

**SALES AND PRODUCTION PLANNING  
ANALYSIS:  
A TOOL OF PROFIT PLANNING AND CONTROL  
(A Case Study of Sita Ram Gokul Milk (Ktm) Ltd. )**

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## **RECOMMENDATION**

This is to certify that the thesis

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Sales and production planning analysis a tool of profit planning and control has been prepared as approved by this department in the prescribed format of faculty of management.

This thesis is forwarded for examination.

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I hereby declare that the work reported in the thesis entitled “Sales and Production Planning Analysis, a tool of Profit Planning and Control” submitted to Central Department of Management, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of the requirement for the Master’s Degree of Business Studies under the guideline and supervision of Lecturer Achyut Gyawali, Central Department of Management.

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## ABBREVIATIONS

|                  |   |  |
|------------------|---|--|
| SGML             | : | Sita Ram Gokul Milk (Ktm) Ltd.                       |
| HACCP            | : | Hazard Analysis and critical control point           |
| CC               | : | Chilling Centers                                     |
| A/C              | : | Account  |
| B.S.             | : | Bikram Sambat  |
| BEP              | : | Break Even Point                                     |
| C.V.             | : | Coefficient of Variation                             |
| CFAT             | : | Cash Flow After Tax                                  |
| DDC              | : | Dairy Development Corporation                        |
| F/C              | : | Fixed Cost   |
| F/Y              | : | Fiscal Year  |
| i.e.             | : | That is  |
| IRR              | : | Internal Rate of Return                              |
| Kg.              | : | Kilogram   |
| S.D.             | : | Standard Deviation                                   |
| SMART            | : | Suitable, Measurable, Applied, Reasonable and Timely |
| SWOT             | : | Strength, Weakness, Opportunities and Threat         |
| WFP              | : | World Food Programme                                 |
| ltrs             | : | Liters   |
| Rs.              | : | Rupees   |
| Mfg.             | : | Manufacturing  |
| Mgt.             | : | Management   |
| Dept.            | : | Department   |
| MBO              | : | Management by Objectives                             |
| SMP              | : | Scheme Milk Powder                                   |
| VC               | : | Variable Cost  |
| Dep <sup>n</sup> | : | Depreciation   |
| NCO              | : | Net Cash Outlay                                      |
| PPC              | : | Profit Planning and Control                          |

# Chapter – I

## Introduction

### 1.1 Background of the Study

Nepal is the small landlocked country of South Asia. It is covered by India in the east, west and south and by China in the north. The area of Nepal is 147181 square kilometers. It has three regions (Himalayan, Hilly and Tarai), 14 zones and 75 districts. This area is about 0.3 percent of Asia and 0.03 percent of world. Nepal is extended from east to west with a length of about 885 km and with average width of 193 km from North to South. In Nepal, rocks, snow barren mountains and sloppy hills etc. cover 77 percent of land while 23 percent land is plain type (Tarai). Nepal is a Himalayan kingdom, where the highest mountain of world Mount Everest (8848 meter) and lowest point of Nepal i.e. Kechana Kalan of Jhapa District (72 meters) are situated. It has the deepest valley (The Arun valley) in the world. It is small kingdom rich in nature beauty and Himalayas. So, the Natural environment of the Nepal is direcfiable and Sangrila. It is also called the Switzerland of Asia (Pokhrel, 2064: 20).

Nepal lies in the line of least developed country of world with \$490 per capita income. It has poor economy. More than 80 percent of the people involved in agriculture actively. But this sector contribution is only 40 – 44 percent of GDP. It is the major source of employment and income of rural people (International Forum, jan/feb 2012:73).

Industrialization plays a vital role in the development of economic and its importance as a means of achieving economic growth and prosperity has been recognized in the economic literature. Industrialization is universally accepted as a strategy of economic development as well as the fundamental goal of most developing countries like most other developing countries one of the important aspiration of Nepal has been to bring about a structural change that would transform its agriculture economy into and industrial one.

Industrialization is the fundamental goal of most developing as well as developed countries. The prevailing state of under development is commonly contributed to lack of adequate industrialization. It is so because most of the economically advanced

nations of the contemporary world reached their high standards of living through successful thrust of industrialization. Industrialization is the focal point of economic development of backward countries like Nepal. It is one of the major tools with the aid of which the vicious of backwardness and poverty can be minimized. Industrialization helps the unemployment and unemployment persons especially from the agriculture sector to find alternative models of productive activity and more into much more productive activities. This reduces the unemployment problems and utilizes the resources which help the countries for economic development.

Modern manufacturing enterprises in Nepal have a history of about 77 years. It was in 1935 that the first modern industry of Nepal Biratnagar Jute Mill was established in the joint venture of Nepal and India. In order to reap quick benefit from the shortage of consumer goods created by the Second World War. Nineteen other mills were established haphazardly till 1945. They consisted of sugar, match, rice, Oil, cotton, ceramics, cigarette, glass, chemicals bobbins, plywood, hydropower, furniture, soap, paper and Ayurvedic medicines etc. after the end of the Second World War, Biratnagar Jute Mill and Juddha Match factory at Birjung-continued operation successfully. Most other modern industries either closed down or declined. Nepal entered the era of planned development in 1956. The growth of industries various plan has been mixed.

(Shrestha, 2005).

Now a days, many people have transfer industrial sector from agriculture. People have felt that without industrialization or develop of industry economic improvement is impossible which also show from world history because there were not the industrialization, Japan, America, Britain would not the rich country or strong economic condition. So the Nepal also has followed them. Now pace of industrialization is increasing Nepal has become the member of WTO. So the policy of government is free now. It promotes the privatization to increase the participation of general public for industrial development.

In this way the evolution of industrial development has own history. It is the outcomes of previous efforts and scarification. Before some year the political situation of country was very bad. Many industries were closed. Because of strike and Nepal band many industries were faced different problems which can not gained their

objectives. However now a days we can hole to improve that's situation, which will favorable for industrial environment.

Production and Sales Planning is an important tools of Profit Planning and Control. It provides information about behavior of production and sales activities like production planning schedule, inventory level, cost level, actual and budgeted production and sales, manpower planning and administration profit due to variable output. Production and sales planning analysis may therefore by define as managerial tools showing the relationship between various ingredients of profit planning.

Finally it can be conclude that sales and production planning analysis and its effectiveness is the base of manufacturing organization. So the researcher has analyzed how production and sales planning analysis affect in profit planning and control organization and also the relationship and efficiency of utilization in research work.

## **1.2 Profile of Sample of Organization**

### **1.2.1 Introduction of Sita Ram Gokul Milks Ltd.**

The demand of milk and milk product is gradually increasing day by day so it was found necessary to improve of Sita Ram Gokul Milks. As a result Sita Ram Gokul Milks Kathmandu Ltd. was established in 2052 B.S. as a mediator for social welfare and development of Nepalese farmers. It is the private limited company and promoted by Kedia organization and was lead by **Late Shankar Lal Kedia** with an investment about 260 million, the enterprise does not have any collaboration. Its main objective was to act as mediator in transferring the milk of farmers to Nepalese homes at urban area. As the time changed, it established itself as one of the emerging commercial organization by introducing product line of milk, ghee, butter, peda etc. keeping the objective uniform. The main products of this enterprise are pasteurized milk, cream butter, ghee and yoghurt. The company is perceived as pioneer in the modern dairy industry from the private sector.

Sita Ram Gokul Milks has been supplying the milk and various products to Nepalese homes by collection raw milk from collecting cow and Buffalo milk with the farmers to co-operative centers at the price fixed by the enterprise, then brought to chilling centers. The company has 13 chilling centers among which 11 are run by the organization itself and the remaining by co-operatives. It has 7 road tankers that start

delivering the milk in the market from 4:30 A.M. Its average sales are about 35000 liters per day and production capacity of more than 2.86 million gallons of milk per year. At present organization is supplying the milk and various products to Nepalese homes by collection raw milk mainly from the district Chitiwan, Nawalparasi, Kavre, Nuwakot & Rupendhi.

To provide packaged drinking milk conforming to relevant specification, Incorporating Hazard Analysis and Critical Control Points (HACCP) requirements at to provide at competitive price to meet or exceeds requirements and satisfaction of valued customers, which should be achieved through continues improvements in quality of work, enhancing employee participation at all levels and by using best available resources. The Nepal Burean of Standards and Metrology (NBSM) has fixed the quantity of milk. e.g fat, S.M.F. contents. The enterprise follows the quality standards and metrology set by Nepal Bureau of standards and Metrology. The enterprise is the process of acquiring ISO- 9000 (Shrestha, 2005).

The sale of packaged drinking milk confirming to relevant specification, following HACCP requirements to some extent to provide at competitive price to meet or exceed requirements and satisfaction of valued customers is done through 620 dealers and 1143 sub- dealers in Kathmandu Valley. Among them 443 Dealer and 871 sub dealer in Kathmandu, 131 Dealer and 217 sub dealer in Lalitpur and 46 Dealer and 55 sub dealer are in Bhaktapur. The company has accounting software and computers and it has 450 KVA capacities Diesel Generator set for self-backup source of power. The enterprise sells the pasteurized milk in half-liter plastic pouch through dealers and sub- dealers (google, sitaram gokul milks).

### **1.2.2 Product of the Company**

Sita Ram Gokul Milk (Kathmandu) Ltd. produces the following product:

- (1) Pasteurized milk
- (2) Yoghurt
- (3) Butter
- (4) Paneer
- (5) cheese

### **1.2.3 Organization Chart of Sita Ram Gokul Milk (Kathmandu) Ltd.**

Sita Ram Gokul Milks Ltd. organization chart indicates that Chief executive officer is the head of director's board. Under the Chief executive officer and general manager the company being operates. Four divisions are under the General manager (i.e. Production, Finance, Marketing and Administration) under this division, various department and section in the company. The organization chart shows in Appendix.

### **1.3. Statement of the Problem**

The objectives stated in various plan documents were accelerating the rate of economic growth, generation employment, economic equality, utilization of natural resources, contribution in government exchanger. Most of the enterprises are not fulfilling the objectives because of less utilizing the capacity and ancient technology. The industrialization process in Nepal is being developed very slowly. In spite of various attractive policies of the government in respect of industrialization, new investment made on industrial sector is not satisfactory manufacturing industries is also not good. Most of the industries are operating in losses and such condition of the established industries discourages the new investment, both in manufacturing and non manufacturing sector. There may be various and different reasons for the poor performance of manufacturing industries. Such reason should be investigated and should be taken corrective measures for the improvement of their performance.

Sita Ram Gokul milk is Private Limited established in Nepal to fulfill the need of people by supply quality milk at reasonable price. DDC has majority of market share of milk products is the major threat for SGML. It also expected to be financially sound and contribute surplus to GDP. Due to the lack of authority and communication of goals and objectives from top to lower level management more over them they don't maintaining responsibilities and co-ordination between various developments and responsibilities center, many enterprise can't achieve their pre-established objectives and goals.

Now-a-days the enterprises are suffering from accurate estimation of sales and production. In other word, there is not balance in sales and production, which has two results. First, sales is less than production; in this condition the firm has more production but sales volume is very few which invites the problems of overstocking of inventory (unsold product), that results the cost is increased for managing over

inventory. So on second is, production is less than sales. In this case, there will be lack of stock for sales or there will not be the goods (product) for sales, which also increases the loss of profit because sales can not be made according to their demand. And also other negative aspects are the customers are lost and image or reputation also lost.

So, the main problem is how to co-ordinate between production department and sales department and also how to keep optimum level of inventory in SGML.

This study has attempted to address following key research issues:

- How to analyze the sales and production planning prepared by SGML?
- How does SGML adopt the PPC at present?
- Why does there fluctuation at inventory level (Production)?
- Why does there difference between budgeted and actual achievement?

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

The main objective of this is to evaluate and examine the Sales and Production Planning in profit planning and control applied by Sita Ram Gokul Milks Ltd. The specific objectives are as follows.

- To review the present PPC adopted (using tools of PPC i.e. Sales and production budget) by SGML.
- To analyze the sales and production planning and inventory policies.
- To analyze the financial performance of SGML.
- To provide the suggestions and recommendations for improving the production and sales planning for SGML.

#### **1.5 Significance of the Study**

Co-ordination between sales and production is very important for manufacturing industry. Over and under production brings different problems, which increases the cost and losses the profit. So, the researcher has thought that the study will be very important to improve the performance of Sita Ram Gokul milks. The significances of this study are as follows:

- The study will be useful to concerned bodies to keep their attention on reducing account irregularities.
- This is creative research about the related field, which may provide material for the interested concerns.
- This study will be helpful in profit planning system so that it controls the unnecessary expenses of the firm.
- This study focuses on the application of systematic approaches of profit planning and analyzes the effectiveness, problem and solution of the problems.

## **1.6 Limitations of the Study**

These studies only focus of the sales and production planning of the firm, where arises different practical and technical problem for the research which is listed below.

- Sales and production planning analysis cover of the five last year (i.e. F/Y 2063/64 to 2067/68).
- Analysis is concerned with the sales and production planning analysis. It doesn't analyze the other sector of the company.
- The study is based on primary data as well as secondary data.
- Being a researcher as student and due to the limited time and resources constraints, the study is neither comprehensive nor extensive.

## **1.7 Organization of the Study**

Organization of study refers to the management of research work for the effective analysis. The study has been divided into five chapters as mentioned below:

### **1.7.1 Introduction**

This chapter deal with the general background of study, introduction of corporation and it's objectives, statement of problem, objectives importance and limitation of study.

### **1.7.2 Review of Literature**

This includes two parts: one is the conceptual framework which includes the fundamental concept and component of profit planning and control and sales and production planning (budgeting) and second is review of previous related studies about SGML.

### **1.7.3 Research Methodology**

This chapter followed to achieve the purpose of the study has been described. It includes research design, nature and sources of data, population and sample, data gathering method and instrument and data processing.

### **1.7.4 Presentation and Analysis of Data**

This chapter includes the tabulation and analyzing the collected data through different sources. We use various analysis tools and techniques here based on the analysis of the research, questions we have been tried to answer and major findings regarding this study also have been included.

### **1.7.5 Summary, Conclusion and Recommendation**

This includes the theme of the whole study. At last few recommendations for the improvement of the sales and production planning and other planning performance for Sita Ram Gokul Milks Ltd.

At the end of the study bibliography, appendix and questionnaires are also incorporated.

## **Chapter – II**

# Review of Literature

## 2.1 Conceptual Framework

### 2.1.1 Profit

There are several interpretations of the profit. An economist says the profit is reward for entrepreneurship for his risk bearing so on other's says about the different definition of profit. It is a primary objective of business. Profit is a signal for the allocation of resources and a yard stick for judging managerial efficiency (Kulkarni, 1990: 245). The survival measure of the effective performance of a business is profit. Profits are the primary measure of success of the business enterprises. Profits are the acid test of business enterprises performance. Simply, profit is the excess of income over cost of production".

The entrepreneur earns profit for organizing and coordinating the other factors of production land labour and capital of the purpose of producing goods. Various economists have different views in respect of the term profit. According to Howley, Profit is the reward for risk taking in business. Schumpeter opines that an entrepreneur earn profits as rewards for his introducing innovation. J.M. Keynes held the view that profit resulted from favorable movements of the general price level. Mrs. Joan Robinson and Chamberlain opined that the greater the degree of monopoly poner the greater the profits made by the entrepreneur (Joshi, 2001: 170-171).

Finally, it should be noted that profits are residual income left after the payment of the contractual rewards to other factor of production. The difference between outflow and inflow is profit. Inflow means the income from sales or other's receipt and outflow means the cost of producing and selling the product. Profit as the reward of bearing risk, uncertainties and the reward of successful innovation, it is obtained by subtracting the cost from revenue.

$$\text{Profit} = \text{Total Revenue} - \text{Total Cost of Production and Selling}$$

### 2.1.2 Planning

Planning is deciding in advance what is to be done in future. Planning is the feed forward process to reduce uncertainty about the future. The planning process is the feed forward process to reduce uncertainty about future. The planning process is based on the conviction that management can plan its activities and conditions the

state of the enterprise determines its destiny (Pandey, 1994: 554). Planning is a systematic method of thinking out acts and purpose before hand. It is the first essence of management and all other functions are performed within the framework of planning. It is the basis foundation of profit plans.

Planning should start by deciding and defining the objectives of the company, making sure in the process that there are compatible with the skills and resources of the under taking. Planning is essential to accomplish goals. It reduces uncertainty and provides right direction to the employees by determining the course of action in advance. Formal planning indicates the responsibility of management and provides an alternative to grouping without direction. Planning on the other hand, involves the determination of what should be done, how the goal may be reached and what individual units are to assume responsibility and be held accountable (Grace, 2001: 102).

Planning is the process of developing enterprise objectives and selecting future courses of action to accomplish them. It includes:-

- I. Establishing enterprises objectives.
- II. Developing premises about the environment in which they are to be accomplished.
- III. Selecting a course of action for accomplishing the objectives.
- IV. Initiating activities necessary to translate plans into action plan.
- V. Current re-planning to correct current deficiencies (Glenn, 1995: 3).

Planning and forecasting are also not same things. Forecasting is a component of planning or it is a prediction of future event, condition or situation. But plan includes a program of intended future actions and desired result. Forecasting is a prediction of what will happen on the basis of certain assumptions. Planning can be performed under conditions of certainty, uncertainty or ignorance about future. It is in those situations involving uncertainty and forecasting provides the maximum help to planners. When certain exist, forecasting does not require much more effort since prediction about the future is trivial. When there is ignorance the most that forecasting can do provide some clues about future possibilities.

However, such clues cannot be provided unless some information is available and which the forecast can be based. In many organizations the major purpose of forecasting is to reduce uncertainty and minimize ignorance.

In this way planning is an intellectual process rational way, a systematic way, goal oriented task, primary function of management and it directs all managerial activities and it is directed towards efficiency.

### **2.1.3 Control**

Control is checking current performance against pre-determined standards contained in the plans, with a view to ensure adequate progress and satisfactory performance. Controlling is one of the managerial functions like **planning, organizing, staffing and directing**. It is an important function because it helps to check the errors and to take the corrective action so that deviation from standards are minimized and stated goals of the organization are achieved in a desired manner. According to modern concepts, control is a foreseeing action whereas earlier concept of control was used only when errors were detected. Control in management means setting standards, measuring actual performance and taking corrective action. Thus, control comprises these three main activities.

According to **Henri Fayol**, Control of an undertaking consists of seeing that everything is being carried out in accordance with the plan which has been adopted, the orders which have been given, and the principles which have been laid down. Its object is to point out mistakes in order that they may be rectified and prevented from recurring.

According to **Harold Koontz**, Controlling is the measurement and correction of performance in order to make sure that enterprise objectives and the plans devised to attain them are accomplished.

