	221	150.42
Standard Deviation (s.d)	27.64055	29.0116
<b>Co-efficient of correlation (r) = 0.9714</b>		

Now the regression line y on x

$$y - \bar{y} = r \frac{s.dY}{s.dX} (x - \bar{x})$$

Substituting the values from the above table,

**We have**

$$y - 150.42 = 0.9714 \times \frac{29.0116}{27.64055} (X - 221)$$

$$\text{Or, } y - 150.42 = 1.0196 (x-221)$$

$$\text{Or, } y = 1.0196x - 74.9116$$

This regression line ascertains the expected sales achievement with the given value of target sales (x) from this equation the actual sales 'y' can be calculated by assigning 'x' to the budgeted sales .

Another statistical tool called least square method can also be used to analyze the trend of actual sales and to estimate the possible future sales for a given time (years). Time element is an important factor to analyze the trend. So, with the passes of time, actual sales will be changed.

To fit the straight line trend, the time factor is considered as independent variables (x) and actual sales achievement (y) is assumed as dependent upon time (years).

The straight line trend by the least square method for actual sales upon time is expressed by.

$$y = a+bx$$

Where,

Y = actual sales achievement

X = years or time factor

Calculation of straight line trend by least square method is as follows:

**Table No. 2**

**Fitting straight line trend by least squares method.**

(Rs. In lakh)

<u>Fiscal years(x)</u>	<u>actual sales (y)</u>	<u>X(x-2061)</u>	<u>X<sup>2</sup></u>	<u>XY</u>
2064	108.5	-2	4	-217
2065	127.5	-1	1	-127.5
2066	157.9	0	0	0
2067	189.7	1	1	189.7
2068	168.5	2	4	337
	y = 752.1	x = 0	x <sup>2</sup> = 10	XY = 182.2

Now straight-line trend  $y_c = a + bX$

$$\text{Where } a = \frac{\sum y}{n} = \frac{752.1}{5} = 150.42 \text{ lakh.}$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{182.2}{10} = 18.22 \text{ lakh. } Y_c = a + bx \therefore Y_c = 150.42 + 18.22X$$

From this equation the actual sales for the FY 2068 can be estimated.

$$\text{Where } x = 2068 - 2061 = 7$$

Sales in 2068

$$Y_c = 150.42 + 18.22 \times 7$$

$$= 277.96 \text{ lakh.}$$

If the past sales trend doesn't change the possible future actual sales will be in increasing trend.

There was high positive correlation between actual & budgeted sales. There was no consistency in both sales targets and achievement and there is also large gap between them. The actual sales are less stable than the budgeted sales.

#### 4.2 Production Plan of J.Bs' Industry:

Production budget is the second step in the development of the profit planning and control. Production budget is based on the capacity of plant and sales budget.

Production budget can be presented numerically as under:

Production in (Rs.) = sales + closing stock of finished goods – opening stock of finished goods.

The production plan is based upon sales plan and inventory policy of the enterprise. The production division of J.Bs' Industry fully responsible for developing production plan.

The following table states the budgeted or planned production and actual production achievement from the FY 2064 to 2068.

**Table No. 3**

#### J.Bs' Industry

#### Production budget

#### Production target and achievement

(Installed capacity Rs. 4, 00, 00,000)

Fiscal year	Budgeted production		Actual production		% achievement of target
	Rs.	%	Rs.	%	

2064	1,80,00,000	45	1,35,48,774	33	75
2065	2,00,00,000	50	1,26,17,850	31	63
2066	2,25,00,000	56.25	1,77,19,587	44	78.8
2067	2,50,00,000	62.5	2,05,38,977	51	82.15
2068	2,50,00,000	62.5	1,82,15,782	45	73

**Source: J.Bs' Industry**

The above table states that there is a wide gap between production target and actual production achievement. The highest budgeted production was Rs. 2,50,00,000 (i.e., 75% of instated capacity) and lowest production target in the FY 2064 was Rs. 1,80,00,000 (i.e., 45% of installed capacity). It can be said that production target and achievement were not satisfactory.

The actual productions were below the target which gave an evidence of inefficient management of J.Bs'.

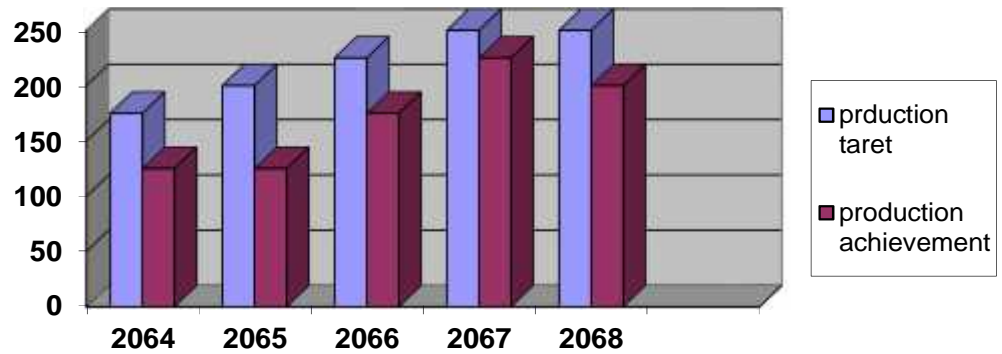
The production plan can be presented in the following bar diagram.

**Multiple bar diagram No. 2**

**J.Bs' Industry**

**Production target & Actual Production Achievement.**

Production target and achievement



Years

The above bar diagram indicates that actual production was greater in the FY 2067. There is a lack of consistency in actual production achievement.

To find out the variability of budgeted production and actual production of J.Bs' Industry, calculation of, mean, standard deviation, co-efficient of variation and correlation co-efficient.

Detailed calculations were presented in Appendix II.

### Summarizing the results from Appendix II

Statistical tools	Budgeted production (x) (Rs.In lakh)	Actual production (y) (Rs. In lakh)
Mean	24	165.29
Standard deviation	27.6405	29.82
CO-efficient of Variation (C.V.)	12.51 %	18 %

Correlation co-efficient between x & y = 0.91

The mean of budgeted production was high and standard deviation of actual production was also high. Co-efficient of variation of budgeted production was less than actual production. So the actual production was more variable or less stable than the

budgeted production. There was highly positive correlation (relationship) between budgeted production & actual production.