## **Characteristics of Control**

- Control is a continuous process
- Control is a management process
- Control is embedded in each level of organizational hierarchy
- Control is forward looking
- Control is closely linked with planning
- Control is a tool for achieving organizational activities
- Control is an end process

Thus control is a fundamental managerial function. It is the process of regulating organizational activities so that actual performance conforms to expected organizational standards and goals and ensures that necessary corrective action is taken. There are different concepts of control which are used in different contexts

### **2.1.4 Profit Planning**

After discussing about the profit and planning, it becomes easier to know that what profit planning is. Simply profit planning is planning for future operation in such a way as to maximize the profit. It is a managerial process, which helps management to perform planning function effectively. A comprehensive profit planning is also known as broad budgeting schedule developed in financial statement. Profit Planning deals with the development of objectives, specification of short-term goals, and development of strategic and tactical profit plan. It is an important approach developed to facilitate the effective performance of management process.

“The concept of comprehensive profit planning encompasses systematic integrated approaches of profit planning and strategic planning. The descriptive term comprehensive profit planning used other terms in some contexts are business budgeting, managerial budgeting and others budgeting” (Glenn, 1995: 31).

Profit planning means the development and acceptance of objectives and goals and moving or organization efficiency to achieve the objectives and goals. Profit planning is not a separate technique that can be through of the separated independently of the total management process. The broad concept of profit planning entails on integration of numerous managerial approaches and the techniques that might be exploited such

as sales forecasting, sales quota system capital budgeting, cash flow analysis, cost volume profit analysis variable cost budget etc. profit plan or budget is a comprehensive statement of the intention, expressed in financial terms, for the operations of the firm for a short period. It is a plan of the firm's expectations and used as a basis for measuring and controlling the actual performance of manager and their units.

“Profit planning or budgeting is a forward planning and involves the preparation in advance of quantities as well as financial statement to indicate the intention of management in respect of various aspects of the business. Profit planning in fact is a managerial techniques and it is a written plan in which all aspects of business operation with respect to define future period are included. It is a formed statement of policy, plan, objectives and goals established by the top management in respect of some future period, profit planning is predetermined detail plan action developed and distributed as a guide the current operation as performed. Thus, we can say that profit planning is a tool which may be used by the manager in planning the future course of action and in controlling the actual performance” (Bhattarai, 2005: 2).

### **The Profit Planning and Control Involves:**

- Development and application of broad and long term objectives of the enterprises.
- The specification of enterprise goals.
- Development of strategic long-range profit plan in broad terms.
- Specification of a tactical short range profit plan detailed by assigned responsibilities (division, department products).
- Establishment of a system of periodic performance reports detailed by assigned responsibilities.
- Development follows up procedures (Glenn, 1995: 30).

At last we conclude profit planning refers to the organization techniques and procedures were by long range, short range plan are formulated, considered and approved, responsibility for execution is delegated, flexibility to meet changing is provided, progress in working the reported deviation in operations are analyzed and corrective action requires to reach the desired objectives is taken.

## **2.1.5 Planning Levels**

### **2.1.5.1 Strategic Long-Term Planning**

Long range planning covers five years and more varying with the enterprises sometimes extended beyond 10 years. Long range planning is one of the most difficult time spans involved in planning. As many problems in short range planning cannot be treated due to the absence of clear sense of direction and the practices, which a comprehensive long-range plan provides.

To be successful a long range plan provides achieve the following objectives:

- In corporate the engineering department's development and support expenses for new product features.
- Review the plant capacity, personal requirement in light of start up products and existing plant capitalization.
- Identify future capital requirement for developing departments, the manufacturing process and support departments such as management information system and the building structures.
- Reflect changes in cash requirement for salaries, materials, capital etc.
- Consider what impact will be in inflation fringle, benefits, product cost and in overseas operations, the projected impact of exchange will have on the long-range profitability of plant (Glenn, 1995: 82-83).

### **2.1.5.2 Medium Term Planning**

The medium term planning covers of 2 to 3 years. Medium term planning is used mainly to determine the allocation of resources among completing activities and to revise.

Medium term planning often takes the forms of budgeting in which each division department or unit is allocated certain resources during the coming years. These allocations are based in fact on forecasting of demand, cost, financial position and competition. The important and frequency of medium term planning make it worth while to spend more effort and employ more elaborate prediction than in the case for shorter time horizons. Often it may be wise to use more than one method in order to check and compare the accuracy of results.

### **2.1.5.3 Short Term Planning**

It is also called tactical plan. It is to be developed for short period of time. The short term planning is selected to conform to fiscal quarters or year. Because of practical needed for conforming plans of according periods and the some what arbitrary limitation of the long range to three to five years is usually based as been indicated on the certainty over long period makes planning of questionable value. Short-range planning is a limited five dimension usually it covers one year time period. Management uses it as a substantial part of long range and medium range plan.

### **2.1.6 Profit Planning Process**

Profit planning process should involve periodic consistent and depth replanning so that all operations should carefully re-examined and re-evaluated. There are several steps in profit planning process which is discussed below.

#### **2.1.6.1 Identification and Evaluation of External Variables**

It is basic function of profit planning process. In this stage the profit planning process focuses on (a) identifying and (b) evaluating the impact or effect of external environment, which will have significant impact on the enterprises. As the management planning focuses on the best possible manipulation of controllable and non-controllable variables are considered separately. This is done in order to minimize the potential unfavorable impact.

A particularly significant phase of this analysis includes the evaluation of the present strength and weakness of the enterprise. Planning must start with objectives and realistic understanding of the present status of products, services, markets, profit and return on investments, cash flow, availability of capital, production capabilities and the competences of both management and non management personnel. So, analysis and evaluation of the environmental variables must be a continuing concern of management. These activities should involve all executive managers, who in turn should export carious staff groups to provide data and recommendations (Glenn, 1995: 74-75).

#### **2.1.6.2 Developing of the Broad Objectives of the Enterprise**

In this stage of the statement of objectives should express the mission, vision and ethical character of the enterprise. Its purpose is to provide identity, continuity of

purpose and definition. However, the statement of broad objectives normally should not specify the quantitative goals. Rather, it should be narrative expression of the purpose, objectives and philosophical character of the business. It should be signed for wide dissemination and should be believable, which means, in the long run the company's action must be harmony with the statement (Glenn, 1995: 75-76).

#### **2.1.6.3 Development of Specific Goals for the Enterprise**

In this stage of process bring the statement of broad objectives into sharper focus and to move from the realm of general information to more specific planning information it provide both narrative and quantitative goals that are definite and measurable. There are specific goals that relate to the enterprise as a whole and to the major responsibility centers. Executive management should exercise leadership in this planning phase so that there will be realistic and clearly articulated framework within which operations will be conducted towards common goals. This statement of specific goals should define such operational goals as expansion or contraction of products and services lines, geographical areas, share of the market by major products service lines, growth trends, production goals, profit goal's, profit margins, return on investment and case flow. When the goals are specific they could offer basis for performance measurement (Glenn, 1995: 77-78).

#### **2.1.6.4 Development and Evaluation of Company Strategy**

The purpose of developing and disseminating enterprises is to find the best alternatives for attaining the planned broad objectives and specific goals. Strategic focus on "how", therefore they outline a plan of action for the enterprise. Executive management must be creative and directly involved in the development of new strategies and in the adaptation of currently on going strategies in harmony with the relevant variable with which management must cope. While developing the basic enterprise, the executive must focus on identification of the critical areas that influence the long-range success of the enterprise. Critical area should be pinpointed through evaluation concern to executive management, periodic reassessment of the strategies is essential in the light of a careful analysis of all relevant variables and their probable future impact on the enterprise (Glenn, 1995: 78-79).

### **2.1.6.5 Preparation and Evaluation of Project Plans**

Project plans encompass periodic plans and project plan for improvement of present products, new and expanded physical facilities, entrance into new industries, exit from products and industries, new technology and other major activities that can be separately identified for planning purpose.

The nature of projects is such that they must be planned as separate units. In planning for a project, the time span considered must normally be the anticipated life span of the project. Projects approved must then be timed into the strategic and tactical profit plans. In addition to any going projects, management should encourage on a continuing basis project proposals from any source within the enterprise. Consistent with the approach, during the formal planning cycle, management must evaluate and decide upon the plans status or each project in process and select any new projects to be initiated during time dimensions covered by the upcoming strategic and tactical profit plans (Glenn, 1995: 79-80).

### **2.1.6.6 Development and Approval of Strategic and Tactical Plans**

When the managers of the various responsibility centers in the enterprise receive the executive management planning instructions and the project plans, they can begin intensive activities to develop their respective strategic and tactical profit plan. The strategic long-range plan and the tactical short-range profit plan are usually developed at the same time. It is generally seen that the executive management develops the strategic and tactical profit plans but the backlash of this practice is that this denies the full participation by middle managers in the planning process. And this can give rise to unfavorable behavioral effects. So, here we assume a participatory planning and the manager of each responsibility centers have received instructions of the executive managements. Now the manager of each responsibility center to develop a strategic long-range profit plan and in harmony with the long range plan, a tactical short range profit plan. However, a certain format and procedural instructions should be provided by a centralized source to establish the general format, amount of detail, and other relevant procedural and format requirement essential for aggregation of the plans of the responsibility centers into the overall profit plans.

After the completion of the two profits plans the approval must be initiated. This process involves approval, disapproval or revision based on action by executive

management or presentation and justification by the managers of the responsibility centers to the next higher level of authority (Glenn, 1995: 80-81).

#### **2.1.6.7 Implementation of Profit Plan**

Implementation of management plans that have been developed and approved in planning process involves the management function of leading subordinates in attaining enterprise objectives and goals. Thus effective management at all levels requires that enterprise objectives, goals, strategies and policies be communicated and understood by subordinates. There are many facets involved in management leadership. However, a comprehensive profit planning and control programme may aid substantially in performing this function. plans, strategies and policies developed through significant participation establish to foundation for effective communication.

The plans should have been developed with the managerial conviction that they are going to be met or exceeded in all major respects. If these principles are effective in the development process, the various executive and supervisors will have a level of clear understanding of their responsibilities and the expected level of performance, which will ultimately lead to effective implementation of profit plans (Glenn, 1995: 84-85).

#### **2.1.6.8 Use of Periodic Performance Reports**

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

A clear distinction must be made between external and internal financial reports. Internal report can be further classified as (a) statistical reports that give the basic quantitative internal statistics about the operation of the enterprise; (b) special managerial reports about non-recurring and special problems; and (c) periodic performance reports. The latter reports focus on dynamic and continuous control tailored to the assigned managerial responsibilities. These reports are primarily repetitive, short-term reports developed for each of the responsibility centers. Short-term performance reporting is essential for effective control (Glenn, 1995: 64-65).

### **2.1.6.9 Use of Flexible Expenses Budget**

The flexible expenses budget is also referred to as the variable budget, sliding scale budget, expenses control budget and formula budget, which applies only to expenses. It is completely different from profit plan but it is used to complement it. It gives realistic information about expenses that make it possible to compute budget amount for various output volumes or rates of activities in each responsibility center. To do this the flexible budget provides a formula for each expense in each responsibility center. The formula gives the relationship of each expense to output in the center. Each formula includes a constant expenses factor and a variable expenses rate. To apply this concept in a department, each expense must be classified into the three categories (a) fixed expenses, (b) variable expenses, (c) semi-variable expenses. In the case of a fixed expenses the variable rate is zero and in the case of a variable expenses, the constant factor is zero and in the case semi-variable expenses, there is a value for both the constant factor and the variable rate.

Flexible expenses budget formulas can be used in two phases of the PPC process (tactical profit plan). If the flexible expenses formulas are developed concurrently with the strategic and tactical profit plan, they are used to computer the budgeted expenses amounts in the tactical profit plan. This is done by multiplying the planned output or activity of each responsibility center by the related variable expenses rate for each center and then adding any fixed cost for the center. Flexible expenses budgets are usually constructed early in the budget planning period because, as indicated, they provide cost data for the tactical profit plan (Glenn, 1995: 86-87).

### **2.1.6.11 Implementation of Follow-up**

Follow-up is an important part of effective control. Because performance reports are based on assigned responsibilities, they are the basis for effective follow-up action. It is important to distinguish between the causes and effect. The performance variation are effects (the result) and the management must determine the underlying causes. The identification of cause is primarily a responsibility of line management. Analysis to determine the underlying causes of both favourable and unfavourable performance variances, should be given immediate priority. In the case of favourable performance variance, after identifying the basic cause as opposed to the results, an alternative for corrective action must be selected and the corrective actions be implemented. If

performance variances are favourable, the underlying causes should be identified and this is helpful improving efficiency (Glenn, 1995: 88).

## **2.1.7 Importance and Limitation of Profit Planning and Control**

### **2.1.7.1 Importance**

After knowing the meaning and process of profit planning control it is useful to know about it's importance. It can be adopted to any business at any condition. It is very important to emphasize on developing positive reinforcement, improving motivation, developing goals copying with the effect of budgetary pressure, resolving budget padding problems and using budget control. There are some importance of profit planning and control, which are shown below (Glenn, 1995: 60-61):-

1. It focuses early consideration 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 enterprise.
3. It compels all member of management from 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 supervision are needed.
10. It frees executives from many day-to-day interval problems thought predetermined policies and clear-cut authority relationship. It thereby 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 understanding 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; banks commonly require a projection of future operations and cash flows to support large loan.
17. It checks progress or lack of progress toward the objectives of the enterprises.
18. It forces recognition and corrective action (including rewards).
19. It rewards high performance and seeks to correct unfavourable performance.
20. It forces management to consider expected future trends and conditions.

#### **2.1.7.2 Limitation**

The following main arguments are usually given against profit planning and control or they are main limitation of profit planning and control (Glenn, 1995: 60):-

1. It is difficult, if not possible, to estimate revenues and expenses in our company realistically.
2. Our management has not interest in all the estimates and schedules. Our strictly informal system is better and work well.
3. It is not realistic to write out and distribute our goals, policies and guidelines to all the supervisors.
4. Budgeting places too great a demand on management time, especially to revise budgets constantly. Too much paper work is required.
5. It takes away management flexibility.
6. It creates all kinds of behavioural problems.

7. It places the management in a strait jacket.
8. It adds a level of complexity that is not needed.
9. It is too costly, aside from management time.
10. The managers, supervisors and other employees hate budgets.

### **2.1.8 Development of Profit Plan**

The management decisions in developing the profit plan were the statements of broad objectives, specific goals and basic strategies. The profit plans are based on structured planning process that includes a series of different sub-plans.

1. The sales plan or budget.
2. The production plan or budget.
3. The material plan or budget.
4. The direct labour plan or budget.
5. Expenses plan or overhead budget.
6. Flexible expenses plan or budget.
7. Capital expenditure plan or budget.
8. Cash budget.

#### **2.1.8.1 The Sales Plan or Budget**

Sales planning are the foundation of all other budgets. It is most important but difficult to prepare. Sales plan provides basic management decision about marketing. Marketing decision are the basic approaches for developing a comprehensive sales plan. Since, the sales planning process is a necessary part of Profit Planning and Control (PPC).

A sales plan should be realistic. If it is not realistic, most other parts of the overall profit plan also are not realistic. So, management should develop a realistic sales plan. If management cannot develop realistic sales plan, it will be little justified. Similarly, if it is difficult to assess the future revenues of business, there are little incentives for investment.

A comprehensive sales planning includes strategic and tactical sales plans. A sales plan incorporates such management decision as objectives, goals strategies etc. These translate into planning decisions about planed volume of goods, services price, promotion and the other sales effect (Ojha and Gautam, 2011:13-14).

The purposes of a comprehensive sales plan are as follows:

1. It reduces future uncertainty about future revenue.
2. It incorporates management judgment and decisions in planning process.
3. It facilitates management to control of sales activities.

### **Factor Consideration in Sales Planning**

The following factors should be considered while preparing sales plan:

- General economic conditions.
- Sales trends of specific products.
- Anticipated results of advertising and promotional campaigns.
- Effect of proposed price change.
- Entrance of competitor in market.
- Shifting of market.
- Introduction of new, improved, substitute products by company of its competitors.
- Company's productive capacity.
- Government rules and regulations etc.

### **Sales Planning and Forecasting**

It is important to make distinction between sales planning and forecasting because they are confusing and ambiguous. A forecast is not a plan. It is a statement of future condition about a particular subject based assumptions. It may be accepted or rejected or modified or rejected by management. Therefore, it is only one input of a compressive sales plan. A sales plan incorporates all management decision that are based on forecast, other inputs and management judgment about such related items as sales volume, price production, financing. Therefore, a sales plan is not conditional

but forecast is conditional. It is also technical staff function (Ojha and Gautam, 2011:13-14).

The difference between sales plan (budget) and sales forecast can be explained as follows:

- Forecasts are merely well educated estimates or inference about future probable events whereas a budget relates to planned events and is the quantitative expression of business plan and policies to be pursued in future.
- Budgeting begins where forecasting ends. In fact, forecasting provides the logical basis for preparing the budgets.
- A budget provides standard for comparison with the results actually achieved, thus, it is an important control device of management, whereas forecasting represents merely a probable event over which no control can be exercised.

### **Long-range and Short-range Sales Plan**

Long range sales plan is known as strategic sales plan. Usually it is of 5 to 10 years. It is to be developed in broad and general management policies and assumptions by year and annual amount. Usually it is prepared by considering future market potentials, population changes, state of economy, industry projections, company objectives and long-term strategies because they affect in such area as pricing development of new product line, innovation of product, expansion of distribution channel, cost patterns.

Short-range Sales Plan is also called tactical sales plan. It is to be developed for short period of time detailed by products, months and quarters for future 12 months. Tactical sales plan includes detailed plan for each major products and for grouping of minor products. Short-term sales plans are usually developed in terms of physical units of jobs and in sales or dollars. For planning and controlling purposes, short-term sales plans must be developed by sales responsibility. Because short-term profit plan provides major considerations for planning and controlling purposes, it is also necessary for completing other components of profit plan.

### **Development of Comprehensive Sales Plan**

The following process should be followed to develop a comprehensive sales plan:

Step -1 Development management guidelines specify to sales planning including the sales planning process and planning responsibilities.

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

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

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

Step - 5 Secure managerial commitment to attain the goal specified in the comprehensive sales plan.

(Ojha and Gautam, 2011:17).

**Table No. 1**

**Components of Comprehensive Sales Plan**

| <b>Components</b>                          | <b>Strategic Plan</b>                            | <b>Tactical plan</b>                                     |
|--|--|--|
| Management Policies and Assumption         | Broad and General                                | Detailed and Specific for the year                       |
| Marketing Plan (Sales and Service Revenue) | Annual amounts major groups                      | Detailed by product and responsibility                   |
| Advertising and promotion plan             | General by year                                  | Detailed and specific for the year                       |
| Distribution (selling) expenses plan       | Total fixed and total variable expenses by year. | Fixed and variable expenses by month and responsibility. |

(Ojha and Gautam, 2011:16).

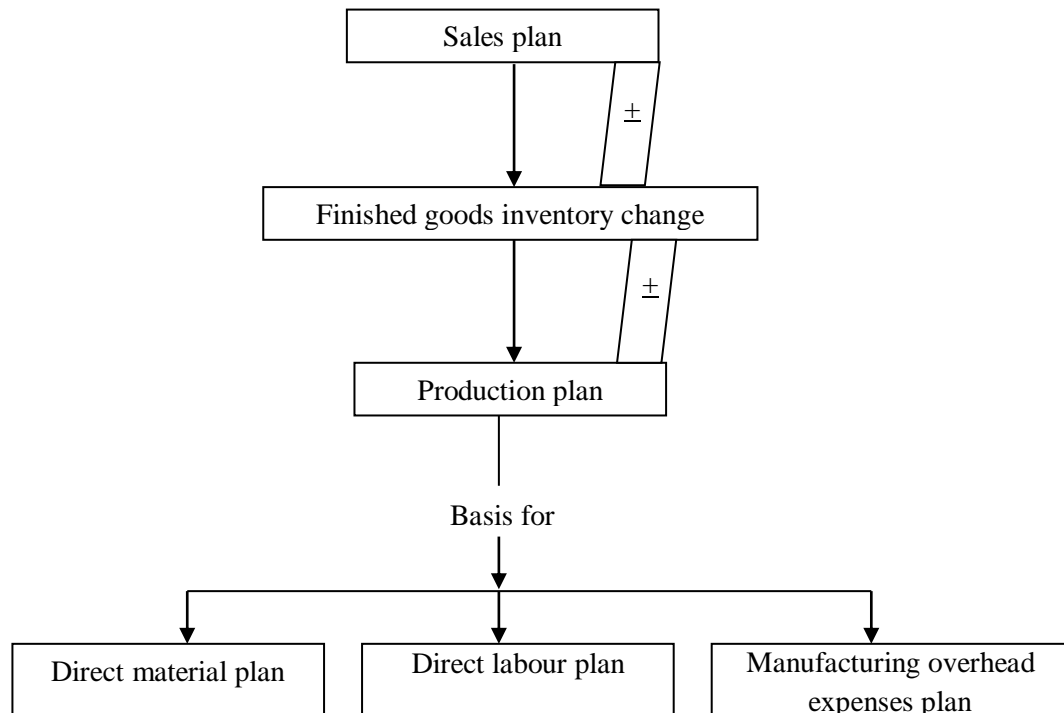
**2.1.8.2 The Production Plan or Budget**

A next step in the manufacturing enterprises after a tentative approval of sales plan is the preparation of a production plan. The production plan is an important tool of planning, coordination and control in a manufacturing organization. Development of a production plan requires the conversion of sales plan into production program. It interlinks the activities such as materials planning, labor planning, overhead planning etc.

The production plan specifies the planned volume of each product to be produced for each time period throughout the planning period. This entails the development of policies about efficient production levels, use of productive facilities and inventory

levels. The quantities specified in the marketing plan. Adjusted to confirm to production and inventory policies, give the volume of goods that must be manufactured.

It can be presented in equation:



(Ojha and Gautam, 2011: 39).

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

Step 1: To establish policies for inventory level.

Step 2: To plan the total quantity of each product that is to be manufactured during the budget period where the sales unit should be considered.

Step 3: To schedule this production by interim period when the production plan has been completed by a production manager, (i.e. monthly, quarterly etc.) it should be provided to the executive committee for evaluation and then to present for tentative approval period to use as a basis for developing the direct material, direct labour and factory overhead.

The production planning has different areas which can be explained as below:

**Direct Market Sales:** When the production is based only with market demand, the production process starts after the demand of goods. In case of job or, unit production system production budget is not necessary. The quantity produced is always equal to the quantity sold.

**For Inventory:** When the nature of product is scarce, firm can manufacture goods in full capacity. In other words, when demand is higher than supply, the firm can produce goods as much as possible. Therefore, production budget is not necessary. The quantity produced is always equal to the quantity sold.

**For Sales and Inventory:** Production budget is importance when goods are produced for either selling or storing purpose. In this case, budgeted sales and inventory affects the production volume of the firm. Therefore, the objective of the production should be clear.

### **Responsibility for Production Planning**

Different people have different responsibility for preparing production planning in manufacturing industry which is explained below.

- i. **Chief Executive:** The responsibility of chief executive is to formulate objectives and policies of organization. They are as follows:
  - Production policy: Stable production policy vs unstable production policy.
  - Inventory policy: Stable inventory policy vs unstable inventory policy.
  - Flexibility in both production and inventory policy.

- ii. **Sales Manager:** Production plan bases on the sales budget. The accuracy of production budget depends on the accuracy of sales plan. The sales manager is responsible to provide accurate sales budget in time.
- iii. **Production Manager:** The production manager is responsible to prepare production plan for the company. Production planning, scheduling, dispatching of goods in time are the functions of the production manager. Therefore, production manager prepares the production budget considering availability of personal, plant capacity, raw materials and parts and technology.
- iv. **Production Supervisor:** Production supervisor makes a tactical production plan. He/She must know about standard rate of direct material and direct labour production hours, strike, seasonal variation and other areas of tactical plan.
- v. **Administrative Manager:** Administrative manager must appoint the required number of labour and personal. The appointment must be optimal and the required skilled manpower must be provided in time. Therefore, personal policy affects the production policy of organization.
- vi. **Financial Manager:** The financial manager must provide standard rate, historical data and capital additional plan in time. The financial position must be strengthened before production to pay the wages to the labourers, cost of raw material, overhead expenses and purchase the additional plant and tools (Goet, 2005:3.2).

### **Factors Consideration in Production Planning**

The following factors are to be considered for production planning:

- Plant capacity.
- Availability of raw materials.
- Types of raw materials.
- Availability of capital.
- Availability of labour.
- Timing of production.

- Establishment costs.
- Economic lot size.

## **Production Policies**

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

### **i. Stable Production Policy or Unstable Inventory Policy:**

An equal ending inventory is kept every time, so the planned production fluctuates with the size of planned sales units. Therefore, budgeted sales of that period are unequal (Ojha and Gautam, 2011:42).

There are several advantage and disadvantages for applying this policy which are as under:

#### **Advantages**

- It utilizes the full capacity.
- It reduces labour turn over.
- It ensures regular supply of raw materials.
- It ensures availability of skilled manpower.
- It ensures stability of employment.
- It increases in efficiency.
- It attracts better employees.
- It reduces in training expenses.
- It ensures volume discount or raw material purchase.
- It avoids idle capacity.

#### **Disadvantages**

- It needs high storage facility.
- It needs high capital requirement.
- It has high risk on inventory.

- ii. Unstable Production Policy or Stable Inventory Policy:** In this policy units of final inventory are to be stable at the end of each period and production units are to be fluctuated in each budget period. The number of units produced and budgeted sales are directly related (Ojha and Gautam, 2011:42).

This policy have also some advantages and disadvantages which are as under.

#### **Advantages**

- It has low storage problems.
- It requires low capital requirement.
- It has low inventory cost.
- It ensures proper preservation of inventory.
- It has less obsolescence due to lack of inventory.

#### **Disadvantages**

- It has low efficiency of employee.
- It has high labour turn over.
- It needs high training expenses.
- It cannot ensure regular supply of raw material.
- It ensures increase idle capacity.

- iii. Flexible in Both Inventory and Production:** In this policy, production unit and inventory level differ from time to time in the specified budget period. This policy is useful when the market (factor effecting of sales) is fluctuating time to time (Ojha and Gautam, 2011:43).

#### **Production Control**

The production control system is an importance part of production plan. It is an important tool used for managerial control of cost, time, quantity and quality of goods. The major procedures of production control are given below:

- Material Control
- Analysis of production process by responsibility centers in the production division.

- Routing
- Scheduling
- Dispatching
- Follow-up (Fago, 2004: 30-35)

### **2.1.8.3 The Material Plan or Budget**

- iv. Planning and controlling of material purchase and material use is a comprehensive profit, planning and controlling of raw material and parts involved in production process. In other word, material budget co-ordinates raw material and part required for production, inventory level of raw material and parts that must be purchased. Raw material budget is prepared after the planned production (Ojha and Gautam, 2011:72).

#### **The Objectives of Material Budget are as follows:**

- To provide quantity data for purchase of material and parts.
- To provide quantity data to compute material cost per unit.
- To establish effective inventory policy.
- To prepare effective cash budget.
- To introduce effective control system on material use.

#### **The followings are the main components of Material Budget:**

##### **Material and Parts Budget**

It helps to determine the quantities of materials and parts needed for production. It is determined as under.

Material budget = planned production × standard usage rate.

- i. **Material and Parts Purchase Budget:** It includes the quantities of materials to be purchased, estimated price and the required inventory level for seasonal variations. Timing for purchase and quantity to be purchased can be determined as follows (Ojha and Gautam, 2011:72).

Timing for purchase/Re-order point = Replacement Stock + Safety Stock

Quantity to be purchased (Economic order quantity)

$$EOQ = \sqrt{\frac{2Ao}{c}}$$

Where,

A = Annual requirement in unit.

o = Ordering cost per order.

c = Carrying cost of carrying one unit of inventory for one year.

Purchase of material can be determined as follows:

Purchase = Material usage + closing stock of raw material – opening stock of raw materials

**Materials/Parts Inventory Budget:** Material inventory budget refers the budgeted level of material and parts inventory in terms of units and cost. In other word material inventory budget deals with the difference between the required quantities budget and purchased unit budget. It can be computed as follows.

Closing stock of raw materials = Opening stock of raw material + purchase of raw material – material usage of raw material.

**Cost of Materials and Parts Budget:** Cost of material and parts budget is planned cost of the materials parts used in production process. It should be computed as follows:

Material cost = Material usage × Material cost per unit

(Fago, 2004: 67-68)

#### **2.1.8.4 The Direct Labour Plan or Budget**

Planning and controlling labour costs involve major and complex areas

(1) human resource needs, (2) recruitment, (3) training, (4) job evaluation and specification, (5) performance evaluation, (6) union negotiations, and (7) wage and salary administration. Labour costs are composed of all expenditures incurred for employees: top executives, middle management personnel, staff officers, supervisor, foremen, skilled workers and unskilled workers. It is necessary to consider separately the different types of labour cost.

Direct labour budget is also developed from the production budget. Direct labour requirements can be computed by multiplying product to be produced in each period by the number of direct labour-hours required to produce each unit.

### **Components of Direct Labour Budget**

Basically, there are three components of direct labour budget.

**(i) Direct Labour Hour Budget:** It estimates the total direct labour hours required for each product by time and responsibility. It is computed as:

Total direct labour hour required = Planned production  $\times$  standard time required per unit of output.

**(ii) Manpower Budget:** It estimates the number of each kind of manpower by department and time.

Number of labour = Total labour hour required  $\div$  working hour per period per time (month)

Working hour per person per month = Normal working hours per person per day  $\times$  working days in a time (month)

**(iii) Direct Labour Cost Budget:** It estimates the total direct labour costs by product, time and responsibility. To get direct labour cost 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 department, cost center or operation. The multiplication of the department's cost center's or operation's total unit by the unit labour cost rate gives the total direct labour cost for each product.

### **Approaches Used in Planning Direct Labour Time**

**Time and Motion Studies:** It is made by industrial engineers. They analyze the operations required on a product and determine a standard time for each specific operation. So this study provides reliable information about labour time needed to perform each specific operation.

**Standard Costs:** Standard cost accounting system also provides information on direct labour have requirements per unit of production.

**Direct Estimate by Supervisor:** Some production supervisors estimate. Standard direct labour hour base on their judgment, recent past performance of the department, assistance from the next level of management and technical staff personnel.

**Statistical Estimates by a Staff Group:** In this approaches historical cost records are used to obtain useful information for converting production requirements to direct labour hour. It is used by producing department. The historical ratio of direct labour hours to some measure of physical output is computed and then adjusted for planned changes in the responsibility center (Goet, 2005: 6-6.3).

### **2.1.8.5 Expenses Plan or Overhead Budget**

Planning and control of expenses are necessary to maintain reasonable expenses level to support the objectives and planned program of the enterprise. It should not focus on reducing expenses but rather on better utilization of limited resources. So, it should focus on the relationship between expenditures and benefits derived from those expenditures. The two terms cost and expenses are often used in the same sense. But for financial accounting purposes, cost is defined as an expenditure that entirely recorded as an assets and becomes expenditure when it is used up in the future. So on for management accounting purposes, these terms are however, not rigidly defined. They are used interchangeably.

All costs do not show the same behaviour throughout the operation. There exists a relationship between costs and volume of activity.

#### **Variable Cost**

Variable costs are the costs that tend to vary in direct proportion and same direction to changes in production activity, sales activity or some other measures of volume of cost driver. So, we conclude that

- Total variable costs are proportionately related to operating activity levels.
- Variable cost per unit remains constant.
- Variable costs can be regulated and controlled in the same responsibility center and in the short run as well.
- Cost that changes proportionately in total but remains fixed per unit is variable.

## **Fixed Cost**

Fixed costs remain constant whether activity increase or decrease or it is subject to change over a period of time. They key features of fixed costs are as follows:

- Total fixed cost are constant.
- Fixed costs per unit are variable.
- Fixed costs are either capacity cost or the time costs or the committed costs.
- Fixed costs are regulated and controlled in a short-term period and by the lower level responsibility center.

## **Semi-variable Costs**

Semi-variable costs are also known as mixed costs as they consist both of fixed costs and variable costs. The first part will not be affected by the changes in the volume/activity. But the later part will be affected by the change in activity.

## **Cost Reduction and Cost Control**

**Cost reduction** programs are directed towards specific efforts to reduce cost by improving methods, work arrangements and products.

**Cost control**, in a narrow sense, may be through of as to attain cost goals within a particular operational unit. In a broad sense, cost control includes cost reduction. Programme (without reducing the utility). To exercise control so that desired benefits (i.e. cost goals) could be obtained from the given level of expenses.

Three broad categories of expenses are included in the overhead.

### **A. Manufacturing Overhead:**

It is a part of total production cost. It consists of indirect material, indirect labour and all the miscellaneous factory expenses such as taxes, insurance, depreciation, repair etc. Following steps should be taken for developing the manufacturing overhead budget.

- Select the appropriate activity base.
- Compute total volume of work/activity for each department.
- Compute overhead rate for each production department.
- Computer overhead cost per unit for each product.

- Compute the cost of goods manufactured.

### **B. Selling and Distribution Expenses Budget:**

This includes all cost relating to selling distribution and delivery of product to customers. It's main aspects are:

**Planning and Co-ordination:** Marketing executive are directly responsible for planning the optimum economic balance between sales budget, advertising budget and distribution expenses budget. PPC views them as three separate problems.

**Control of Distribution Cost:** Distribution include head office expenses and field expenses for the planning and control point of view, these expenses must be planned by responsibility center. These expenses are not product costs. They are not allocated to special products. So, separate distribution expenses plan should be developed for each responsibility center.

### **C. Administrative Expenses Budget**

Expenses other than manufacturing and distribution expenses are administrating expenses. These cost are incurred in the responsibility centers that provide supervision of and service to all functions of the enterprise. They include large portions of fixed costs than variable cost (Goet, 2005: 7-7.8).

#### **2.1.8.6 Flexible Expenses Budget**

Flexible budget is prepared at different level of activities. It will furnish the budgeted figures for any level of activity which a company may actually attain. It reflects costs revenues and profit at the various level of budgeted activity. It is prepared on the basis of time, demand of product, cost of product, availability of demand of product, season and availability of factor of production.

A flexible budget can be used comfortable to reduce the margin of deviation between estimation and actual performance. It is used as a yardstick to measure the efficiency at the level of performance achieved and tool for controlling the cost.

In this way it is differ from the static budget. It will be very useful when the all factors of market are not static or they are dynamics. So on it is very importance tool for decision making on uncertain environment.

#### **Preparation of Flexible Budget**

We can develop the flexible budget with two methods.

**1. Tabular Method:** Here, the budget prepared at different level of activities within the range of output. The factors to be taken into consideration for preparing the flexible budget under this method are follows:

**(a) Determination of Level of Activity**

The activity levels are determined on the basis of units of output or machine hours, labour hours used in production process.

**(b) Estimation of Cost and its behaviour for each level of activity:**

The costs and estimated for each element of cost together with the cost center at the level of output determined. The organization should determine cost behaviour, fixed variable and semi-variable (About this I already explained in overhead budget part).

**(c) Determination of units at the level of activities:**

The unit of output to be produced at different level of activities are determined for estimating the budget.

**(d) Prepare of flexible budget:**

In this stage the flexible budget should prepare at different level of activities whose example is given below:

**Table No. 2**

**Flexible Budget Format**

| <b>Level of Activities</b>                 | <b>.....%</b> | <b>.....%</b> | <b>.....%</b> |
|--|---------------|---------------|---------------|
| Sales units/output units                   | xxx           | xxx           | xxx           |
| Sales revenue Rs. (unit × price)           | xxx           | xxx           | xxx           |
| Total variable cost (A)                    | xxx           | xxx           | xxx           |
| Total fixed cost (B)                       | xxx           | xxx           | xxx           |
| Total semi-variable cost (C)               | xxx           | xxx           | xxx           |
| Total Cost (A+B+C)                         | xxx           | xxx           | xxx           |
| Profit (loss) = total Revenue – Total cost | xxx           | xxx           | xxx           |

**2. Formula Format:** This format provides a formula for such expenses account in each responsibility centre the formula gives the fixed amount and variable rate. This is more compact and generally more useful because the components of each expense are given. The formula format uses straight line relationships. It is a widely used for expressing expenses budget in actual practice. The formula format is shown below.

**Table No. 3**

**Flexible Budget**

**Under Formula Format  $y = a + bx$**

| <b>Expenses</b>      | <b>Cost Behaviour</b> | <b>Fixed cost</b> | <b>Variable cost</b> |
|----------------------|-----------------------|-------------------|----------------------|
| Different Cost Items | -                     | xxx               | xxx                  |
| Total                | -                     | xxx               | xxx                  |

(Fago, 2004: 7-7.4)

### **2.1.8.7 Capital Expenditure Plan or Budget**

Capital budgeting is a investment decision regarding long term assets for increasing the revenue of the organization. It is the process of investment, evaluating, planning and financing major investment project of an organization. So it is an evaluation system of capital expenditure decision which involve current outlays but are likely to produce benefits over a period of time longer than one year.

**There are some steps which are involved in capital budgeting decision.**

**Step – 1:** Calculation of Net Cash Outlay (NCO)

First we should calculate the total cash outflow at current (zero) period. It involve purchase price, transportation and installation cost, working capital increase etc.

**Step – 2:** Calculation of Cashflow After Tax (CFAT)

In this step we should calculate annual cash flow after tax or total cash receipt amount of the period which is calculated as by Total Revenue – Operating expenses – Depreciation – Tax + Dep.

**Step – 3:** Calculation of Final year CFAT

In final year additional amount may receipt because of the scrap value and working capital. So final year CFAT = Regular CFAT + Net Scrap value  $\pm$  working capital.