The following table presents the actual sales and actual production of the previous five years of the industry.

**Table No. 4**

**J.Bs' Industry**

**Actual Sales and Actual Production (Rs. In lakh)**

Fiscal year	actual sales	actual production	% of actual sales on actual production
2064	1,08,53,575	1,35,48,774	80.12
2065	1,27,52,170	1,26,17,850	101.06
2066	1,57,93,132	1,77,19,587	89.13
2067	1,89,67,602	2,05,38,977	93.35
2068	1,68,45,022	1,82,15,782	92.47

**Source: J.Bs' Industry**

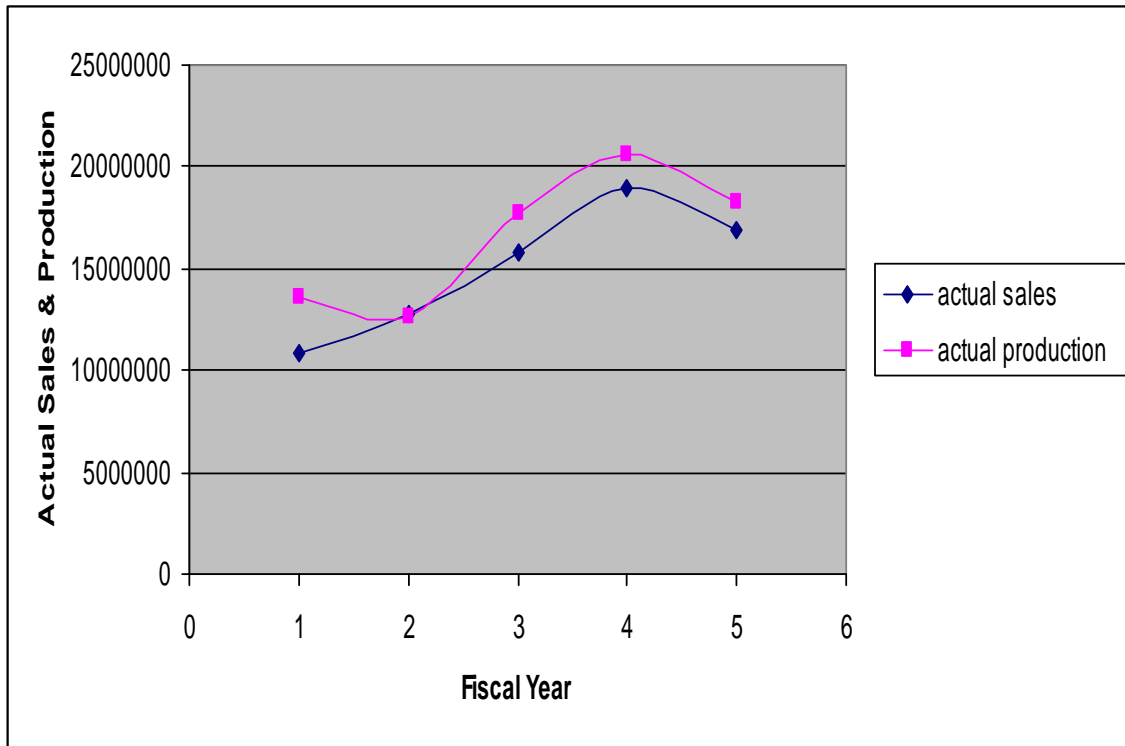
The above table indicates that there was no significant deviation between the actual sales and actual production. This shows that the industry produces goods nearer to the last year sales. In the FY 2064 sales & production were low as compared to other fiscal years.

The data of actual sales and actual production were presented in the following graph:

**Line graph No. 1**

**J.Bs' Industry**

**Actual Sales and Actual production (in Rs.)**



The above graphical presentation shows that there was no more difference between actual sales and actual production.

In order to find out the nature of variability, correlation & other statistical measures between actual sales and actual production, the arithmetic mean, standard deviation, coefficient of variation, correlation co-efficient between actual sales and actual production of J.Bs' were calculated.

The detailed calculations of these statistical measures are shown in Appendix III.

Now summarizing the results from

**Appendix III**

Statistical tools	Actual sales Rs. in lakh (x)	Actual production Rs. In lakh (y)
Mean	150.42	165.29
Standard deviation	29.01	29.82
Co-efficient of variation (c.v.)	19.28 %	18.04 %
Correction co-efficient (r) = 0.95		

The mean and standard deviation of actual production were high. Co-efficient of variation of actual sales was more than the actual production. So, actual production was more stable than the actual sales. Correlation co-efficient between actual sales and actual production was positive represented by 0.95 which showed that there was perfect positive correlation between actual sales and actual production.

The following points can be noted regarding production plan.

- i) J.Bs' industry didn't prepare the long term production budget.
- ii) The actual production was more variable or less stable than the budgeted production.
- iii) Mean of budgeted production was higher than the actual production and standard deviation of actual production was greater.
- iv) Actual sale of goods was more variable than actual production of goods.
- v) There was perfect correlation co-efficient between actual sales and actual production.



### 4.3 Material Purchase Budget And Inventory Policy

A manufacturing company cannot produce goods without materials. So raw material is the basic element of production. Material required budget deals with quantities of direct material required for planned production. Similarly material purchase budget is prepared by considering the requirements of raw materials, closing and opening stock of raw materials and cost of raw material.

J.Bs' Industry uses the different types of raw materials in production of goods.

Main raw materials used by J.Bs' Industry are as follows:

Orange, lemon, tomato, potato, chilly, sugar, salt, acetic acid, chemicals, mango, cabbage, hing, pineapple, carrot, radish, ginger, soybean, spice, oil, starch powder, electricity power, kerosene, water, etc.

Sub-raw materials or packaging raw materials are as follows.

Bottle and jar, carton, can bottle, label, bottle cap etc.

Most of the raw materials are purchased from local market and some of them are imported from India and other country.

The following table shows the opening stock, purchase, consumption and closing stock of raw materials in five years.

**Table No. 5**

#### **J.Bs' Industry**

#### **Opening Stock, Purchase, Consumption & Closing Stock of Raw Materials.**

Fiscal years	op. stock (in Rs.)	Purchase (in Rs.)	Consumption (in Rs.)	closing stock (in Rs.)
2064	11,11,504	70,80,214	68,66,513	13,25,205
2065	13,25,205	65,60,623	63,65,220	15,20,608
2066	15,20,608	85,96,374	79,21,723	21,95,259

2067	21,95,259	95,90,623	94,84,000	23,01,882
2068	23,01,882	80,82,593	80,58,514	23,25,961

**Source: J.Bs' Industry**

The above table shows that total material purchase cost in the FY 2067 was high as compared with the other years and actual production volume in the FY 2067 was also high.

Consumption of raw material in the FY 2067 was also high, as compared in other years but consumption of raw material was low as availability of raw material, so there was increasing trend in closing stock of raw materials. It seemed that due to the poor political condition of the nation the industry is adopted increasing inventory.

Sub raw materials (or packaging raw materials) of the industry are bottle & jar, carton, plastic cap, label, can bottle etc.

The following table shows the opening stock of sub raw material, purchase of sub raw material, consumption of sub raw material and closing stock of sub raw material.

**Table No. 6**

**J.Bs' Industry**

Opening stock, purchase, consumption & closing stock of sub raw material.

Fiscal years	Opening. Stock (in Rs.)	Purchase (in Rs.)	Consumption (in Rs.)	Closing stock (in Rs.)
2064	14,64,201	32,88,133	34,03,640.96	13,48,693
2065	13,48,693	36,44,372	31,70,879	18,22,186
2066	18,22,186	47,51,751.99	38,44,716.03	27,29,221.96
2067	22,29,221.96	48,53,725.4	45,61,397	30,24,550.36
2068	30,24,550.36	45,46,645	43,63,312	32,07,883.36

**Source: J.Bs' Industry**

The above table also indicates that closing stock of raw material was in increasing trend. In the FY 2067 purchase and consumption of sub raw material were higher than the other fiscal years because of high production.

Thus it can be said that J.Bs' has no adequate and appropriate policy regarding inventory of raw materials and sub raw materials. But in practice, the industry holds inventory of raw materials only for one or one and half months but sub raw materials for 6 months. Due to the unstable political condition of nation, industry is adopting aggressive inventory policy so that no hamper will occur in terms of production.

To conclude with regard to the purchase characteristics and inventory problems of J.Bs' industry, the following points can be noted:

- i) Lack of systematic policy regarding inventory & purchase of raw materials.
- ii) Following aspects were not considered by the industry in establishing inventory policies for materials :
  - a) Opportunity costs.
  - b) Availability of raw materials
  - c) Protection against shortages.
  - d) Risk involved in inventories.
  - e) Timing and quality of manufacturing needs.
  - f) Economies in purchasing through quantity discounts.

Therefore, to determine the realistic inventory level, management policy with respect to material and inventory must be specified.

#### **4.4 Man Power Planning of J.Bs'. Industry**

Man power planning is an important aspect of profit planning. It is the required to determine the desire manpower of the firm. Manpower planning process includes

- (i) Ascertain personal needs
- (ii) Recruitment
- (iii) Selection

- (iv) Job description and evaluation
- (v) Training
- (vi) Fixation of wages and salary
- (vii) Motivational activities, etc.

Proper manpower planning provides right number of persons in right place and right time from which organization can get benefit.

For the annual profit plan, the direct labour budget should be developed by interim time period, responsibilities, and product. Such budget includes planned labor requirements to produce necessary quantities. Though, well manpower planning is wealth of organization, most of the public enterprise of Nepal does not give priority for manpower planning. In the context of Nepal, most of the organizations are facing overstaffing problems because of the government interference, rather than needed of the firm. In J.Bs' industries limited, there was no practice of developing direct labour budget. Required manpower is appointing as a permanent basis and sometime the industry hires daily wage workers as per need. Fixed monthly salary is paid to the employees and daily wage to temporary workers.

The following table presents the no of employees at the different level of J.Bs' Industry

**Table No. 7.**

**J.Bs' Industry**  
**Man power plan for 2068**

S.No	Level	Technical	Non Technical	Total
1.	General manager	-	1	1
2.	Officers and assistant	10	6	16
3.	Workers	70	10	60
	Total	80	17	103

**Source: J.Bs' Industry**

The above table shows that there were 80 technical & 23 Non technical employees. Technical employees were more than non technical employees. Except the permanent nature employees, industry hired many hourly basis workers from local area as per the production requirement, which was not included in the above table.

#### **4.5 Cash Budget of J.Bs' Industry**

Cash budget contains detailed estimates of cash receipts (cash inflows), cash out flows (disbursements) and ending position for the budget period. Cash planning is an effective way to plan and control the cash flows. It brings equilibrium between available cash and cash demanding activities-operations, capital expenditures and so on. Therefore, cash budgeting is extremely important since business operations require adequate cash to acquire materials and meet various expenses and loan obligations.

J.Bs' Industry has not adopted any systematic procedure to develop cash budget. It didn't prepare cash budget. But the major sources of cash in flows of the industry are sales of its proudest (i.e. pickles, sauces, Jams, slices etc.), cash collection from debtors, and revenue from SEAM -AN project etc. Similarly, the major cash out flows are purchase of fixed assets (investment), distribution, Administration and interest.

To provide the information about the beginning & ending cash & Bank balance, J.Bs' Industry cash flow statement is presented. The following table shows the cash & bank balance of the industry for the FY 2068.