After these step (identifying net cash outflow at present and annual Inflow in future) we should evaluate the project, that is profitable or not. For evaluation, we should use different methods which are below.

#### **Traditional Method**

- (a) Payback Period: It is that period or year required in which total cash outflow will covered by inflow. So having shorter payback period project is preferable.
- (b) Accounting rate of return: Accounting rate of return indicates the profitability of the projects instead of net cash flows. It considers profitability rather than liquidity. Under this method project with higher ARR is prefer then lower. ARR is calculated by Averaging of Net income dividing average investment.

$$ARR = \frac{\text{Average net income}}{\text{Average investment}}$$

## **Discounted Cash Flow Method**

Traditional methods do not consider the time value of money so this method have developed. This method considers the time value of money. Before evaluation any project under this method the future cash flow must be converted into present value. The following methods are used to evaluate the projects.

### **(a) Net Present Value**

The net present value is the net benefit at present value of an investment. It is the net differences between present value of cash outflow and present value of an investment. It is the net differences between present value of cash outflow and present value of cash inflow. It can be presented in the following equation.

$$\text{Net present value} = \text{Total present value} - \text{Net cash outlay.}$$

### **(b) Profitability Index**

It is similar to net present value approach. It measures present value of return per rupee invested while the NPV shows the Present Value of Return in lump sum. A ratio of total present value of cash inflow and initial cost outlay is called profitability index.

$$\text{Profitability index} = \frac{\text{Total Present Value}}{\text{Net Cash Outlay}}$$

### **(c) Internal Rate of Rate (IRR)**

It is a discount rate which the net present value of investment will be zero. It is the rate that discounts an investment's future cash flow to the present so that the present value of those cash flow exactly equal the cost of investment. It is presented as follows

$$\text{NCO} = \frac{\sum \text{CFAT}}{(1 + \text{IRR})^n}$$

Project having IRR more than interest rate is preferable. (Fago, 2004: 12-12.12)

## **2.1.8.8 Cash Budget**

Cash budget is the very important tool of profit planning and control or cash management. It is an integral part of cash planning. It is a plan of future cash receipt

and payment. The statement showing the estimated cash income (cash inflow) and cash expenditure (outflow) over a projected time period is known as cash budget. The forecast of cashflows are made on the basis of past behaviour of cash flows as modified and adjusted to likely changes during the coming period. It is one of the major responsibility of management to plan, control and safe guard the cash of enterprises. An annual profit plan, short term cash plan is also to be includes. Basically cash budget includes two parts:

- (a) The planned cash received (inflows) and
- (b) The planned cash disbursement (outflows)

Planning of cash inflow and outflow gives the planned beginning and ending cash positions for the budget period. It will indicate

- Need for financing probable cash deficit.
- Need for investment planning to put excess cash to profitable use - cash budget is prepared after preparing excess sales, production, material, labour, overhead, selling and distribution expenses budget. Generally it is prepared monthly.

There are several objectives of cash budget which are follows:

- Give the probable cash position at the end of each period as a result of planned operations.
- Identify cash excess or shortages by time periods.
- Establish the need for financing and on the availability of idle cash for investment.
- Coordinate cash with
  - (a) Total working capital
  - (b) sales revenue
  - (c) expenses
  - (d) investment
  - (e) liability.
- Establish some basis for continuous monitoring of the cash position.

- Indicate the availability of cash discount.
- Preserve liquidity.

Following is the format of cash budget.

**Table No. 4**  
 ..... company  
**Cash budget, by month**  
**For the year...**

| Items                     | Jan (Rs.) | Feb (Rs.) | March (Rs.) |
|---------------------------|-----------|-----------|-------------|
| Opening balance           | xxx       | xxx       | xxx         |
| Add: Cash receipt         |           |           |             |
| Cash sales                | xxx       | xxx       | xxx         |
| Collection from customers | xxx       | xxx       | xxx         |
| Other's receipts          | xxx       | xxx       | xxx         |
| Total Cash receipt (A)    | xxx       | xxx       | xxx         |
| Cash payment              |           |           |             |
| Purchases                 | xxx       | xxx       | xxx         |
| Wages                     | xxx       | xxx       | xxx         |
| Other expenses payment    | xxx       | xxx       | xxx         |
| Capital expenses          | xxx       | xxx       | xxx         |
| Total Payment (B)         | xxx       | xxx       | xxx         |
| Surplus (deficit) (A-B)   | xxx       | xxx       | xxx         |
| Borrowing                 | xxx       | xxx       | xxx         |
| Repayment                 | xxx       | xxx       | xxx         |
| Interest payment          | xxx       | xxx       | xxx         |
| Closing cash balance      | xxx       | xxx       | xxx         |

\*Closing balance of month is opening balance of next month.

(Ojha and Gautam, 2011:196-197)

## **2.1.9 Completion and Implementation of Profit Planning and Control**

### **2.1.9.1 Completion of the Annual Profit Plan**

The development of an annual profit ends with the planned income statement, the balance sheet and the planned statement of changes in financial position. These three statements summaries and integrate the details of plans developed by management for the period. They also repost the primary impacts of the detailed plans developed by management for the period. They also report the primary impacts of the detailed plans on the financial characteristics of the firm. Before redistributing the completed profit plan, is generally desirable to recast certain budget schedules so that technical accounting mechanics and Jargon are avoids as much as possible. The redesigned budget schedules should be assembled in one logical order, reproduced and distributed before the first day of the up-coming budget period. The profit plan completion date is important. Issuance of a profit after the beginning of the budget period is one sure way of destroying much of tic budget potential. Timely copulation to the planning budget suggests the needs for a nudged manner.

### **2.1.9.2 Implementing the Profit Plan**

The final test of whether the effort and cost in developing a profit plan are worthwhile is its usefulness to management. The plan should be developed with the conviction that the enterprises in going to exceed all major objectives. Participations enhance communication. If this principle is to be effective the curious executives and supervisors should have a clear understand of their responsibilities. The copied of the complete profit plan should be prepared and distributed to the members of executive management. Normally, distribution of the completed plan should be limit to vice presidents and to the heads of the certain staff groups. The guiding principle in establishing the distribution policy might be expressed to provide one copy to each member of the management term according to his or her overall responsibilities, taking into account the problem of security. The distribution policy should allow distribution of pars, or segments, of the profit plan to middle and lower management. For example, a sales district supervisor would not be given a copy of the entire budget. But should receive those parts that apply to his particular responsibility, such as the sales budget, and advertising budget for his district, after distribution of the profit, plan, a series of profit plan conferences should be held. The top executive

discusses comprehensively the plans, expectation and steps in implementation. At this top-level meeting the importance of action flexibility and continuous control may well be emphasized. In particular, it must be realized by each manager, that the budget is a tool for their use. The profit plan, no matter how well designed and how well carefully drawn cannot manage, in the final analysis people, not budgets perform the management functions use of a profit plan as a guide to action and performance, directed toward attaining or bettering the goals qualified in the annual profit plan required continuous management effort and attention.

Similar conference should be conducted until all levels of management are reached. Each executive and supervisor must clearly understand his particular responsibilities. This conference should and, if conducted properly, will tend to ensure action support for the objectives. Basically, this is a phase of communication from the top down a generally neglected phase in management.

The profit plan provides the managers of each responsibility center an approved operating plan for his center, thus the planning budget becomes the basis for current operation and exert considerable coordinating and controlling effects.

Performance must be measured and reported to management. Execution of the plan is assured through control. Procedures must be established so that accomplishment, or failure, is immediately known. On this basis action can be taken to correct or minimize any undesirable effects. Short-term performance reposting is essential.

The flexibility of the key aspect of the budget implementation. To view the profit plan as an inflexible blueprint of operations is to invite trouble. Obviously, it is impossible during the planning phase to anticipate all contingencies each day may present contingencies not anticipate in the plans. Therefore, current adjustments must be made in operating plans despite the ordinary budget. The budget should not be viewed as restrictive influence but rather as a specification of the goals of the entity. Certainly every advantage should be taken as it arises despite its not having been anticipated in the budget. Taking advantage of favorable opportunities as they arise is primary responsibility of the management.

#### **2.1.10 Performance Report**

The performance report is an effective controlling tool for profit planning and control. The performance reporting phase of comprehensive profit planning and control

program significantly influences the extent to which the organization's plan, goals and objectives.

To indicate the extensive reporting requirements a business must fulfill and to focus on performance reporting the following broad classification of reports is presented and briefly explained.

### **External Reporting**

These are reports to government agencies, regulatory commissions, creditors, investigative agencies and other groups external to the active management, frequently, these reports are quite extensive and comprise a significant portion of the overall reporting activities of the business.

### **Report to Owners**

These are reports prepared within the company for internal use only. They may be considered confidential reports, they do not have to meet the needs of external groups nor the text of generally accepted accounting but rather the text of internal management needs.

All companies regardless of size have reporting requirements for all the categories listed above. In the smaller company most of the basic reporting needs may be accomplished with a single general purpose report. However, as the size and complexity of the company increases, there is greater need for regimentation of the reporting as suggested above.

### **Essential Features of Performance Reports**

Performance reports should be:

- (a) Tailored to the organization structure and controllability.
- (b) Designed to implement the exception principle in management.
- (c) Repetitive and relate to short time spans.
- (d) Adapted to the requirement of the principle use.
- (e) Simple, understandable and report only essential information.
- (f) Accurate and expressive of significant distinctions.
- (g) Prepared and presented promptly.

(h) Constructive in tone.

The extent to which the various managers utilize their performance reports depends upon many factors, some behavioural and some technical. One important factor is to extent to which the performance reports serve the evaluation and decision-making needs of the user. Communication is a subtle problem, if the different needs and experiences of the user are taken into account. A foreman responds differently than a vice president.

Top management must have reports that give a complete and readily comprehensible summary of the overall aspects of operations and an identification of major events. The summaries must be supported by sufficient detail to facilitate tracing unfavourable situations to their source.

Middle management is usually defined as those members of the major sub-division of the business, such as sales, production and finance; middle management is responsible for carrying out the responsibilities assigned to be sub-divisions with in the broad policies and objectives established by top management. Performance reports for middle management, although including summary data, also are characterized by detailed data on day-to-day operations.

Lower level management is principle concerned with coordination and control of day-to-day operation, therefore, control reports must be designed accordingly. These reports are principally concerned with production and cost control. Reports to foremen and supervisors must be detailed, simple, understandable, and limited to items having a direct bearing on the supervisor's operational responsibilities.

### **2.1.11 Analysis of Budget Variance**

Comparison of actual performance and planned performance has been emphasized as an integral part of the control process. A basic features of performance reports is the reporting of variances between actual results and planned or budget goals. If a variance is significant, a careful management study should be made to determine the underlying causes. The underlying causes, rather that the actual results, should lead to remedies through appropriate corrective action by management. There are numerous ways to study or investing variances to determine the underlying causes. Some of the primary approaches are the following.

- (a) Conference with responsibility centre managers and supervisors and other employees in the particular responsibility centre involved.
- (b) Analysis of the work situation including the flow of work, coordination of activities, effectiveness of supervision and other prevailing circumstances.
- (c) Direct observation.
- (d) On the spot investigations by line managers.
- (e) Special studies.
- (f) Investigations by staff groups.
- (g) Variance analysis

Variance analysis involves a mathematical analysis of two sets of data in order to gain insight into the underlying causes of a variance. One amount is treated as the base, standard or reference point. Variance analysis has wide application in financial reporting. Variance are analyzed in the following areas:

- (a) Raw materials variances
- (b) Labour variances
- (c) Overhead variances
- (d) Sales variances
- (e) Profit variances

Variance is the deviation between actual and budgeted or standard results. Following are the basic steps in analyzing variances:

- (a) Setting standards
- (b) Measurement of actual performance.
- (c) Analyzing variances.
- (d) Taking corrective action or feedback.

Variance should be broadly grouped under two categories; favourable and unfavourable variances, further should be classified as controllable and non-controllable. If unfavourable variance are arise due to controllable causes, then related centre or management should be accounted for responsibility.

## **2.2 Review of Previous Related Studies (Journals, Articles and Thesis)**

During the research work the previous study about it is the very importance because they provide bases for the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past research studies. Literature review is basically a stock taking of available literature in the field of research.

The main purpose of literature review is to find out what studies have been done in the field of study and what remains to be done. It provides the foundation for developing a comprehensive theoretical framework and minimize the risk of pursuing the dead-ends in research. Thus different books, reports and journals research studies published by SGML and other organization submitted by master level students in the topic of profit planning have been reviewed.

**Mundul (2007)** has published an article entitled “Corporate Financial Sector: Restructuring.” He mentioned that corporate and financial sector restructuring are two aspects of the same problem. The amount of debt and company can sustain – and on which lenders can expect reliable debt service - is determined by the unit’s cashflow. Indeed, a company cannot sustain interest payments in excess of its cashflow (i.e. interest coverage < 1:1), let alone make any repayments on the principal. Hence, substantially higher ratios of interest coverage are most desirable. He concluded that the corporate debtors and financial institution creditors will naturally seek to minimize their losses from corporate restructuring. The government has a role to play in balancing a variety of conflict interest.

**Thapa (1999)** has studied about “Profit Planning in Manufacturing Enterprises in Nepal (A Comparative Study in Dairy Development Corporation and Sitaram Gokul Milks). The main objectives of this study were to analysis to functional budgets on sales and production sector of the concern, to analyze various accounting ratios to measure the profitability and efficiency of concern, to study of present process to find its usefulness and limitation and to analyze of budget target and its achievement along with reason of deviation if any etc.

**Major Findings of the Study:-**

- (a) DDC has been trying to minimize the loss and SGML has concentrates its whole effort to the survival of the company. Both industries have no in depth analysis of company's strength and weakness.
- (b) Employees are more careful of their duties and responsibility in SGML than DDC. No fair system of reward and punishment to them on the basis of their performance is maintained in both industries.
- (c) SGML's capacity utilization is proper than DDC's capability utilization.
- (d) Both companies are positive correlation between target and actual sales.
- (e) Both companies have not proposed profit planning except sales and production plan.

**Bhattarai (2004)** has conducted a research about "Sales and Production Planning in DDC" in his research. He has tried to point out some feature and problem of profit planning in Nepalese manufacturing public enterprises.

**Major Findings of the Study:-**

- (a) DDC has practiced short term planning rather then long term planning.
- (b) The corporation has no proper practice of segregating cost into fixed and variable.
- (c) There is not separate planning development and expert planner is prepared on tradition and adhoc basis.
- (d) No proper management to supply milk in the urban areas because of the difficult in collecting surplus milk in rural market.
- (e) Financial position of the DDC has not good.
- (f) DDC has problem of maintaining the quality of the products.

**Acharya (2005)** has studied about "Sales Planning of Nepal Telecom". The main objectives of this study were to analyze the existing sales planning system of Nepal Telecom, with seasonal demand, to study the relationship between sales plan with other expenses, to analyze the relation between sales and profit, to analysis BEP of

Nepal Telecom, to provide suitable suggestion and recommendation on the basis of study.

**Major Findings of the Study:-**

1. NT prepares both long term and short term profit plans but the long term profit plan is confined only to top level.
2. Long range sales planning of NT are not shown according to category of consumer and time wisely.
3. NTs budget is not realistic to its sales and production achievement.
4. Idle capacity of installed telephone lines is as increasing trend. Which, affects to generate revenue.
5. NT fail to analyze its strengths and weakness in depth because of the absence of the competitors, it has become monopolistic concerns concern, and hence, it is not alert towards its possible threats and opportunities.

**Tiwari (2007)** has conducted his research entitled "Profit Planning in Nepal Electricity Authority." He has tried to examine whether the NEA applying profit planning system properly or not analyzed if there is any draw back in profit planning system of the authority. The basic objectives of this study are as follows.

**Major Findings of the Study:-**

1. The authority fails to maintain its performance report systematically.
2. Low level staffs are not encourages to participation but only executive level.
3. Total acid turnover ratio, profitability ratio, return on net capital employed ratio are perfectly satisfactory.
4. Overhead are not classified systematically and creates problem to analyze its expenses proper.
5. The authority is suffering from high fixed cost.
6. Specific goals and objectives are not conveyed to lower level staff and it denotes the absence of MBO principle of management.
7. There is lack of proper coordination between the various responsible departments.

8. Absence of skilled and partly academic manpower in budgeting section of authority.

**Kunwar (2010)** has studied about “Profit Planning in Public Utility Enterprises of Nepal; A Case Study of Nepal Electricity Authority”. The main objectives of this study were to manage electricity supply by way of effective generation and distribution.

**Major Findings of the Study:-**

1. Achievement of authority for actual sales is more variable than budgeted sales and actual production is also more variable than planned production.
2. Overhead are not classified systematically and creates problem to analyze its expenses properly.
3. NEA has no proper record of manufacturing and it has no proper practice of segregating cost into fixed, variable and semi variable.
4. NEA is paying a large amount of interest every year and it is suffering from high fixed costs.
5. NEA is suffering from idle cash and bank balance.
6. Goals and objectives are not clear cut of the authority.

**Basnet (2011)** has conducted a research about “Profit Planning and Control (PPC) of Machhapuchhre Bank Limited” in his research. He has tried to examine the main approaches of profit planning and to test the extent of achievement of planning of MBL.

**Major Findings of the Study:-**

Total revenue has been increasing every year. Revenue from foreign currency exchange and revenue from other income is in fluctuating trend.

1. Total expenditure has been increasing every year. Interest expenses is the major part of the expenditure of MBL. It is increased every year. Operating expenses and employee expenses has been increasing every year.
2. Along with the increment of total deposit, interest expenses is also increased every year.
3. Operational profit and net profit of MBL is decreased unexpectedly.

4. Net profit trend shows the negative trend, which is decreased by Rs. 7220.24 thousand every year.

**Joshi (2011)** has conducted a research about “Sales Budget and its Impact on Profitability of Unilever Nepal Limited”. He has tried to analyze the current practices of sales budgeting including cost-volume analysis.

#### **Major Findings of the Study:-**

1. The company did not have practice of preparing sales budget although there was tentative sales budget.
2. The Actual sales were below the budgeted sales.
3. The correlation between the budgeted and actual sales showed a positive correlation (i.e.0.9875). It means that the company can meet its sales goals as budgeted sales.
4. There was no cost classification system in the company. The costs were not segregated into fixed and variable in systematic manner.
5. The company has no practice of systematic sales forecasting. Sales forecasting is not based on realistic approach. It has no practice of using statistical techniques in sales forecasting.
6. Net profits earned by UNL were fluctuating trend.

#### **The Research Gap**

In this way there are more studies done by previous researcher about SGML and other Organization, whose has separate objectives, findings and recommendation. But they are not sufficient for how to implement these recommendations. So on how to improve the management system of SGML. But the researcher has tried to give the optimal solution to implement the recommendation and improve the management system of SGML. So this study will be fruitful to those interested person, scholar, students, teachers, civil society, stakeholders, businessmen and Government for academically as well as policy perspectives.