**Table No: - 8**

**J.Bs' Industry**  
**Cash flow statement for the year**  
**Ended Ashad 2068**

Particulars	Amount (Rs)	Amount (s)
A. Cash from operating activities		
(i) Cash collection from sales & debtors :-		
Sales Revenue	1,6845,022	
received from SEAM-AN project	8,39,426	
decrease in debtor (26,63,364-17,13,096)	9,50,268	
(i)		1,86,34,716
(ii) payment made on purchase & supplier :-		
Cost of goods sold.	1,34,76,418	
Increase in stock (99,92,633-36,21,873)	13,70,760	
Increase in creditors	(13,27,514)	
(ii)		1,35,19,665
(iii) payment made for operating expenses :-		
Distribution expenses	2,520	
administration expenses	27,75,981	
Interest	75,143	
Decrease in prepaid expenses (2,64,356-2,15,374)	(48,982)	

(iii)		28,04,662
(iv) Tax expenses (17,798+2,01,882-90,569)	1,29,111	
(iv)		1,29,111
A. Cash flow from operating activities		<b>21,81,272</b>
(i-ii-iii-iv)		
B. Cash out flow from investing activities		
Purchase of fixed assets	(27,82,013)	
(39,99,193+5,57194-17,74,374)		
		<b>(27,82,013)</b>
B. Cash from investing activities		
C. Cash from financing activities		
	21,50,000	
Increase in short-term borrowing	(16,23,481)	
Paid long term loan		
		<b>5,26,519</b>
C. cash flow from financing activities		<b>(74,216)</b>
Net changes in cash (A+B+C)		
(21,81,271-27,82,012+5,26,519)		
Add. Opening cash balance		<b>1,53,314</b>
<b>Cash at end</b>		<b>79,098</b>

(Source: J.Bs' Industry)

The above table shows that the cash flow from operating activities was Rs. 2181271. 97. If Industry can improve its inventory system, it can increase its cash flow from operation. Cash flow from investing activities included the purchase of fixed assets. Cash flow from financing activities consisted of short term loan taken & long term loan paid.

A change in cash was negative but there was adequate cash in the beginning so closing cash because was positive. It indicates profit in future, if the present situation remains the same in the future. But there was negative net cash flow during the year (i.e. Changes in cash), so J.Bs'L needed to adopt effective cash planning and control system for improving its current cash flow position. The borrowing of J.Bs' Industry was also in increasing trend.

#### **4.6 Capital Budget of J.Bs' Industry**

The investment plan of the firm is commonly known as capital Budgeting or capital expenditure plan. A capital expenditure deals generally with a huge amount of money to be invested. Capital expenditure includes fixed or long term assets such as plant and machinery, land and building, furniture and equipment and major renovations etc. The investment decisions would generally involve expansion, acquisition, modernization and replacement of the long term assets. Capital expenditure plan is used to ascend future profit and to deduce future costs.

In J.Bs' Industry there is no particular planning of capital budgeting. Planning section officers don't use any capital budgeting techniques like NPV, IRR, PBP, etc. while purchasing fixed assets.

The following table shows the picture of capital expenditures of the industry.

Purchase of fixed assets =Closing balance of fixed assets + depreciation – opening balance of fixed assets.



Year	Purchase (Rs.)
2064	$10,26,450 + 1,56,659 - 10,45,568 = \text{Rs. } 1,37,541$
2065	$8,96,814 + 1,45,637 - 10,26,450 = \text{Rs. } 16,001$
2066	$9,39,610 + 1,22,532 - 8,96,814 = \text{Rs. } 1,65,328$
2067	$17,74,374 + 1,29,146 - 9,39,610 = \text{Rs. } 9,63,910$
2068	$39,99,193 + 5,57,194 - 17,74,374 = \text{Rs. } \underline{27,82,013}$
<b>Total</b>	<b>4064793</b>

*Source: J.Bs' Industry*

The table states that J.Bs' Industry invested Rs. 137541 in the FY 2064 but Rs. 278213 in the FY 2068. But lowest investment was Rs. 16001 in the FY 059-060. In the FY 2068 to produce a new product industry has spend huge amount in fixed assets.

#### **4.7 Flexible Budget**

Flexible budget is a budget which is designed to change in accordance with the level of activity actually attained. Thus, flexible budget has different budgeted cost for the different level of activity. So, the ascertainment of the costs at different levels of activity is the main objective of flexible budget. Therefore, flexible budget is a useful tool for cost control, performance reporting & variance analysis.

J.Bs' Industry does not prepare flexible budget. The flexible budget is necessary for J.Bs' Industry because most of its products are seasonable, and changeable.

To prepare flexible budget by J.Bs' the following points are to be considered.

- i) Sales price per unit assumed to remain in the same ratio as it was in the FY 2068.
- ii) Variable cost volume ratio of 0.80 remains constant
- iii) Total fixed cost of Rs.20,64,386 will also remain constant.
- iv) Flexible budget of J.Bs' is prepared from 25 % to 100% capacity utilization.

**Table No. 9**

**J.Bs' Industry**  
**Flexible budget**  
**For the year 2068**  
**(Full capacity Rs. 4,00,00,000)**

Particulars	Levels of activity in %								
	25%	30%	40%	50%	60%	70%	80%	90%	100%
Sales revenue (A)	1,00,00,000	1,20,00,000	1,60,00,000	2,00,00,000	2,60,00,000	2,80,00,000	3,20,00,000	3,60,00,000	4,00,00,000
B. variable cost (80% of sales)	80,00,000	96,00,000	1,28,00,000	1,60,00,000	2,08,00,000	2,24,00,000	2,56,00,000	2,88,00,000	3,20,00,000
Contribution margin A-B=C	20,00,000	24,00,000	32,00,000	40,00,000	52,00,000	56,00,000	64,00,000	72,00,000	80,00,000
D fixed costs	20,64,386	20,64,386	20,64,386	20,64,386	20,64,386	20,64,386	20,64,386	20,64,386	20,64,386
Net profit (loss) (C-D)	(64,386)	3,35,614	11,35,614	19,35,614	31,35,614	35,35,614	43,34,614	51,35,614	59,35,614

**Source:J.Bs' Industry**

The table indicates that when J.Bs' operates at 30% or more than 30% capacity utilization, there will be profit. The cause of negative figure of profit (i.e. loss) is low capacity utilization, Low productivity of plant and manpower and high fixed cost (i.e. high administrative & depreciation expenses etc.). It also indicates that if industry increases its capacity, profit will be increase.

### **Findings:**

The above analysis of various budgets, accounting and financial data and actual results displayed the medium financial picture of J.Bs' Industry limited. But industry has been suffering from number of problems in formulating and implementing profit plan. J.Bs' Industry has not given priority using financial & statistical tools to evaluate performance of the industry. The industry was not running from losses but margin of profit was very low.

Major findings of research work can be presented below.

1. The industry did not use long-range profit planning.
2. There was deviation between budgeted & actual sales, budgeted production and actual production. Actual sales and production was very low than the budgeted sales and production.
3. The industry has high administrative cost i.e., 69.24% of total fixed cost.
4. The industry has no effective inventory policy. The inventory management, raw materials handling and controlling system were not systematic.
5. There was no coordination among purchasing department, production & sales department.
6. Production plan of J.Bs' depend upon the availability of crops. (i.e, tomato, chilly, papaya, etc.) These crops are seasonable, so industry cannot produce goods after season because it has not big cold house to stock these crops.
7. The industry has not detailed and systematic expenses plan. Overhead expenses plan is the necessary element of profit planning and control.
8. The industry does not follow the evaluation criteria (like PBP, ARR, NPV and IRR) to evaluate major capital expenditure.
9. There is no systematic and effective cost control mechanism to reduce cost.

10. Sales forecasting is not based on realistic ground. J.Bs' IL has not practice of using statistical techniques in sales fore casting.
11. The J.Bs' Industry has not practice of systematic and scientific tools used. Sales forecasting is based in the personal judgment of top level staffs.
12. The profit trend of the industry is not satisfactory as compared to sales, profit is very low.
13. Only the top level executives are involved in planning and decision making but lower level participants are not encouraged.
14. The industry has not practice of cash flow statement.
15. Industry does not give attention for making proper marketing strategy in the today's age of competition.
16. Budgeted profit and loss account and balance sheet is not developed, only actual report is prepared at the end of each fiscal year.
17. Most of the ratios analysis is not considered in J.Bs' while planning a profit.
18. J.Bs' has not practice of direct labour budget. There is not proper reward & punishment system in the industry.
19. In the industry, there is no proper cost classification system; there is no practice of preparing flexible budget to analyze its performance.
20. Industry has not used SHOT analysis System.
21. It seems only purchase of fixed assets but there is not mentioned detailed about it.

## CHAPTER 5

### Summary, Conclusions and Recommendation

#### 5.1 Summary

J.Bs' Industry was established in 2047 B.S. It is a fruits and vegetable processing industry. It manufactures "Sagarmatha" branded fruit and vegetable products like orange squash, lemon squash, tomato ketchup, chilly squash, jam, pickles, canned fruit juice, soybean sauce, vinegar, etc. All products are nutritious, delicious and better priced. All the products and process are manufacture and processed by using sophisticated equipments and machineries under clean and hygienic environment. However found to be suffering numbers of problems since its establishment.

Profit planning is one of the more importance approaches which have been developed to facilities effective performance of management process.

Success of any organization depends upon the effective profit planning & controlling because profit planning and controlling is an important management tools. That why present study tried to seek and analysis the answer of extent that profit planning process is being followed by the J.Bs'.

This study covers the period of five year FY 2064 to 2068. Most of the data is taken from 5 years analysis & some are from FY 2068 only. Mainly secondary data are used for this study, besides the performance has also been supplemented from the interview with the related persons of J.Bs'. These data have been analyzed with the various accounting and statistical tools.

The study has been organized in five main chapters consisting introduction, review of literature, research methodology, data presentation and analysis, summary, conclusion and recommendation. In introduction there is presented introduction of J.Bs'. Industries limited, objective of the study etc, in review of literature chapter there is description of terms related with profit planning and control, in the research methodology chapter there is presented methodology terms, available data & financial statements are analyzed with the help of various budgets, accounting, & statistical tools in data presentation & analysis chapter, in last chapter

there is summary, conclusion & recommendation of the study. The related literatures that are viewed during the study are the reports, books, profiles, etc.

In the fiscal year 2067 the sales targeted was Rs. 2,50,00,000 (i.e. 62.5%) of installed capacity but actual sales achievement gone up to 75.87% of the sales target which was a recorded remarkable results of sales achievement. A lowest sale achievement was in the FY 2064 was 60.30 of sales target. The percentage of sales achievement in the FY 2068 in comparison to the FY 2067 decreased by 8.49 %.

There is a wide gap between production target and actual production achievement. The highest budgeted production was Rs. 2,50,00,000 (i.e., 75% of instated capacity) and lowest production target in the FY 2064 was Rs. 1,80,00,000 (i.e., 45% of installed capacity).It can be said that production target and achievement were not satisfactory.

Consumption of raw material in the FY 2067 was also high, as compared in other years but consumption of raw material was low as availability of raw material, so there was increasing trend in closing stock of raw materials. It seemed that due to the poor political condition of the nation the industry is adopted increasing inventory.

There were 80 technical & 23 Non technical employees. Technical employees were more than non technical employees. Except the permanent nature employees, industry hired many hourly basis workers from local area as per the production requirement.

cash flow from operating activities was Rs. 2181271. 97. If Industry can improve its inventory system, it can increase its cash flow from operation. Cash flow from investing activities included the purchase of fixed assets. Cash flow from financing activities consisted of short term loan taken & long term loan paid.

A change in cash was negative but there was adequate cash in the beginning so closing cash because was positive. It indicates profit in future, if the present situation remains the same in the future. But there was negative net cash flow during the year (i.e. Changes in cash), so J.Bs'L needed to adopt effective cash planning and control system for improving its current cash flow position.

## 5.2 Conclusions

After analysis of sales plan & production plan it can be said that budgeted sales and production are more than actual sales and production. There is huge gap between budgeted and actual sales and production. Different statistical tools can be used for sales forecasting but in practice industry is not using it. The entire functional budget is not prepared by the industry and they are not prepared on systematic way. Correlation between actual sales and actual production is highly positive so industry must try to increase its production to increase sales.

Most of Raw material used in the industry is purchased from local market. So most of the purchases of the industry is in cash basis. Industry is suffering from over stocking problems of raw materials and finished goods in each fiscal year. Over stocking increases the working capital and increase in working capital increases the opportunity cost.

Industry has not practice of developing direct labour budget. Most of the employs are relatives of top management. So it creates low productivity & lack of responsibility, rewards & punishment problems. Industry has not practice of cash budget so it is difficult to know detailed about the cash expenses & cash receipts and actual cash balance at the end.