# Chapter – III

## Research Methodology

### 3.1 General Introduction:

Research methodology is the way to solve scientific process and systemically about research problem. “Research methodology refers to various sequential steps. To adopt by research in studying a problem with certain objective in view” (Kothari 2009. 39). In other words research is a careful investigation of inquiry especially through search for new facts in any branch of knowledge. Research methodology helps to analyze, examine and interpret various aspects of research works such as sale and production planning and other aspects related to profit planning in the research work. Its way of basic objectives and other sub objective are also formulated and research methodology is followed to achieve the objectives of the research paper. Major contents of research methodology are research design, period covered, nature and sources of data, research variables, statistical tools used and research procedure followed in the study are as below.

### 3.2 Research Design

Research design is the plan structure and strategy of investigations conceived so as to obtain answers to research question and to control variance (Kerlinger). In other word make any type of research to necessary for fulfills the objective of the study and problem. Generally research design means definition procedure and technique which guide to study and foundation way for research through analysis data. This study is an examination and evaluation of budgeting procedures in the process of profit planning of SGML. So analytical as well as descriptive approach has been considerable adapted to present data.

This study is closely related with various functional budgets and their actual performance as well as other according statements. The available information from primary and secondary sources is used to examine, explain and evaluate the profit planning system of Sita Ram Gokul Milk Ltd (SGML).

### **3.3 Period Covered**

Profit planning and control “concepts” for two dimensions such as short range and long range. For short range planning it has analyzed one year’s period activities of SGML. Long range trend for analyze from fiscal year 2063/64 to 2067/68.

### **3.4 Nature and Sources of Data**

Actual Data is very important of any research work to achieve the objective of problem. The researcher has been used primary as well as secondary data. Primary data are collected through interviews with official and worker to help developed some supplementary questionnaire.

Secondary data has been collected from the different reports and published document of SGML, magazine, publication of National planning Commission, Statistical Survey, Unpublished dissertation and the official accounting and planning record of SGML. The questionnaires will be shown in the appendix at the end of this study which is used for collecting information about SGML.

### **3.5 Research Variables**

The research variable of this study is mainly related with the accounting statement of SGML sale, production, inventory, purchases, profit/loss statement, balance sheet, capital utilization, capital expenditure and cash flow related to long-term and short-term period of SGML are main research variables of this study.

### **3.6 Statistical Tools Used**

The research variables of the study are mainly related with the accounting statement of SGML. Sales and production are the main variable of this study and other variable are also used here as necessary. Data collected from various sources are managed, analyzed and presented in proper table and format. Interpretation and explanation are made whatever necessary. To analyze the collected data financial and statistical tools are used. Financial tools are mainly used for cost-volume profit analysis, ratio analysis and flexible budget. Similarly the statistical tools are used for mean, correlation, regression, coefficient of variance, standard deviation, percentage graphs and diagrams.

Some Formula

i) **Arithmetic mean**  $(\bar{x}) = \frac{\sum x}{N}$

In mathematics and statistics, the **arithmetic mean**, or simply the **mean** or **average** when the context is clear, is the central tendency of a collection of numbers taken as the sum of the numbers divided by the size of the collection. The collection is often the sample space of an experiment. The term "arithmetic mean" is preferred in mathematics and statistics because it helps distinguish it from other means such as the geometric and harmonic mean.

In addition to mathematics and statistics, the arithmetic mean is used frequently in fields such as economics, sociology, and history, though it is used in almost every academic field to some extent. For example, per capita GDP gives an approximation of the arithmetic average income of a nation's population.

Suppose we have sample space  $\{a_1, \dots, a_n\}$ . Then the arithmetic mean  $A$  is defined via the equation

$$A := \frac{1}{n} \sum_{i=1}^n a_i .$$

If the list is a statistical population, then the mean of that population is called a **population mean**. If the list is a statistical sample, we call the resulting statistic a **sample mean**.

ii) **Standard Deviation**  $(SD_x) = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$

In statistics and probability theory, **standard deviation** (represented by the symbol  $\sigma$ ) shows how much variation or "dispersion" exists from the average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data points are spread out over a large range of values.

The standard deviation of a random variable, statistical population, data set, or probability distribution is the square root of its variance. It is algebraically simpler though practically less robust than the average absolute deviation. A useful property of standard deviation is that, unlike variance, it is expressed in the same units as the data.

iii) **Correlation Coefficient** ( $r$ ) = 
$$\frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

**Correlation coefficient** may refer to:

- **Pearson product-moment correlation coefficient**, also known as  $r$ ,  $R$ , or Pearson's  $r$ , a measure of the strength and direction of the linear relationship between two variables that is defined in terms of the (sample) covariance of the variables divided by their (sample) standard deviations
- **Correlation and dependence**, a broad class of statistical relationships between two or more random variables or observed data values
- **Goodness of fit**, which refers to any of several measures that measure how well a statistical model fits observations by summarizing the discrepancy between observed values and the values expected under the model in question
- **Coefficient of determination**, a measure of the proportion of variability in a data set that is accounted for by a statistical model; often called  $R^2$ ; equal in a single-variable linear regression to the square of Pearson's product-moment correlation coefficient. (The strength of the linear relationship between the values)
- **Intraclass correlation**, a descriptive statistic that can be used when quantitative measurements are made on units that are organized into groups; describes how strongly units in the same group resemble each other.
- **Rank correlation**, the study of relationships between different rankings on the same set of items
  - **Spearman's rank correlation coefficient**, which measures how well the relationship between two variables can be described by a monotonic function
  - **Kendall tau rank correlation coefficient**, which measures the portion of ranks that match between two data sets.

iv) **Coefficient of Variation** ( $C.V.$ ) = 
$$\frac{SD_x}{\bar{x}}$$

In probability theory and statistics, the **coefficient of variation (CV)** is a normalized measure of dispersion of a probability distribution. It is also known as **unitized risk** or the **variation coefficient**. The absolute value of the CV is sometimes known as relative standard deviation (RSD), which is expressed as a %. CV should not be used interchangeably with RSD (i.e. one term should be used consistently).

The coefficient of variation (CV) is defined as the ratio of the standard deviation  $\sigma$  to the mean  $\mu$ :

$$C_v = \frac{\sigma}{\mu}$$

which is the inverse of the signal-to-noise ratio. It shows the extent of variability in relation to mean of the population.

#### v) Regression Equation

Regression Equation(y) = a + bx

Slope(b) =  $(N\sum XY - (\sum X)(\sum Y)) / (N\sum X^2 - (\sum X)^2)$

Intercept(a) =  $(\sum Y - b(\sum X)) / N$

where,

x and y are the variables.

b = The slope of the regression line

a = The intercept point of the regression line and the y axis.

N = Number of values or elements

X = First Score

Y = Second Score

$\sum XY$  = Sum of the product of first and Second Scores

$\sum X$  = Sum of First Scores

$\sum Y$  = Sum of Second Scores

$\sum X^2$  = Sum of square First Scores

In statistics, **regression analysis** includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. Most commonly, regression analysis estimates

the conditional expectation of the dependent variable given the independent variables that is, the average value of the dependent variable when the independent variables are fixed. Less commonly, the focus is on a quantile, or other location parameter of the conditional distribution of the dependent variable given the independent variables. In all cases, the estimation target is a function of the independent variables called the **regression function**. In regression analysis, it is also of interest to characterize the variation of the dependent variable around the regression function, which can be described by a probability distribution.

Regression analysis is widely used for prediction and forecasting, where its use has substantial overlap with the field of machine learning. Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. However this can lead to illusions or false relationships, so caution is advisable. A large body of techniques for carrying out regression analysis has been developed. Familiar methods such as linear regression and ordinary least squares regression are parametric, in that the regression function is defined in terms of a finite number of unknown parameters that are estimated from the data. Nonparametric regression refers to techniques that allow the regression function to lie in a specified set of functions, which may be infinite-dimensional.

Source: google search

### **3.7 Research Procedure**

For a successful research work, several procedures should follow systematically. In this research work the researcher has been followed different procedures systematically which are follows.

- 1) Collection of various books and other publication relevant about study.
- 2) Assimilation of useful secondary data.
- 3) Description and analysis of collected data in light of theoretical basis.
- 4) Tabulation and presentation of data through table, charts and graphs.
- 5) Analysis of data by using statistical and financial tools.
- 6) Finding the valuable conclusion and recommendation.

## **CHAPTER-IV**

### **Presentation and Analysis of Data**

## **4.1 Introduction**

The one important part of planning and control is implementation of effective management performance. The main purpose of profit planning in any business is to increase the chances of making profit. Budgeting or comprehensive profit planning and control to operate continues in the organization. Planning involves the control and manipulation of relevant components controllable and non-controllable to clear definition and reduced the uncertainty, So that the enterprise could be saved from the profit at short term and long term.

Profit planning and control have wide application in any individual business Government unit and any types of business enterprise. It should be regarded not as a master plan but as some time its become secondary business planning. management planning and profit planning are integrated to each other or they are supplement of effective planning process of organization.

The main purpose of this studies is to analyze the sales and production planning (a tools of profit planning and control) of SGML. To gain this purpose in this chapter, the researcher has analyzed the various aspects of profit planning and their actual achievement. Profit planning is the managerial tools, which is applied in every business either manufacturing in trading enterprises. So the profit planning is the formal expression of the enterprises, plan goals and objectives stated in financial term for specific future period of time moreover various strategies, policies, plan and programs are applied by management for achieving prescribed objectives at a competitive business environment.

Profit planning is a managerial technique and profit plan is a written plan, in which all aspects of the business operation with respect of defined future period are included. It is formal statement of policy, plan, objectives and goals established by the top management is respect of some future period. Profit planning is predetermined detailed plan of action developed and as a partial basis for the subsequent, evaluation of performance. So profit planning is a tools which may be used by management in planning the future course of action and the controlling the actual performance.

Budgeting or profit planning is a numerical plan of action, which gradually cover the area of revenue and expenditure or production and sales. Profit is main element of cash and every business for its survival, further development and fulfilling the social

expectation. Organizational effectiveness and efficiency measure by earning power. Generally organizational adopt two types of plan structure and long run. This studies cannot cover two plan because cost and time constraints. Therefore these studies mainly focused in tactical short run profit plan of SGML. So the sales, production and other related figure of previous result are also presented and financial trend of SGML. For this purpose study five year's data from fiscal year data from fiscal year 2063/64 to 2067/68 BS.

The short run profit plan is analyzed by taking relevant figure from various functional budgets on each year. Figure of one fiscal year may represent the techniques, process and other procedure of preparing budget. Their use for profit planning, comparison with actual achievement and analysis of variance for the year because such process are some for every year and repeated each year in the time of preparing and analyzing budget. For this fiscal year 067/68 has been takes as representatives year to analyze short-term profit plan. Various functional budgets of fiscal year 2067/68 and their basis of preparation actual achievement and actual are analyze in detailed. Attempt is made to point out the reason the deviation between budgeted and actual. Some recommendations have been made after analyzing this study.

#### **4.2 The objectives and goals as basic elements of profit planning in SGML.**

SMART objectives and goals is very important for operating any enterprises.

S= Suitable

M= Measurable

A= Applied

R= Reasonable

T= Timely

Every enterprise is established to attain described level of objectives. So organization necessary specified the objectives in broad terms. In a present context reasonable profit approach has been becoming at a strong position. In other words for survival growth and maintaining social expectation, reasonable profit must be earned or existence profit is basic element of profit planning.

For the analyzing the organization resources and management co-ordinate all resources of organization for formulating the SMART goals and objectives. So clear

goal and objectives help to organization to be successfully operating out more challenging and competitive environment.

Nepalese business enterprises are systematic management system is very traditional. Goals and objectives are specified on the planning but not adopted by development of enterprises. Manager haven't any knowledge of analyzing the risk, environment situation, goals, effective planning strategies, resources analysis etc. without effective implementation of planning there is no fulfillment of objectives and goals. So fulfillment of objectives and goals of SGML effective planning is very necessary, which includes sales planning, production, planning, inventory, manpower capacity utilization, flexible budgeting planning etc. which is defining clearly below.

### **4.3 Sales Planning or Sales Budget**

Sales planning or budgeting is the basic function of all other profit planning. It provides basic management decision about marketing. Sales is primary sources of cash inflow and all other functional budget or planning which are prepared on the basis of sales plan. It is directly related with all business activities. So sale plan prepared relastic and proper. Sales planning are prepared in the basis of sales forecasting which depend on different factor of market situation. The preparation of sale plan involves the different steps which are as follows.

1. The marketing plan
2. The advertising and promoting plan
3. The selling expenses budget.

Sales budget is prepared by product, by period and sales territory. Overall responsibility of preparing sales budget is upon the sales manager, although chief executive should also be involved in such activities. Generally a comprehensive sale plan includes both strategie and technical sales plan.

SGML has only short-range sales plan for coming fiscal year. Sales budget is prepared by product by region and by times. SGML has produces different products that can be measure in litters, and kilograms. For example the production of milk yoghurt and ice cream can be measure in litters and other product can measure in kilograms. SGML has supplied its production from 620 dealer and 1143 sub dealer in Kathmandu.

The following table Butter, Ghee and Cheese shows the budgeted and actual sale for the SGML in quantity.

**Table 5: Sita Ram Gokul Milk (Kathmandu) Ltd**

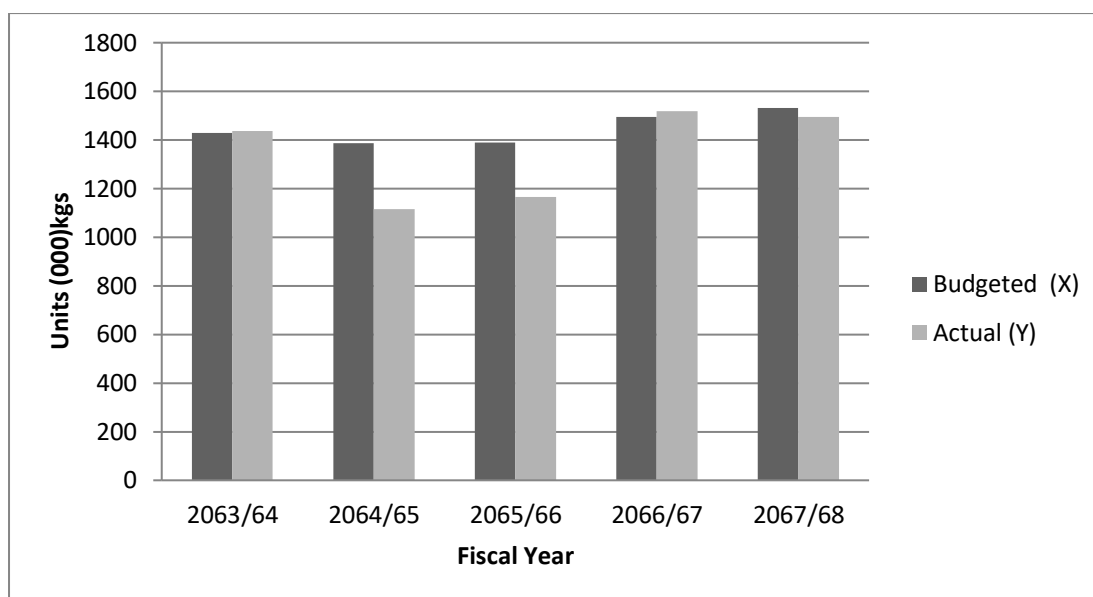
Budgeted and actual sales (Butter, Ghee, and Cheese) units (000) in kg

| Year    | Budgeted (X) | Actual (Y) | Achievement %            |
|---------|--------------|------------|--------------------------|
| 2063/64 | 1427.80      | 1436.52    | 100.60                   |
| 2064/65 | 1386.12      | 1115.12    | 80.45                    |
| 2065/66 | 1390.00      | 1164.49    | 83.77                    |
| 2066/67 | 1495.15      | 1517.30    | 101.48                   |
| 2067/68 | 1530.46      | 1495.51    | 97.72                    |
|         |              |            | Mean ( $\bar{x}$ )=92.80 |

Source:- Annual report of SGML

The above table shows that most of the actual sales are below than the budgeted. F/y 2064/65, 2065/66, 2067/68 is lowest achievement and f/y 2063/64 and 2066/67 is higher than the budgeted sales. So, f/y 2063/64 and 2066/67 is better performance than other years however, average achievement is 92.80% which is good and satisfactory performance. The gap between actual and budgeted sales is data clear by following figure.

**Graph 1: Sita Ram Gokul Milk (Kathmandu) Ltd**



The following table shows the budgeted and actual sales of products (milk and curd).

**Table No 6: Sita Ram Gokul Milk (Kathmandu) Ltd**

Budget and actual sales (milk and curd), units in liter(000).

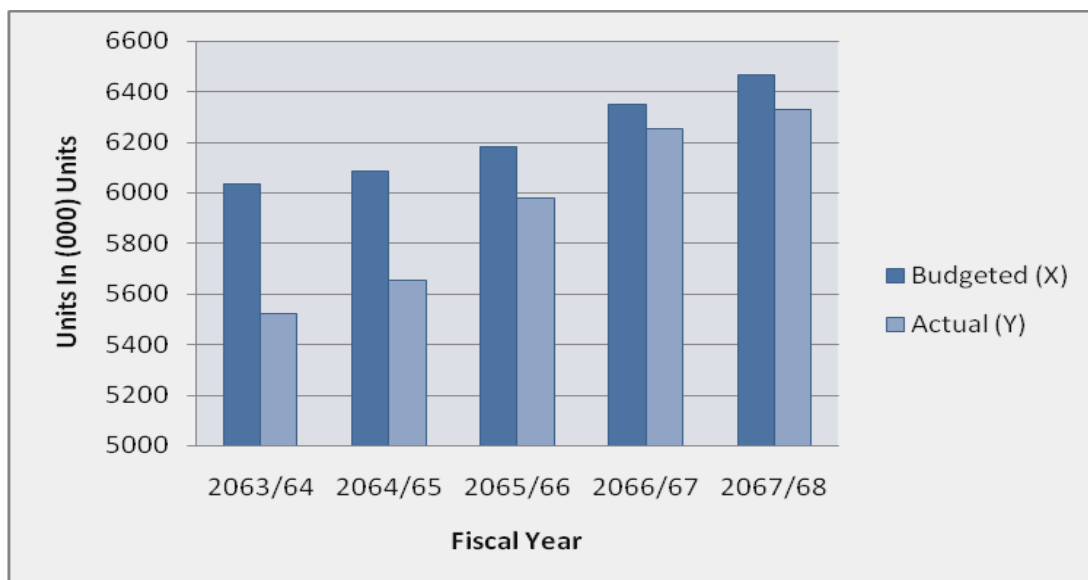
| Fiscal Year | Budgeted (X) | Actual (Y) | Achievement (%)          |
|-------------|--------------|------------|--------------------------|
| 2063/64     | 6033.98      | 5523.97    | 91.547                   |
| 2064/65     | 6086.26      | 5656.83    | 92.944                   |
| 2065/66     | 6183.13      | 5978.52    | 96.691                   |
| 2066/67     | 6349.95      | 6256.88    | 98.534                   |
| 2067/68     | 6468.89      | 6328.58    | 97.831                   |
|             |              |            | Mean ( $\bar{x}$ )=95.51 |

Source: Annual Report of SGML

The above table shows that the actual sales are below than the Budgeted sales on all period. The achievement is lowest on f/y 2063/64 and highest is on f/y 2066/67 however, average achievement is 95.51% which is better and satisfactory

performance. The gap between budgeted and actual sales clearly shown by following graph.

**Graph No 2 Budget and actual sales (milk and curd) SGML.**



The above table and figure (graph) have been shown the budgeted and actual sales in liters of product. So we can found the generally actual achievement is less than planning quantity. It is poor performance.

The following table shows the budgeted planned and actual sales in amount.

**Table No: 7 Sita Ram Gokul Milk (Ktm) Ltd**

Budget and actual sales (milk and milk products) Rs. Lakhs

| Year    | Budgeted (X) | Actual (Y) | Achievement %            |
|---------|--------------|------------|--------------------------|
| 2063/64 | 1286.54      | 1176.43    | 91.44                    |
| 2064/65 | 1332.63      | 1195.64    | 89.72                    |
| 2065/66 | 1922.36      | 1875.54    | 97.56                    |
| 2066/67 | 2496.18      | 2602.78    | 104.27                   |
| 2067/68 | 3385.16      | 3254.07    | 96.13                    |
|         |              |            | Mean ( $\bar{x}$ )=95.82 |

Source: Annual Report of Sita Ram Gokul Milk Ltd.

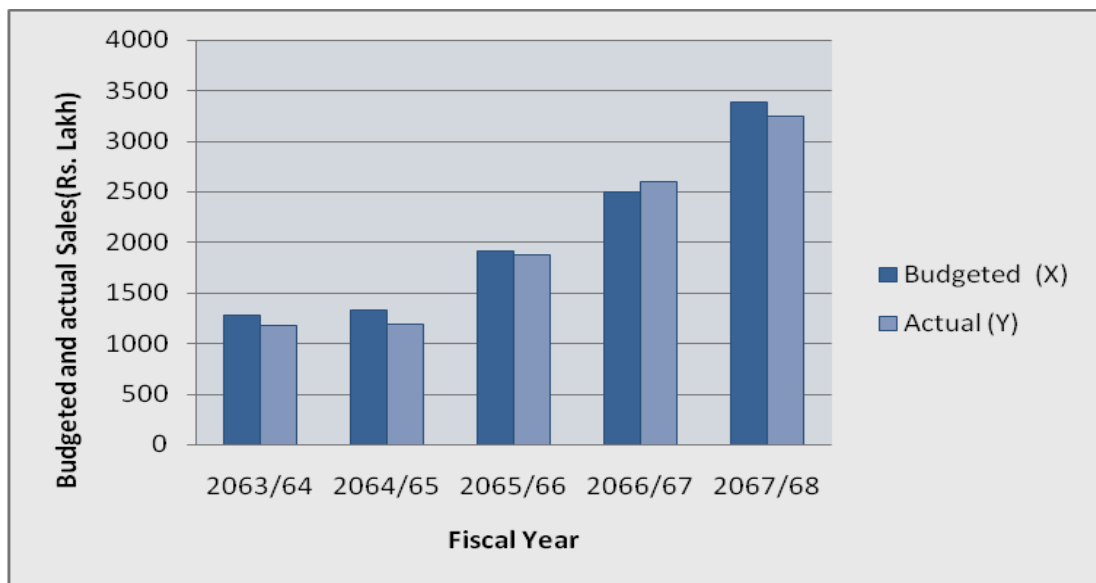
The above table shows that the actual sales are below than budgeted sales and f/y 2066/67 actual sales higher than the budgeted sales. The lowest achievement is f/y

2064/65. The gap between actual sales and budgeted sales with means the sales target is develop without considering the previous year's sales achievement while preparing the sales budget for coming year. Previous year's sales performance should also be considered in account but SGML the planning is neither made on basis of the past year sales trend nor on research market situation nor demand forecast. However, average achievement is 95.82% which is better and satisfactory performance.

Above table presentation will be more effective by following graph.

Budget and actual sales

**Graph No 3 Sita Ram Gokul Milk (Ktm) Ltd.**



For find out of the nature of variability, we can calculate different types of statistical tools like mean, standard deviation, coefficient of variation and correlation.

The detail calculation of their figure are shown in **appendix-1** that summarizing result is shown below.

| Particular               | Budgeted (X) Sales | Actual sales |
|--------------------------|--------------------|--------------|
| Mean                     | 2084.57            | 2028.89      |
| Standard deviation       | 786.07             | 821.52       |
| Coefficient of Variation | 37.70              | 40.49        |

From the above calculations, it is clear that the actual sales is more variable than budgeted sales or budgeted sales is more constant or homogeneous than actual sales because C.V. of actual sales is higher than budgeted sales.

The relationship between two (i.e. dependent and independent) variable are called simple correlation. The most important methods of measuring the correlation between the two variable is "Karl's Pearson's" coefficient of correlation. This is a mathematical methods of measuring the degree of association between the two variables say X and Y. (Shrestha, 2066: 318). Here statistical tool correlation of coefficient (r) can be used to analyze the relationship between budgeted sales and actual sales. For this purpose budgeted sales X is assumed that to an independent variable and actual sales Y is assumed that to dependent variable. It is assumed that actual sales will increase if budgeted sales are increase vice-versa. It means there is positive correlation between budgeted and actual sales.

The probable error (PE) of correlation is applicable for the measurement of reliability of the computed value of the correlation coefficient 'r'.

If  $r < PE$  the value of 'r' is not significant no matter how high 'r' value is ie there is no evidence of correlation between the variables.

If  $r > PE$  the value of 'r' is significant ie there is evidence of correlation between the variables (Shrestha, 2066: 325)

The details calculation of r and PE is presented in Appendix – I. here we can calculate in summarize from of 'r' and PE in following way.

Calculation of karls persons correlation coefficient  $r = 0.341$ .

Calculation of probable error (PE) of correlation coefficient  $r = 0.27$ .

This figure of the value of 'r' shows that there is positive correlation between budgeted and actual sales. The actual sales will change in same direction of the change in the budgeted sales. Here  $r > PE$   $r = (0.314) > PE (0.27)$ , so the value of r is definitely significant. So it can be said that actual sales will go on same direction of budgeted sales. Some assumption of Karl Pearson's correlation coefficient 'r' the numerical measurement of relationship between the two variables is denoted by the symbol of 'r' which value range from  $-1$  to  $+1$ .

If  $r = 0$  there is no relationship between the variable.

If 'r' < there is negative relationship between the variables.

If 'r' > 0 there is positive relationship between the variables.

If r = +1 the relationship perfectly positive.

If r = -1 the relationship is perfectly negative.

(Source: Shrestha, 2066; 318)

#### 4.4. Production Plan or Production Budget

About the production plan already discussed in the reviews of literature chapter. It refers the developing of policies about efficient production level, use of production facilities and inventory level. Preparation of production plan is second step developing profit plan.

Production unit = Planned sales + final inventory – initial inventory.

The following table 8 and 9 presents the budgeted production and actual production of previous years.

**Table No 8 Sita Ram Gokul Milk (ktm) Ltd.**

Budgeted and actual production (milk curd and yoghurt) units in (000)

| Fiscal year | Budgeted (X) | Actual (Y) | Achievement %            |
|-------------|--------------|------------|--------------------------|
| 2063/64     | 7538.35      | 6983.65    | 92.64                    |
| 2064/65     | 7517.37      | 7080.76    | 94.19                    |
| 2065/66     | 7483.16      | 7563.25    | 101.07                   |
| 2066/67     | 7680.95      | 7365.45    | 95.89                    |
| 2067/68     | 7695.32      | 7292.77    | 94.76                    |
|             |              |            | Mean ( $\bar{x}$ )=95.71 |

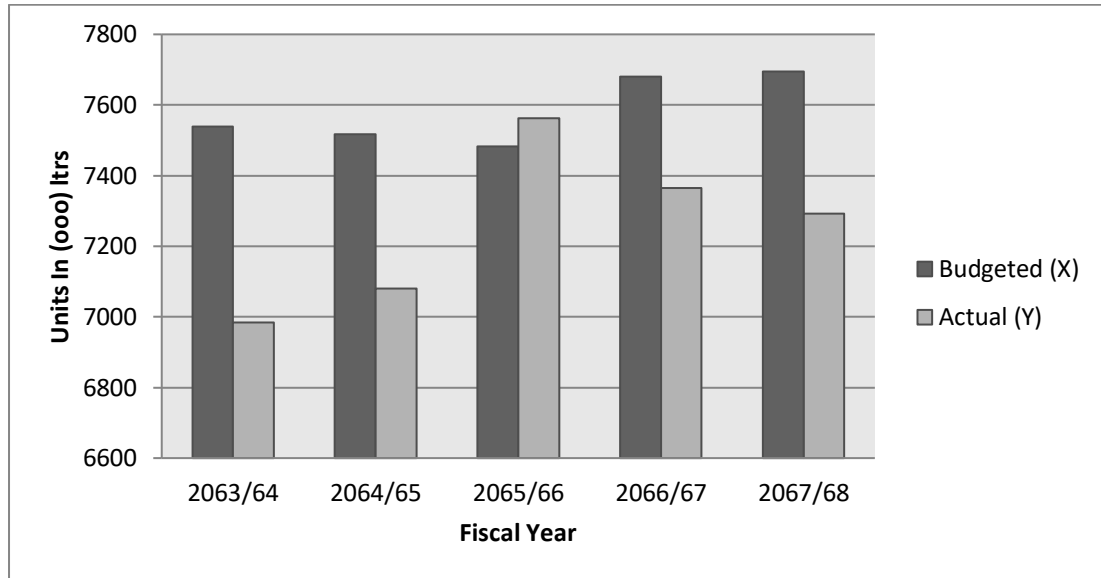
Source: Sita Ram Gokul Milk Annual Report

The above table shows that all the actual productions are below than the budgeted production accepts 2065/66. The gap between budgeted and actual production is not more than 8.43%. The achievement is lowest in f/y 2063/64 and highest in f/y 2065/66. There are a few decreases in production target but actual production is more decreased in comparison with previous period. F/y 2066/67 there is decrease actual production but budgeted are few increases with last year production. Average achievement is 95.71% which is better and satisfactory performance.

Above figure can present in graph which will be more effective than table.

**Graph No – 4 Sita Ram Gokul Milk (KTM) Ltd.**

Budgeted and actual production



For find out of the natural of variability, we can calculate different types of statistical tools like mean, standard deviation, coefficient of variance, and correlation of coefficient.

The calculation of these figures is shown in **appendix-2** and the summarizing result of appendix-2 is below.

| Particular               | Budgeted production | Actual production |
|--------------------------|---------------------|-------------------|
| Mean                     | 7583.03             | 7257.17           |
| Standard deviation       | 87.75               | 206.20            |
| Coefficient of variation | 1.16%               | 28.42%            |

From the above calculation, it is clear that budgeted production are more consult than actual production and actual production are more fluctuation then budgeted production because c.v. of actual production is higher than budgeted production.

A statistical tools correlation of coefficient [r] can be used to analyze the relationship between budgeted and actual production. For this purpose budgeted production [x] are assumed to be independent variable and actual production[y] are assumed to be dependent variable. It is assumed that actual production will increase if budgeted

production increased or vice-versa. It means there is positive correlation between budgeted and actual production.

The probable error [P. E.] of the correlation coefficient is applicable for the measurement of reliability of the compute value of the correlation coefficient (r).

If 'r' < PE the value of 'r' is not significant no matter how high 'r' value is i.e. There is evidence of correlation between the variables. If 'r' > PE the value of 'r' is significant i.e. correlation is significant.

The details calculation of 'r' and "PE" are presented in appendix-2. Here we can state is summarizing from of r and PE values.

Calculation of Karl parsons correlation coefficient  $r = 0.126$

The figure of the value of 'r' shows that there is positive correlation between budgeted and actual production. Here  $r > PE$  i.e.  $(0.762 > 0.126)$  so the value of 'r' is significant at all. It is same direction of actual and budgeted production.

**Table No 09: Budgeted and Actual Production (Butter, ghee and cheese) Units in '000' k.g.**

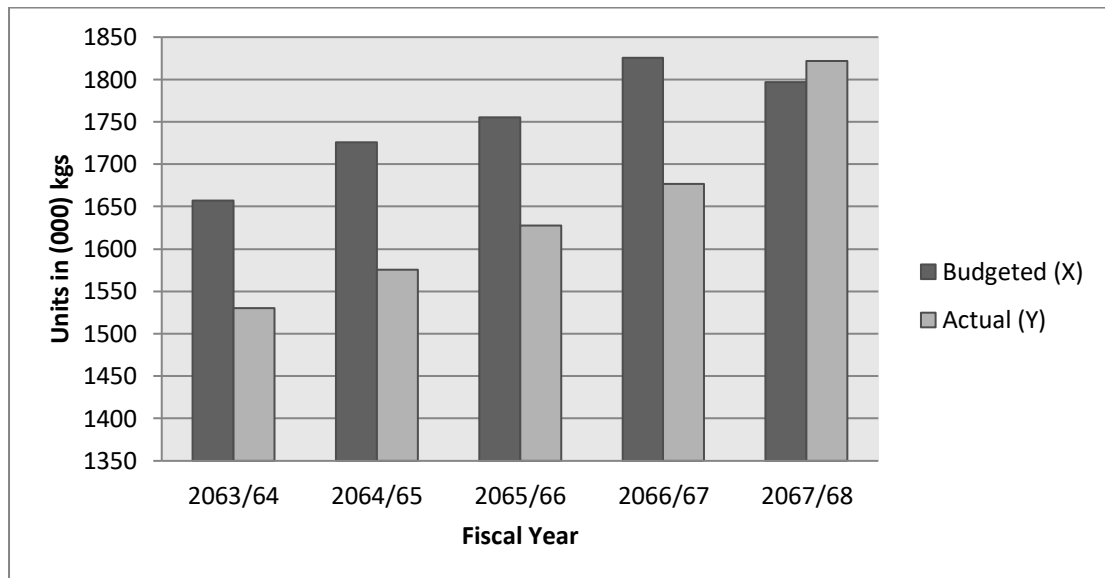
| Fiscal year | Budgeted (X) | Actual (Y) | Achievement %            |
|-------------|--------------|------------|--------------------------|
| 2063/64     | 1657.53      | 1530.60    | 92.34                    |
| 2064/65     | 1725.89      | 1575.79    | 91.30                    |
| 2065/66     | 1755.71      | 1627.91    | 92.72                    |
| 2066/67     | 1825.59      | 1676.58    | 91.83                    |
| 2067/68     | 1796.81      | 1821.82    | 101.39                   |
|             |              |            | Mean ( $\bar{x}$ )=93.92 |

Source: Annual Report of SGML

The above table shows that the actual productions are below than the budgeted production expect in F/y 2067/68. The achievement is lowest on F/y 2064/65 and highest on F/y 2067/68 other year actual and budgeted production comparison for last year we find decrease the achievement and nearly achieved the targeted however, performance of the company is not satisfactory and target is achieved only f/y 2067/68. However, overall achievement is 93.92% which is good performance. The presented of above table will be more effective by following graph.

### Graph No-5 Sita Ram Gokul Milk (KTM) Ltd.

#### Budgeted and Actual Production



To find out of the nature of variability, we can calculate different types of statistical tools like mean, standard deviation, coefficient of variation and correlation of coefficient. The detail calculations of these figures are shown in Appendix. Now summarizing result of **Appendix-3**.

| Particulars              | Budgeted Production | Actual Production |
|--------------------------|---------------------|-------------------|
| Mean                     | 1752.30             | 1646.54           |
| Standard Deviation       | 58.38               | 100.41            |
| Coefficient of Variation | 3.34                | 6.09              |

From the above calculations it is clear that actual production are more variable than budgeted production. Hence the coefficient variation of actual production is higher which means the budgeted production is more constant.

A statistical tool, correlation of coefficient (r) can be used to analyze the relationship between budgeted and actual production. For this purpose budgeted production (X) are assumed to be independent variable and actual production (Y) are assumed to be dependent variable. It is assumed that actual production will increase if budgeted production is increase or vice versa. It means there is positive correlation between budgeted and actual production.

The details calculation of 'r' and PE of 'r' is presented in Appendix-3. Here we can calculate is summarizing from of 'r' and PE in the following way. Karl Pearson's

correlation coefficient (r) =0.78 probable error PE of correlation coefficient (r) = 0.118.

The figure of the value of 'r' shows that there is positive correlation between budgeted and actual production. In others words if plan is increased the performance would improve. So the actual achievement also increases. Here  $r > PE$  ( $0.78 > 0.118$ ) so value of 'r' is significant at all. So it is go on same direction of budgeted production at all condition.

#### 4.5 Comparisons between Actual Sales and Actual Production

Sales and production is basic function of PPC production budget depend upon sales budget. It is necessary to analyzed whether production meets sales or not and it is significant to analyze the relationship between sales and production. The following table presents the actual production and actual sales by different fiscal years.

**Table No: 10 Sita Ram Gokul Milk (ktm) ltd.**

Actual production and actual sales [milk curd and yoghurt (units in 000 liters.)

| Fiscal Year | Actual Production(X) | Actual Sales (Y) | Achievement %            |
|-------------|----------------------|------------------|--------------------------|
| 2063/64     | 6983.65              | 5523.97          | 79.09                    |
| 2064/65     | 7080.76              | 5656.82          | 79.89                    |
| 2065/66     | 7563.25              | 5978.35          | 79.04                    |
| 2066/67     | 7365.45              | 6256.88          | 84.94                    |
| 2067/68     | 7292.77              | 6328.58          | 86.77                    |
|             |                      |                  | Mean ( $\bar{x}$ )=81.94 |

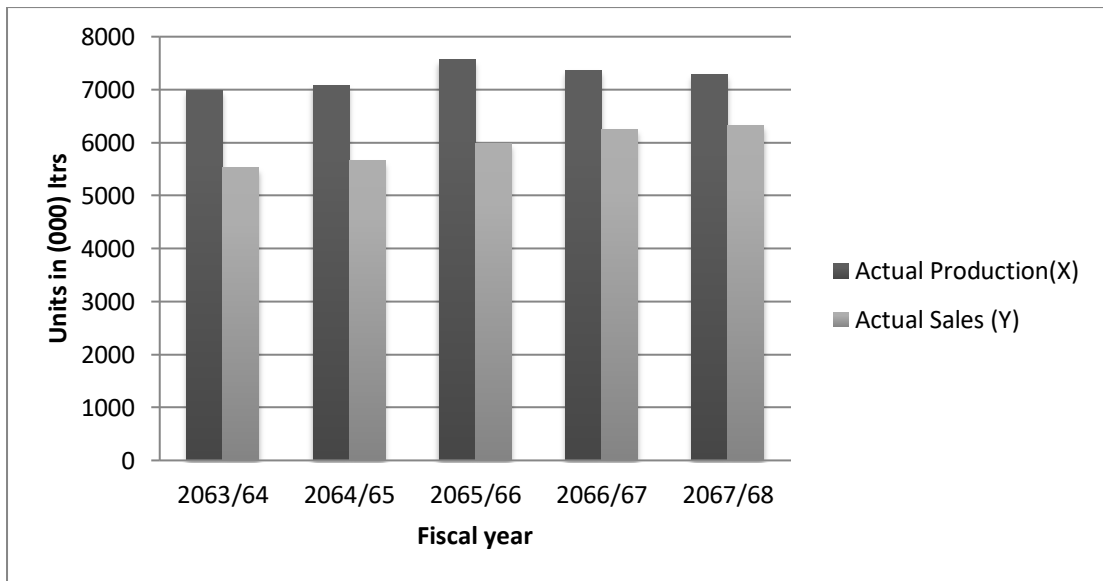
Source: annual report SGML

The above table shows that percentage of achievement for first two fiscal year is constant. But last two years is more increasing continuously. Performance of the company of the product milk, curd and yoghurt is also poor. The higher different between actual production and actual sales is 7.73. However, average achievement is 81.94% which is not satisfactory performance.