There is a not systematic expense planning. Over heads are not classified on the basis of function and cost are not classified on the basis of behavior i.e., fixed and variable. Variable cost in fiscal year 2068 is 80%. Industry has not applied lost reduction techniques. It has not applied CVP analysis, flexible budgeting and ratio analysis while decision making. So there are many difficulties for planning & implementation. Actual sales are more than break even sales which indicates efficiency of the industry. Most of the ratio of J.Bs'IL indicates poor performance but net profit margin is in positive, which indicates the good future of the industry. From fiscal year 2066 there is increasing trend of profit. There is no loss in five years. Industry is not applying, IRR, PBP & ARR approaches while purchasing fixed assets. Competitive marketing strategy and proper distribution system has not applied by the industry. Data recording and document keeping system of J.Bs' is not scientific. So it creates problems, to receive necessary information from J.Bs'. And at last, low productivity of plant and man power, ignorance of SWOT analysis system, lack of entrepreneurship and commercial concept, lack of co-ordination among department and lack of proper reward & punishment system, lack of experts about profit planning and control system, lack of quality raw materials, lack of

appropriate market & poor political condition of the country, are main problems in success of Industry.

### **5.3 Recommendation**

Based on the analysis, findings and conclusion of the present study, the followings suggestions are recommended to improve the profitability of J.Bs' Industry.

1. J.Bs' Industry should develop systematic, scientific and realistic strategic sales plan by considering different factors affecting sales.
2. All persons should be given opportunity to participate on decision making and planning process of the industry.
3. Production budget should be developed by product-wise, and efforts should be made to kept optimum inventory and minimize carrying and production cost.
4. Sales budget should be prepared on the realistic ground. While preparing sales budget, industry should consider Break-Even-Analysis.
5. Material purchase budget should be prepared in detail (i.e., by time, product and cost) on the basis of production budget. Proper inventory policy should be maintained. Economic order quantity (EOQ) technique should be adapted while purchasing materials.
6. Price plays vital role to increase the sales, so industry should have the competitive pricing policy according to the market condition to gain the high market share of its product.
7. All departments should be delegated full authority and accountability for their work. Planning department should create new ideas for innovation of new product to the research and development department.
8. Through the cost reduction and cost control, industry should minimize its loss. For this, industry should established separate costing section and cost should be classified effectively into direct, indirect, fixed, variable, controllable and uncontrollable etc.
9. J.Bs' should develop proper objective through 'SWOT' analysis.
10. To improve the profitability, the industry should utilize its ideal capacity by introducing new product by researching new resources of raw materials.



11. J.BS' should develop capital expenditure budget more effectively and modern evaluation technique like NPV and IRR method should be followed to evaluate major capital expenditures.
12. While formulating the profit plan, cost-volume-profit analysis and flexible budget system should be seriously considered.
13. There should be effective variance analysis. Variance must be categorized as favorable and unfavorable. The causes of unfavorable variances should be timely identified and effective corrective action should be done to minimize the unfavorable variance.
14. Scientific accounting, recording and summarizing system and publication system should be followed to inform Industry's situation.
15. Regular Monitoring and supervision is necessary to control the wastage working hour.
16. The working capital management of J.Bs' Industry is not effective and efficient and liquidity position is very poor. The industry should improve the liquidity position effectively by minimizing the excess majority of closing stock in current assets.
17. To generate more sales and profit, industry should emphasize an efficient utilization of total resources (i.e., total assets) because total assets turnover ratio seems not good.
18. The profitability position of the industry is very low due to fixed costs. So the management of J.Bs' should maximize its profit by reducing un-necessary and excessive amount of fixed costs by adopting effective cost control technique.
19. By increasing capacity of plant and advertising its product, Industry should try to export its product for external sales (i.e., to the other country).
20. J.Bs.' has not practice of direct labour budget. There is not proper reward & punishment system in the industry. In the industry, there is no proper cost classification system; there is no practice of preparing flexible budget to analyze its performance.
21. Industry has not used SHOT analysis System.

At the end, planners should be trained and to make profit planning system more progressive J.Bs' should adopt the comprehensive profit planning approach. And

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22. J.Bs' should be used effective feedback mechanism to control overall activities.

**Appendix – 'I'**  
**Let the budgeted sales 'X' & actual sales 'Y'**

Year	x	y	xy	x <sup>2</sup>	y <sup>2</sup>
2064	180	108.5	19530	32400	11772.5
2065	200	12.5	25500	40000	16256.25
2066	225	157.9	35527.5	50625	24932.41
2067	250	189.7	47425	62500	35986.09
2068	250	168.5	42125	62500	28392.25
	x = 1105	y=752.1	xy=170107.5	x <sup>2</sup> =248025	y <sup>2</sup> =117339.25

$$\text{Mean } (\bar{x}) = \frac{\Sigma x}{n} = \frac{1105}{5} = 221$$

$$\text{Mean } (\bar{y}) = \frac{\Sigma y}{n} = \frac{752.1}{5} = 150.42$$

$$\begin{aligned} \text{Standard deviation of X} &= \sqrt{\frac{\Sigma X^2}{N} - \left(\frac{\Sigma X}{N}\right)^2} = \sqrt{\frac{248025}{5} - \left(\frac{1105}{5}\right)^2} \\ &= 27.64055 \end{aligned}$$

$$\begin{aligned} \text{Standard deviation of 'y'} &= \sqrt{\frac{\Sigma Y^2}{N} - \left(\frac{\Sigma Y}{N}\right)^2} = \sqrt{\frac{117339.25}{5} - \left(\frac{752.1}{5}\right)^2} \\ &= \sqrt{23467.85 - 22626.1764} \\ &= 29.0116 \end{aligned}$$

$$\text{Co-efficient of variation C.V. 'X'} = \frac{s.dX}{\text{meanX}} \times 100 = \frac{27.64055}{221} \times 100 = 12.51\%$$

$$\text{Co-efficient of variation C.V. 'y'} = \frac{s.dY}{\text{meanY}} \times 100 = \frac{29.0116}{150.42} \times 100 = 19.29\%$$