Above figure can present more effectively in the graph below.

#### Graph No.:6 Sita ram Gokul Milk (ktm) ltd.

Actual production and actual sales



To find the nature of variability; we can calculate different types of statically tools like mean, standard deviation, coefficient of variation and correlation coefficient.

The detail calculation of these figure are show in **appendix-4** the summarizing result is given below.

| Particular              | Actual Production | Actual Sales |
|-------------------------|-------------------|--------------|
| Mean                    | 7257.17           | 5948.92      |
| Standard Deviation      | 206.20            | 318.04       |
| Coefficient of Variance | 2.84%             | 5.34%        |

The above calculation shows that the actual sales more variable than actual production. Since the coefficient of variation of actual sales is higher than actual production. That means actual production is more constant. It is poor performance of company.

A statistical tools correlation of coefficient (r) can be used to analyze the relationship between actual production & actual sales for this purpose we can use. In Karl Pearson's formula we denoted by (r) for coefficient of correlation where 'X' denoted the actual production and 'Y' denoted the actual sales. We assumed actual production to be dependent variable and actual sales to be independent virile. Actual sales and production should be positively correlated. If sales are high significant of the coefficient of the correlation (r) is tested with probable error (PE). The details calculation of coefficient of correlation 'r' and probable error (PE) is shown in appendix-4 which summarize result is below.

Karl Pearson's coefficient of correlation ( $r$ ) = 0.691 probable error (PE) of coefficient of correlation ( $r$ ) = 0.157

The above result shows that there is positive correlation between actual production and actual sales. That mean when actual sales increase the volume of actual production also increase to maintain the market demand. Here the value of 'r' is higher than (PE) ( $r > PE$ ) or ( $0.691 > 0.157$ ). So, value of r is significant at all & actual sales will go on same direction of actual production. In other words this relation may be applicable at all condition.

#### **4.6 Inventory Plan**

Inventory includes the stock in hand i.e. raw materials, goods in process, finished goods. A certain level of inventory is needed for operating activities in manufacturing companies. When production is more than sales the level of inventory is increased so on. The inventory level is decreased when sales is more than production, if the producer is not hold the inventory, he will not supply his product when consumer demand is made so the caused for holding inventories are to continue their stock and to supply finished goods regularly. In this fact it is clear that inventory is necessary but the question is how much invest on inventory? We must minimize the inventory cost. The nature of the industry and raw material affect the size of inventory. If the material is seasonal than the production activities are operate only few months of the year, at this situation the size of inventory will automatically large i.e. Sugar Mills, Jute Mills etc.

In the case of SGML almost production wouldn't store for a long time i.e. milk, yoghurt, cream etc.

#### **Table no 11: Opening and Closing Inventory of SGML**

Total inventory in Rs (000)

| Fiscal Year | Opening Inventory | Closing Inventory |
|-------------|-------------------|-------------------|
| 2063/64     | 13705             | 14697             |
| 2064/65     | 14675             | 11499             |
| 2065/66     | 11499             | 11855             |
| 2066/67     | 11855             | 16955             |
| 2067/68     | 16955             | 15612             |

Source: annual report SGML

The above table shows that inventory have in f/y 2064/65 inventory decrease by 22% other fiscal year some year decreasing and some fiscal year increases the inventory. In this calculation it is known that closing inventory is more fluctuating in different period we suggest that for the SGML has been considered minimizing the inventory on that level where deduction of inventory wouldn't effect on regular sales.

#### **4.7 Manpower Planning**

It is called human resource planning it refer the different activities like personal needs, requirements, selection, training and development, job description and evaluation, performance appraisal and career development union negotiation and wages and salary administration. Manpower plan is the estimate of necessary direct lab our requirement to production function for production budget. Manpower planning affects the annual profit plan. The effective planning and on controlling of labor cost is essential for every enterprises.

SGML has two types of manpower i.e. administrative and technical. The employees are worked as a fixed salary and daily wages basis. The permanent employees gate the fixed salary based in time. Beside these, there are few worker working on daily wages basis such as porter, collector etc. Performance, reporting, reward and punishment system of SGML not adopt for scientifically.

According to the informal information by employee, we can know the election, promotion, recruitment process also not effective & employees motivating factor also so poor. There is lack of authority, delegation and decentralization, because all the decision has made from the board. The middle and lower level employees has not involved in planning and decision making so almost employees has not motive in their duty.

SGML provides different types of training programme for improving the skill and knowledge of employees.

**Table no 12: The Manpower Planning in f/y 2067/68**

| Types of Employees | Officer | Non-officer | Total |
|--------------------|---------|-------------|-------|
| Production         | 25      | 30          | 55    |
| Administrative     | 35      | 40          | 75    |

|       |    |    |     |
|-------|----|----|-----|
| Total | 60 | 70 | 130 |
|-------|----|----|-----|

Source: Annual Report of SGML 2067/68

The above table shows that there 130 employees working in the SGML permanently. Among them number of technical employees are lower than administrative.

#### **4.8 Profit and Loss of SGML**

Profit and loss account is developing to report the financial result. It is a tool in accounting system which presents the operating efficiency of the organization. In case of SGML it doesn't prepare the budgeted profit and loss account in the advance. It is prepared at the end of each financial year. Just for knowing the profit and loss situation of organization. SGML's running is loose for a fiscal year. The profit and loss condition of SGML is shown below.

#### **Table no 13:Sita Ram Gokul Milk Ktm Ltd.**

Profit and Loss trend in Rs (000)

| Fiscal Year | Profit or loss |
|-------------|----------------|
| 2063/64     | (20820)        |
| 2064/65     | (18395)        |
| 2065/66     | (11152)        |
| 2066/67     | 4686           |
| 2067/68     | 6186           |

Source: Annual Report of SGML

The above table shows that the profit trend of SGML was very poor. The reason behind loss is high cost production, high quantity of closing stock and high administrative expenses. But every fiscal year the loss be decreasing that the

organization improving their production and non production cost and searching the new market. So we can concluded that the situation of loss improving every fiscal year now some year the organization 90 on the profit earning situation.

#### 4.9 Variance Analysis

The fluctuation or difference between budget goal and actual performance is called variance. So variance analysis is an effective controlling tool in profit planning and control because it compares the actual achievement with its standard and find the cause of fluctuating and provide the feedback for improving its performance. For effective variance analysis the following step should followed systematically.

Step1. Establishment of standard that is for labor overhead, sales, production, profit etc.

Step2. Comparison between actual performance and standard.

Step3. Finding the deviation; its causes and result.

Step4. Feedback or corrective action for improving its unfavorable variance.

In case of SGML there is poor of developed system of predetermining standard of various expenses and profit. Generally, it has determined the deviation between budgeted and actual sales and budgeted and actual production.

#### Table No 14 : Sita Ram Gokul Milk Ltd.

Sales variances (milk and milk Product) Rs. in lakhs

| Fiscal year | Budgeted | Actual  | Variance | Remarks      |
|-------------|----------|---------|----------|--------------|
| 2063/64     | 1286.54  | 1176.43 | 110.11   | Unfavourable |
| 2064/65     | 1332.63  | 1195.64 | 136.99   | Unfavourable |
| 2065/66     | 1922.36  | 1875.54 | 46.82    | Unfavourable |
| 2066/67     | 2496.18  | 2602.78 | (106.6)  | Favourable   |
| 2067/68     | 3385.16  | 3254.07 | 131.09   | Unfavourable |

Source: SGML Annual Report

Here we find that there, four fiscal year is unfavorable variance for the research period.

One of the fiscal year 2066/67 is favorable variance. There are two reasons for unfavorable period.

- i) Not realistical planning
- ii) Lack of marketing exercise i.e. researching market situation or environment, demand forecast etc. so this analysis help to SGML for improving its performance by implementation this cases of variances.

**Table No 15: Production Variance of SGML (milk, curd, yoghurt)**

(Units in 000 Liters)

| Fiscal year | Budgeted | Actual  | Variance | Remarks      |
|-------------|----------|---------|----------|--------------|
| 2063/64     | 7538.35  | 6983.65 | 554.70   | Unfavourable |
| 2064/65     | 7517.37  | 7080.76 | 436.61   | Unfavourable |
| 2065/66     | 7483.16  | 7563.25 | (80.09)  | Favourable   |
| 2066/67     | 7680.95  | 7365.45 | 315.50   | Unfavourable |
| 2067/68     | 7695.32  | 7292.77 | 402.55   | Unfavourable |

Source: Annual Report of SGML

**Table No 16: Production Variance (Butter, Ghee, Cheese) of SGML**

(Units in 000 Kg.)

| Fiscal year | Budgeted | Actual  | Variance | Remarks      |
|-------------|----------|---------|----------|--------------|
| 2063/64     | 1657.53  | 1530.60 | 126.93   | Unfavourable |
| 2064/65     | 1725.89  | 1575.79 | 150.10   | Unfavourable |
| 2065/66     | 1755.71  | 1627.91 | 127.80   | Unfavourable |
| 2066/67     | 1825.59  | 1676.58 | 149.01   | Unfavourable |
| 2067/68     | 1796.81  | 1821.87 | (25.01)  | Favourable   |

Source: Annual Report of SGML

Above table no 15 and 16 shows the production variance of SGML. In table 15 except 2065/66 fiscal year all the result are unfavorable. So on in the table 16 it is shown more unfavorable and less favorable. But latest period achievement is seen in near to target. As a whole the production variable is not satisfactory. It is found main reason is under utilization of its capacity planning and implementation of budget is not

effective. So it should take effective corrective action to their respective Responsibility department to minimize unfavorable variance.

#### **4.10 Cost-Volume Profit Analysis**

The analysis of relationship between cost-volume and profit is known as cost volume analysis. It is an analytical tool of PPC. It is great helpful in managerial decision making. Generally cost volume profit analysis provides the answer to the following questions. (Fago, 2004: 236)

1. What sales volume is needed to avoid loss?
2. What sales volume is needed to avoid loss?
3. What sales volume is needed to earn desired profit?
4. What will be the effect of change in price?
5. Which product or operation of a plant should be discontinued and so on?

The break even analysis is based on some important assumptions which are as follows (Dongol, 2066: 52-53).

- 1 All cost can be classified into fixed cost and variable cost. There is no cost other than fixed and variable.
2. Fixed cost will remain constant and variable cost varies proportionately changes with activities.
3. Selling price per unit remains constant. It is not affected by sales volume.
4. That either the firm produces only one product or the sales mix is constant which is obviously is quite unrealistic.
5. The level of production and sales remain unchanged during the period.
6. Changes in the opening and closing inventories are not significant.

For calculation of BEP in SGML following assumption should be considered.

1. It is based on P/L account of F/y 2067/68.
2. Activity based selected in terms of sales revenue.
3. Calculation is based on total cost not on production.
4. Fixed cost, variable cost and sales revenue is assumed to be constant.
5. Opening and closing inventories are not changed.
6. Non operating and expenditure are not included in total revenue.

For BEP analysis we assume that collection expenses as a variable cost and sales expenses administrative expenses, gratuity expenses, depreciation and interest on loan as a fixed cost. We get the following figure from the profit and loss account of F/y 2067/68 after segregation of expenses into fixed and variable cost.

Total sales = 329407 (in thousands)

Variable cost = 290795 (in thousands)

Fixed cost = 41791 (in thousands)

### **1. Calculation of Profit Volume Ratio (P/V Ratio).**

This ratio shows the proportion of contribution margin and sales. The formula is:

$$PV \text{ Ratio} = 1 - \frac{\text{variable cost}}{\text{sales}} = \frac{290795}{329407} = 0.1172$$

### **2. Calculation of Break Even Point (BEP)**

$$BEP = \frac{\text{fixed cost}}{P.V \text{ Ratio}} = \frac{41791}{0.1172} = 356578.498 \text{ (in thousands)}$$

This calculation shows that the SGML will be in break even sales revenue will be Rs 356578.498 thousand. In other words SGML is running below BEP. So it is not cover selling price and its total cost. We can conclude that SGML has either running with high cost or with the lower price of its product. To maintain the SGML in profitable condition all cost should be revised in detain organization should operate in its full capacity and the selling price of its product should increase to improve the sales revenue as a whole it should maintain its BEP level.

### **4.11 Analysis of Primary Data**

SGML has different department and their branches in a processing of data collection. The researcher tries to understand about the problem faced by SGML. In this way sales and production planning that SGML has followed the practical knowledge about it. The major tools used for this purpose was opinion questionnaires total 12 sets of questionnaires were distributed to be four department of SGML.

The responses received from various respondents have been arranged and analyzed in order to facilitate the descriptive analysis of the study. According to the answers of respondents the researcher has tries to analyze the present condition of SGML.

**Table No :17 Group of respondent and code use.**

| SN | Group of Respondent       | Sample size | code used |
|----|---------------------------|-------------|-----------|
| 1  | Production Department     | 3           | A         |
| 2  | marketing Department      | 3           | B         |
| 3  | Finance Department        | 3           | C         |
| 4  | Administrative Department | 3           | D         |

Source: Field Survey, 2012

From the table it is known the SGML has four separate departments. In regular process all four departments participate in team work. The results derived from the specific questionnaire are same as follows where I have tried to identify about the main causes of low achievement of SGML.

**Table No.18 The main cause of low achievement of SGML**

| S.N | Item of cause   | No. of Respondents | Percent |
|-----|---|--------------------|---------|
| 1   | lack of participate management                                | 2                  | 16.67   |
| 2   | lack of promotion product                                     | 2                  | 16.67   |
| 3   | No optimal capacity utilization and more idle resource.       | 3                  | 25      |
| 4   | Traditional production system and inventory management system | 3                  | 25      |
| 5   | ineffective distribution system                               | 2                  | 16.67   |

Source: Field survey, 2012

After analysis of the internal condition of SGML it is known that why actual achievements of SGML i.e. actual sales and actual production are low than budgeted. There are many problem of SGML. The main problem of SGML is no optimal capacity utilization and more idea source and traditional production system and

inventory management system which both viewed by 25 percent respondents. So on 16.67 percent respondents reply that lack of participative management and distribution channel it is also a major problem of SGML. Because of this problem the lower level employs can't motive. So on lack of effective promotion and ineffective distribution system also the causes of low achievement.

In this way after analysis of primary data it is found that main causes of deviation of budgeted and actual achievement on production and sales.

#### **4.12 Major Findings of the Study**

1. Demand of milk and milk product in urban area is very high.
2. SGML have no long range (strategic) profit plan objectives are not SMART, lack of budgeting experts and no effective program to attain goal.
3. There is lack of participative management and MBO (Management By Objectives) in SGML.
4. SGML has not collected all milks offered by the farmer and not able to provide the loan to the farmer's requirement.
5. SGML can't able to its network covered widely.
6. There are other private and public dairies are competing with SGML.
7. SGML is fully own by the private owner. The government not interferes for SGML activities.
8. SGML has not applied effective inventory policy but being the more demand of milk product, there is not problem for over stocking.
9. SGML was suffering from loss on beginning period of research work but latest period it is operating at gain but possibility of making profit is more than this if SGML improves its weakness.
10. The gap of actual production and actual sales is high.
11. SGML has not practice of statistical tool applied.
12. The high deviation of actual sales and BEP sales.
13. There is not find effective motive manpower and lack of manpower planning.
14. There is no optimal capacity utilization and more ideal source.

## **Chapter -V**

### **Summary, Conclusion and Recommendations**

#### **5.1 Summary**

Nepal is adopting the mixed economy system “This system is a mix of free and centrally planned economies where both public and private sector must be developed. Which helps to economic development and mobilization of unutilized resources many established manufacturing sector industry face the numerous problems. These are situation of physical, infrastructure, instability, lack of capital etc. but now a day the industrial sector developed slowly.

Profit planning is most important tools of management for planning, implementing and controlling of any business activities. So on sales and production planning is a basic function of profit planning and control. The researcher has divided this study in 5 chapters. In first chapter the researcher has studied about SGML and its objectives, statement of problem, its significant and limitation. In second chapter, studied about

different concepts of PPC and its basic term and different research work which has already done. In third chapter, studied about research methodology that how can research made effectively. In forth chapter, studied about budgeted and actual performance of SGML. The statistical tool like percentage, mean, standard deviation, variance, correlation are used. Lastly, in fifth chapter, the researcher has studied the result or outcome of 4 chapters i.e. summary, conclusion and recommendation.

## **5.2 Conclusion**

After studying this problem, the researcher has concluded some points which are listed below.

1. Industrialization is most important factor for economic growth for Nepal in context of being member of WTO and age of globalization.
2. PPC is most important tools of measuring performance evaluation of manufacturing enterprises. But many enterprises manager have not proper knowledge and skill for applying PPC. Which we find out from SGML.
3. Due to lack of budgeting system; the actual data could not be compared with the planned for the variable analysis has not been done.
4. SGML has high fixed cost, employee expenses has played the key role of to increase the administrative fixed cost. Due to high fixed cost associated with interest and depreciation a BEP sale is very high for the industry.
5. As a decision making power is concentrated in top-level management, participative management approach to set the goals is rarely found in the organization.
6. Under-utilization of capacity has become a big issue for the company.

## **5.3 Recommendations**

After analyzing the overall aspect of SGML, some recommendation that which will be very useful to SGML for improving it's weakness and identifying its opportunities to get success in competitive environment. To have strategic advantage over the competitions, Nepalese industries required the various tools of accounting and the relevant aspects should be analyzed and applied. Sita Ram Gokul Milk (Ktm) Ltd. has a lot of potential not only within Kathmandu valley but also in out of valley and different town. There are various factors/ aspects to be recognized by the management

of the industry. On the basis of the findings of the research study, the following recommendations are given to improve the present condition of the company.