Correlation co-efficient between x & y (r)

$$\begin{aligned} r &= \frac{n\Sigma XY - \Sigma X \cdot \Sigma Y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2} \sqrt{n\Sigma y^2 - (\Sigma y)^2}} \\ &= \frac{5 \times 170107.5 - 1105 \times 752.1}{\sqrt{5 \times 248025 - (1105)^2} \sqrt{5 \times 117339.25 - (752.1)^2}} \\ &= \frac{850537.5 - 831070.5}{138.20 \times 145.06} \\ &= 0.9714 \end{aligned}$$

**Appendix II**  
**Let the budgeted production in Rs. 'X'**  
**„ actual „ „ 'Y'**

<b>Fiscal year</b>	<b>X</b>	<b>Y</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY (Rs. In lakh)</b>
2064	180	135.49	32400	18357.54	24388.2
2065	200	126.18	40000	15921.39	25236
2066	225	177.20	50625	31399.84	39870
2067	250	205.40	62500	42189.16	51350
2068	250	182.16	62500	33182.27	45540.

$$X=1105 \quad Y=826.43 \quad X^2=248025 \quad Y^2=141050.2 \quad XY=186384.2$$

$$\text{Mean } \bar{x} = \frac{\Sigma X}{N} = \frac{1105}{5} = 221 \text{ lakh}$$

$$\text{Mean } \bar{y} = \frac{\Sigma Y}{N} = \frac{826.43}{5} = 165.29 \text{ lakh.}$$

$$\begin{aligned} \text{Standard deviation of X (s.d)} &= \sqrt{\frac{\Sigma X^2}{N} - \left(\frac{\Sigma X}{N}\right)^2} \\ &= \sqrt{\frac{248025}{5} - \left(\frac{1105}{5}\right)^2} = \sqrt{49605 - 44841} = 27.64055 \end{aligned}$$

$$\text{Co-efficient of variation (cv of X)} = \frac{s.dX}{\text{meanX}} \times 100 = \frac{27.64055}{221} \times 100 = 12.51\%$$

$$\begin{aligned} \text{Standard deviation of y(s.d)} &= \sqrt{\frac{\Sigma Y^2}{N} - \left(\frac{\Sigma Y}{N}\right)^2} \\ &= \sqrt{\frac{141050.2}{5} - \left(\frac{826.43}{5}\right)^2} \\ &= \sqrt{28210.04 - 27320.78} = 29.82 \end{aligned}$$

$$\begin{aligned} \text{Co-efficient of variation of y (c.v.of Y)} \\ &= \frac{s.dY}{\text{meanY}} \times 100 = \frac{29.82}{165.29} \times 100 = 18\% \end{aligned}$$

Correlation co-efficient (r) between x & y

$$\begin{aligned} &= \frac{n\Sigma xy - \Sigma x.\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2} \sqrt{n\Sigma y^2 - (\Sigma y)^2}} \\ &= \frac{5 \times 186384.2 - 1105 \times 826.43}{\sqrt{5 \times 248025 - (1105)^2} \sqrt{5 \times 141050.2 - (826.43)^2}} \\ &= \frac{931921 - 913205}{\sqrt{1240125 - 1221025} \sqrt{705251 - 682986.54}} = \frac{18716}{138.20 \times 149.20} \\ &= \frac{18716}{20619.44} = 0.91 \end{aligned}$$

**Appendix III**  
Let actual sales 'x'  
Actual production 'y'

Year	x	y	xy	x <sup>2</sup>
2064	108.5	135.49	14700.7	1177.25
	18357.5			
2065	127.5	126.18	16087.95	16256.25
	15921.4			
2066	157.9	177.20	27980	24932.41
	31400			
2067	189.7	205.40	38964.38	35986.09
	42189.2			
2068	168.5	182.16	30693.96	28392.25
	33182.3			

$$\underline{\quad\quad\quad} \quad x=752.1 \quad y=826.43 \quad xy=128426.84 \quad x^2=117339.25 \quad y^2=141050.2$$

$$\text{Mean } \bar{x} = \frac{\Sigma x}{n} = \frac{752.1}{5} = 150.42$$

$$\text{Mean } \bar{y} = \frac{\Sigma y}{n} = \frac{826.43}{5} = 165.29$$

$$\text{standard deviation } X = \sqrt{\frac{\Sigma x^2}{n} - \left(\frac{\Sigma x}{n}\right)^2} = \sqrt{\frac{117339.25}{5} - \left(\frac{752.1}{5}\right)^2} = 29.1$$

$$\text{Standard deviation } Y = \sqrt{\frac{\Sigma y^2}{n} - \left(\frac{\Sigma y}{n}\right)^2} = \sqrt{\frac{141050.20}{5} - \left(\frac{826.43}{5}\right)^2} = 29.82$$

$$cvx = \frac{\sqrt{x}}{\bar{x}} \times 100 = \frac{29.01}{150.42} \times 100 = 19.28\%$$

$$cvy = \frac{\sqrt{y}}{\bar{y}} \times 100 = \frac{29.42}{165.29} \times 100 = 18.04\%$$

Correlation co-efficient ® between x & y

$$\begin{aligned} r &= \frac{n\Sigma xy - \Sigma x \cdot \Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2} \sqrt{n\Sigma y^2 - (\Sigma y)^2}} \\ &= \frac{5 \times 128426.84 - 752.1 \times 826.43}{\sqrt{5 \times 117339.25 - (752.1)^2} \sqrt{5 \times 141050.20 - (826.43)^2}} \\ &= \frac{642134.2 - 621558}{\sqrt{586696.25 - 565654.41} \sqrt{705251 - 682986.5}} \\ &= \frac{20576.2}{21644.12} = 0.95 \end{aligned}$$

## Appendix IV

Calculation of financial ration of J.Bs' IL

Current assess (CA) of industry are cash & bank, inventory, A/count receivable & propel expenses.

Current liabilities (CL) of the industry are creditors, Sorter borrowing, loan matured in current years, provision for liabilities etc.

Liquid ratios

Current ratio =  $\frac{\text{current assets}}{\text{current liabilities}}$

$$\begin{aligned} \text{for 2064} &= \frac{6097569.26}{3292076.34} \\ &= 2.55 \end{aligned}$$

$$\begin{aligned} \text{Where tool current asset} &= 5258362.44+613735.87+140970.95+84500 \\ &= 6097569.26 \end{aligned}$$

$$\begin{aligned} \text{Total current liabilities} &= 141600+2190613.68+59862.66+0 \\ &= 2392076.24 \end{aligned}$$

$$\begin{aligned} \text{for 2065} &= \frac{6774543.63}{2722972.63} \\ &= 2.48 \end{aligned}$$

$$\begin{aligned} \text{for 2066} &= \frac{9252781}{4756264} \\ &= 1.95 \end{aligned}$$

$$\begin{aligned} \text{for 2067} &= \frac{11702908}{7333021} \\ &= 1.60 \end{aligned}$$

$$\begin{aligned} \text{for 2068} &= \frac{12000201}{9259825} \\ &= 1.29 \end{aligned}$$

liquid or quick or acid test ratio

liquid ratio =  $\frac{\text{liquid assets}}{\text{current liabilities}}$

$$\begin{aligned} \text{for 2064} &= \frac{754707}{2392076} \\ &= 0.32 \end{aligned}$$

$$\begin{aligned} \text{for 2065} &= \frac{1528002}{2722973} \\ &= 0.56 \end{aligned}$$

$$\begin{aligned} \text{for 2066} &= \frac{2036779}{4756263} \\ &= 0.43 \end{aligned}$$

$$\begin{aligned} \text{for 2067} &= \frac{2816679}{7333023} \\ &= 0.38 \end{aligned}$$

$$\begin{aligned} \text{for 2068} &= \frac{1792194}{9259825} \\ &= 0.19 \end{aligned}$$

#### Debt Equity ratio

The industry has not long term debt so, it cannot be calculated.

#### Acuity ratios

Inventory turnover ratio =  $\frac{\text{sales}}{\text{closing inventory}}$

$$\begin{aligned} \text{for 2064} &= \frac{10853575}{5258362} \\ &= 2.06 \end{aligned}$$

$$\begin{aligned} \text{for 2065} &= \frac{12752170}{5124041} \\ &= 2.49 \end{aligned}$$

$$\begin{aligned} \text{for 2066} &= \frac{15793132}{7050498} \\ &= 2.24 \end{aligned}$$

$$\begin{aligned} \text{for 2067} &= \frac{18967602}{8621873} \\ &= 2.20 \end{aligned}$$



$$\begin{aligned} \text{for 2068} &= \frac{16845022}{9992633} \\ &= 1.69 \end{aligned}$$

Total assets turn over =  $\frac{\text{sales}}{\text{total assets}}$

$$\begin{aligned} \text{for 2064} &= \frac{10853575}{7124019} \\ &= 1.52 \end{aligned}$$

$$\begin{aligned} \text{for 2065} &= \frac{12752170}{7671358} \\ &= 1.66 \end{aligned}$$

$$\begin{aligned} \text{for 2066} &= \frac{15793132}{10192392} \\ &= 1.55 \end{aligned}$$

$$\begin{aligned} \text{for 2067} &= \frac{18967602}{13477282} \\ &= 1.41 \end{aligned}$$

$$\begin{aligned} \text{for 2068} &= \frac{16845022}{15999394} \\ &= 1.05 \end{aligned}$$

Profitability ratios

Gross profit margin =  $\frac{\text{Gross profit}}{\text{Sales}}$

$$\begin{aligned} \text{for 2064} &= \frac{2204925}{10853575} \\ &= 0.20 \end{aligned}$$

$$\begin{aligned} \text{for 2065} &= \frac{1870168}{12752170} \\ &= 0.1466 \end{aligned}$$

$$\begin{aligned} \text{for 2066} &= \frac{3182754}{15793132} \\ &= 0.2015 \end{aligned}$$

$$\text{for 2067} = \frac{2931338}{18967602}$$

$$= 0.15$$

$$\text{for 2068} = \frac{336804}{16845022}$$

$$= 0.1999$$

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Sales}}$$

$$\text{for 2064} = \frac{433435}{10853575}$$

$$= 0.0399$$

$$\text{for 2065} = \frac{313504}{12752170}$$

$$= 0.02$$

$$\text{for 2066} = \frac{642962}{15793132}$$

$$= 0.0407$$

$$\text{for 2067} = \frac{858834}{18967602}$$

$$= 0.0453$$

$$\text{for 2068} = \frac{797193}{16845022}$$

$$= 0.0473$$

**Appendix no.V**  
**J.Bs' Industry**  
**Balance Sheet of the five fiscal years**  
**As on ended Ashad**

Particulars	2064 (Rs.)	2065 (Rs)	2066 (Rs)	2067 (Rs)	2068 (Rs)
<b><u>Capital &amp; liabilities;</u></b>					
Fixed capital	9,81,500	9,81,500	9,81,500	9,81,500	9,81,500
Working capital	28,60,000	28,60,000	28,60,000	28,60,000	28,60,000
Reserve & retained earning	890443.48	1106884.87	1594627.38	2302759.41	2898069
Creditors	141600	275855	1679902.39	4391742.59	5719256
Short term borrowing	2190613.68	2358718.31	3056978.97	1300000	3450000
Long term borrowing(matured)	-	-	-	1623481.96	-
Other provision for liabilities	59862.66	88399.32	19382.59	17798.52	90569
<b>Total capital &amp; liabilities</b>	<b>7124019.82</b>	<b>7671357.5</b>	<b>10192391.33</b>	<b>13477282.48</b>	<b>15999394</b>
<b><u>Assets;</u></b>					
Fixed assets	1026450.52	896813.88	939609.81	1774374.26	3999193
Current assets:					
Inventory	5258362.44	5124041.70	7050497.60	8621873.22	9992633
A/c receivable	613735.87	1450099.18	1987254.74	2663363.86	1713096
Bank & cash balance	140970.95	77902.77	49523.71	153314.64	79098
Prepaid expenses	84500	122500	165505.47	264356.5	215374
<b>Total Assets(fixed+curren t)</b>	<b>7124019.82</b>	<b>7671357.5</b>	<b>10192391.33</b>	<b>13477282.48</b>	<b>15999394</b>