1. SGML should follow the participative management for planning and decision making and also applied MBO.
2. The company does not have any practice of budgeting. SGML should develop budgeting practice which is one of profit planning. SGML should define short-term and long-term planning and its problems, strategies, goals, targets etc.
3. SGML should expand the collection and distribution scheme all over the country, by using different collection/distribution channel. And it should provide the loan for rural poor farmer to keep cattle through bank, finance, co-operative etc.
4. SGML should consider demand of its products market survey at the time of making plan and it also should consider the price, supply, capacities and policies of other dairies.
5. SGML is bearing huge amount of fixed cost for employee expenses, which is not good for the organization. Therefore, the industry should initiate the cost control program like, SGML should pay salary on the basis of work/time, reduce the employee facilities with participation of employee.
6. There should be effective advertising policies to inform about the dairy product and its quality for consumers through electronic media.
7. To keep optimal inventory, SGML should applied scientific inventory system like FIFO method.
8. SGML should consider the break-even analysis at planning time, so on it should consider variance analysis to find the cause of fluctuation and correct it.
9. The industry is facing the problem of poor communication among production, administration technical, marketing department the strong need of co-ordination among various departments.
10. The performance evaluation system should be established by using different approaches of management.
11. SGML should consider the sales plan on the time of planning production. It should co-ordinate between sales and production unit.
12. Finally, to strength the competitiveness to carry out PPC activities of the industry, the use of profit planning and controlling tools are recommended for

planning activities tools like budgeting, sales and production planning analysis etc. it is recommended to analyze cost and benefit of tools.

### **BIBLIOGRAPHY**

- Ojha, Khagendra Prasad, Chinta M. Gautam (2011). *Profit Planning and Control*. Kathmandu: Asmita Publishers and Distributors.
- Goet, Joginder, Ishwor Bhattarai, Akshay Gautam (2011). *Budgeting: Profit Planning and Control*. Kathmandu: Smita Books Publishers and Distributors.
- Dangol, R.M. (2009). *Management Accounting*. Kathmandu: Taleju Prakashan.
- Bajracharya, B.C. (2006). *Business Statistics and Mathematics*. Kathmandu: M.K. Publishers and Distributors.
- Bhattarai, D.R. (2004). *Management Accounting*. Kathmandu: Khanal books and Stationary.
- Bhattarai, Manoj (2005). *Business Policy and Strategic Management*. Kathmandu: Dhaulagiri Books and Stationary.
- Fago, Ghanendra (2004). *Profit Planning & Control*. Kathmandu: Buddha Academic Publishers & Distributors. Pvt. Ltd.

- Goet, Joginder, Ishwor Bhattarai, Akshay Gautam (2005). *Budgeting: Profit Planning and Control*. Kathmandu: Smita Books Publishers and Distributors.
- Joshi, P.R. (2001). *Research Methodology*. Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.
- Gupta, S.P. (1995). *Statistical Methods*. New Delhi: Tata Mc. Graw Hill Publishing Co.
- Frenger, James M. (1973). *Accounting for Managerial Analysis*. Homewood III: Richard D. Irwan Inc.
- Joshi, Shyam (2004). *Public Enterprises Management*. Kathmandu: Taleju Prakashan.
- Kothari, C.R. (2000). *Research Methodology: Method and Techniques*. New Delhi: Vishwa Prakashan.
- Kushum G.P. and D.K. Shrestha (2005). *Business Environment in Nepal*. Kathmandu: Dhavlagiri Books and Stationary.
- Mundul, Sujit (2007). "Corporate Financial Sector: Restructuring." *New Business Age*, Vol. 6, No. 11
- Pokhrel, Saurav (2064). *Samanyagyan Bhandar*. Kathmandu: Bidharthi Pustak Bhandar.
- Shrestha, Dr. Smity and Dhurba Prasad Silwal (2010). *Statistical Methods in Management*. Kathmandu: Taleju Prakashan.
- Shrestha, Jagannath (2055). *Production Management*. Kathmandu: Taleju Prakashan.
- Welsch, Glenn A., Ronald W. Hilton and Paul N. Gordon (1995). *Budgeting: Profit Planning and Control*. New Delhi: Prentice Hall of India Private Limited.
- Sitaram Gokul Milks (2067). *Sinhabalokan*.
- Sitaram Gokul Milks, (2000). *A Glimps*.
- Sitaram Gokul Milks, (2064). *Barsik Pratibedan 2063/64*.
- Sitaram Gokul Milks, (2065). *Barsik Pratibedan 2064/65*.
- Sitaram Gokul Milks, (2066). *Barsik Pratibedan 2065/66*.
- Sitaram Gokul Milks, (2067). *Barsik Pratibedan 2066/67*.
- Sitaram Gokul Milks, (2068). *Barsik Pratibedan 2067/68*.

### **Unpublished Dissertations:**

Basnet, Deepak (2011). *Profit Planning and Control (PPC) of Machhapuchhre Bank Limited*. Master Degree Thesis, Kathmandu: CDM, T.U.

Joshi, Jagat Prasad (2011). *Sales Budget and its Impact on Profitability of Unilever Nepal Limited*. Master Degree Thesis, Kathmandu: CDM, T.U.

Kunwar, Suman (2010). *Profit Planning in Public Utility Enterprises of Nepal*. Master Degree Thesis, Lainchaur, Kathmandu: Saraswati Multiple Campus, T.U.

Tiwari, Ganesh (2007). *Profit Planning in Nepal Electricity Authority*. Master Degree Thesis, Kathmandu: CDM, T.U.

Acharya, Jeevan (2005). *Sales Planning of Nepal Telecom*. Master Degree Thesis, Kathmandu: CDM, T.U.

Shrestha, M.B. (2005). *Capacity Building of Employer's Organizations on Productivity and Competitiveness*, Kirtipur, Kathmandu: baseline survey of Sita Ram Gokul Milks (Kathmandu) Ltd.

Bhattarai, Tilak (2004). *Sales and Production Planning in SGML*. Master Degree Thesis, Kathmandu: CDM, T.U.

Thapa, Pukar (1999). *Profit Planning in manufacturing enterprises in Nepal, A Comparative Study in Sitaram Gokul Milks and Sitaram Dairy Industry*. Master Degree Thesis, Kathmandu: CDM, T.U.

### **Websites:**

David in Arizona [http://www.accountingformanagement.com/profit\\_planning.htm](http://www.accountingformanagement.com/profit_planning.htm)

Deborah Taylor-Hough - author of *Frugal Living for*

*Dummies* [http://www.accountingformanagement.com/profit\\_planning.htm](http://www.accountingformanagement.com/profit_planning.htm)

Mary Hunt - author of *Debt-Proof Living and Cheapskate*

*Monthly* [http://www.accountingformanagement.com/profit\\_planning.htm](http://www.accountingformanagement.com/profit_planning.htm)

*Monthly* [http://www.accountingformanagement.com/profit\\_planning.htm](http://www.accountingformanagement.com/profit_planning.htm)

[www.accountingforum.org](http://www.accountingforum.org).

[www.ebnonline.com](http://www.ebnonline.com), [www.forexyard.com](http://www.forexyard.com)

[www.sitaramgokulmilks.com](http://www.sitaramgokulmilks.com)

## Appendix 1

Let budgeted sales = x (Rs lakhs)

Actual sales = z (Rs lakhs)

| F/Y     | x        | y        | $x(x-\bar{x})$ | $y(y-\bar{y})$ | $x^2$      | $y^2$      | xy         |
|---------|----------|----------|----------------|----------------|------------|------------|------------|
| 2063/64 | 1286.54  | 1176.43  | (798.03)       | (852.46)       | 622568.34  | 726688.05  | 680288.65  |
| 2064/65 | 1332.63  | 1195.64  | (751.94)       | (833.25)       | 565413.76  | 694305.56  | 626554.00  |
| 2065/66 | 1922.36  | 1875.54  | (162.21)       | (153.35)       | 26312.08   | 23516.22   | 24874.90   |
| 2066/67 | 2496.18  | 2602.78  | 411.61         | 573.89         | 169422.79  | 329349.73  | 236218.86  |
| 2067/68 | 3385.16  | 3294.07  | 1300.59        | 1265.18        | 1691534.34 | 1600680.43 | 1645480.45 |
| Total   | 10422.87 | 10144.50 | 0              | 0              | 3089534.86 | 3374540    | 3213416.86 |

### i) Calculation of Arithmetic mean ( $\bar{x}$ )

$$\text{A.M. } (\bar{x}) = \frac{\sum x}{N} = \frac{10422.87}{5} = 2084.57$$

$$\text{A.M. } (\bar{y}) = \frac{\sum y}{N} = \frac{10144.46}{5} = 2028.89$$

### ii) Calculation of Standard Deviation (SD)

$$SD_x = \sqrt{\frac{\sum x^2}{N}}$$

$$= \sqrt{\frac{3089534.86}{5}}$$

$$= 786.07$$

$$SD_y = \sqrt{\frac{\sum y^2}{N}}$$

$$= \sqrt{\frac{3374540}{5}}$$

$$= 821.52$$

### iii) Calculation of coefficient of variation. (CV)

$$CV_x = \frac{SD_x}{\bar{x}} \times 100$$

$$= \frac{786.087}{2084.57} \times 100$$

$$= 37.70$$

$$CV_y = \frac{SD_y}{\bar{y}} \times 100$$

$$= \frac{821.52}{2028.89} \times 100$$

$$= 40.49$$

**iv) Calculation of Karl Pearson's correlation of coefficient (r)**

$$\frac{\sum xy}{\sqrt{\sum x^2}\sqrt{\sum y^2}} = \frac{3213416.88}{\sqrt{3089534.86}\sqrt{3374540}} = 0.314$$

**v) Calculation of Probable Error (PE) of correlation of coefficient (r)**

$$= \frac{0.6745(1-r^2)}{\sqrt{N}}$$

$$= \frac{0.6745\{1-(0.314)^2\}}{\sqrt{5}}$$

$$= 0.27$$

## Appendix 2

Let budgeted Production =x (unit in 000 liters)

Actual Production =y (unit in 000 liters)

| F/Y     | x        | Y        | $x(x - \bar{x})$ | $y(y - \bar{y})$ | $x^2$    | $Y^2$     | xy       |
|---------|----------|----------|------------------|------------------|----------|-----------|----------|
| 2063/64 | 7538.35  | 6983.65  | -44.88           | -273.52          | 2014.22  | 74813.19  | 12275.57 |
| 2064/65 | 7517.37  | 7080.76  | -65.66           | -176.41          | 4311.23  | 31120.48  | 11583.08 |
| 2065/66 | 7483.16  | 7563.25  | -99.87           | 306.08           | 9974.01  | 93684.96  | 30568.2  |
| 2066/67 | 7680.95  | 7365.45  | 97.92            | 108.28           | 9588.32  | 11724.55  | 10602.77 |
| 2067/68 | 7695.32  | 7292.77  | 112.29           | 35.6             | 12609.04 | 1267.36   | 3997.52  |
| Total   | 37915.15 | 36285.88 | 0                | 0                | 38496.83 | 212610.54 | 69027.14 |

### i) Calculation Arithmetic mean ( $\bar{x}$ )

$$\begin{aligned} \text{(AM)}\bar{x} &= \frac{\sum x}{N} = \frac{37915.15}{5} \\ &= 7583.03 \end{aligned}$$

$$\begin{aligned} \text{(AM)}\bar{y} &= \frac{\sum y}{N} = \frac{36285.88}{5} \\ &= 7257.17 \end{aligned}$$

### ii) Calculation of standard deviation ( $\sigma$ ) SD

$$\begin{aligned} SD_x &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{38496.83}{5}} \\ &= 87.75 \end{aligned}$$

$$\begin{aligned} SD_y &= \sqrt{\frac{\sum y^2}{N}} \\ &= \sqrt{\frac{212610.54}{5}} \\ &= 206.20 \end{aligned}$$

### iii) Calculation of coefficient variation (c.v.)

$$\begin{aligned} CV_x &= \frac{SD_x}{\bar{x}} = \frac{87.75}{7583.03} \\ &= 1.61 \% \end{aligned}$$

$$\begin{aligned} CV_y &= \frac{SD_y}{\bar{y}} = \frac{206.20}{7257.17} \\ &= 28.42 \% \end{aligned}$$

### iv) Calculation of Karl Pearson's correlation coefficient (r)

$$\begin{aligned} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{69027.14}{\sqrt{38496.83} \sqrt{212610.54}} \\ &= 0.762 \end{aligned}$$

### v) Calculation of probable error (PE) of correlation coefficient (r)

$$\begin{aligned} &= \frac{0.6745 (1-r^2)}{\sqrt{N}} = \frac{0.6745 (1-(0.762)^2)}{\sqrt{5}} \\ &= 0.126 \end{aligned}$$

### Appendix-3

Budgeted production = X (unit – 000 kg)

Actual production = y (unit 000 kg)

| F/Y     | x       | y       | $x(x - \bar{x})$ | $y(y - \bar{y})$ | $x^2$   | $Y^2$    | xy       |
|---------|---------|---------|------------------|------------------|---------|----------|----------|
| 2063/64 | 1657.53 | 1530.6  | -94.77           | -115.94          | 8981.35 | 13442.08 | 10987.63 |
| 2064/65 | 1725.89 | 1575.79 | -26.41           | -70.75           | 697.48  | 5005.56  | 1868.5   |
| 2065/66 | 1755.71 | 1627.91 | 3.41             | -18.63           | 11.62   | 347.07   | 63.52    |
| 2066/67 | 1825.59 | 1676.58 | 73.29            | 30.04            | 5371.42 | 902.4    | 2201.63  |
| 2067/68 | 1796.81 | 1821.82 | 44.51            | 175.28           | 1981.14 | 30723.07 | 7801.71  |
| Total   | 8761.53 | 8232.7  | 0                | 0                | 1743.01 | 50420.18 | 22922.99 |

**i) Calculation of arithmetic mean**

$$AM. \bar{x} = \frac{8761.53}{5} = \frac{\sum x}{N} = 1752.30$$

$$A. M \bar{y} = \frac{8232.70}{5} = \frac{\sum y}{N} = 1646.54$$

**ii) Calculation of standard deviation (S.D)**

$$SDX = \sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{17043.01}{5}} = 58.38$$

$$SDY = \sqrt{\frac{\sum y^2}{N}} = \sqrt{\frac{50420.18}{5}} = 100.41$$

**iii) Calculation of coefficient of variation (C.V)**

$$CV_x = \frac{SD_x}{\bar{x}} \times 100 = \frac{58.38}{1752.30} \times 100 = 3.34 \%$$

$$CV_y = \frac{CV_y}{\bar{y}} \times 100 = \frac{100.41}{1646.54} \times 100 = 6.09 \%$$

**iv) Calculation of Karl persons correlation of coefficient (r)**

$$= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{22922.99}{\sqrt{17073.01} \sqrt{50420.18}} = 0.78$$

**v) Calculation of probable error (PE) of correlation of coefficient (r) =**

$$\frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-0.78^2)}{\sqrt{5}} = 0.118$$

### Appendix-4

Budgeted production = X (unit – 000 ltrs)

Actual production = y (unit 000 ltrs.)

| F/y     | x        | Y       | X (x - $\bar{x}$ ) | y(y - $\bar{y}$ ) | $x^2$     | $y^2$     | xy       |
|---------|----------|---------|--------------------|-------------------|-----------|-----------|----------|
| 2063/64 | 6983.65  | 5523.97 | -273.52            | -424.95           | 74813.19  | 180582.5  | 116232.3 |
| 2064/65 | 7080.76  | 5656.82 | -176.41            | -229.1            | 31120.48  | 85322.41  | 55529.36 |
| 2065/66 | 7563.25  | 5978.35 | 306.08             | 29.43             | 93684.96  | 866.12    | 9007.93  |
| 2066/67 | 7365.45  | 6256.88 | 108.28             | 307.96            | 11724.55  | 94839.36  | 33345.9  |
| 2067/68 | 7292.77  | 6328.58 | 35.6               | 379.66            | 1267.36   | 144141.71 | 13515.89 |
| Total   | 36285.88 | 29744.6 | 0                  | 0                 | 212610.56 | 505752.11 | 226631.4 |

i) Calculation of arithmetic mean

$$A. M. \bar{x} = \frac{\sum x}{N} = \frac{36285.88}{5} = 7257.17$$

ii) Calculation of standard deviation

$$SD_x = \sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{212610.56}{5}} = 206.20$$

$$SD_y = \sqrt{\frac{\sum y^2}{N}} = \sqrt{\frac{505752.11}{5}} = 318.04$$

iii) Calculation of coefficient variation (CV)

$$CV_x = \frac{SD_x}{\bar{x}} = \frac{206.20}{7257.17} = 2.84\%$$

$$CV_y = \frac{SD_y}{\bar{y}} = \frac{318.04}{5948.92} = 5.34\%$$

iv) Calculation of karl pearson's correlation of coefficient (r )

$$= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{226631.40}{\sqrt{212610.56} \sqrt{505752.11}} = 0.691$$

v) Calculation of probable error (PE) of correlation of coefficient (r )

$$= \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(0.691)^2)}{\sqrt{5}} = 0.157$$

## Appendix – 6

### Sita Ram Gokul Milk (Kathmandu) Ltd

Balance sheet for five year

| Particulars                          | 2063/64       | 2064/65       | 2065/66       | 2066/67       | 2067/68       |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>A Capital &amp; Liabilities:-</b> |               |               |               |               |               |
| Shareholder's Fund                   |               |               |               |               |               |
| Share Capital                        | 45750         | 45750         | 69250         | 69250         | 69250         |
| Medium & long term loans             | 105502        | 105999        | 95276         | 97917         | 102365        |
| <b>TOTAL</b>                         | <b>151252</b> | <b>151749</b> | <b>164526</b> | <b>167167</b> | <b>171615</b> |
| <b>B Assets:-</b>                    |               |               |               |               |               |
| Fixed Assets (I)                     | 96370         | 91159         | 90095         | 89629         | 92550         |
| Current Assets                       |               |               |               |               |               |
| Loans & Advance                      |               |               |               |               |               |
| Closing Stock                        | 14675         | 11499         | 11855         | 16955         | 15612         |
| Sundry Debtors                       | 1268          | 2148          | 4405          | 3113          | 4125          |
| Cash and Bank Balances               | 1132          | 843           | 1446          | 2721          | 2836          |
| Advances & Deposits                  | 3652          | 1986          | 2248          | 2688          | 3542          |
| Sub – Total (a)                      | 20727         | 16477         | 19955         | 25477         | 26115         |
| Current Liabilities & Provision      |               |               |               |               |               |
| Sundry Creditors                     | 12740         | 13334         | 69529         | 74840         | 78215         |
| Short Term Loans                     | 7287          | 4459          | 7016          | 8849          | 8435          |
| Provision & Other payable            | 46989         | 57583         | 0             | 0             | 0             |
| Sub – Total (b)                      | 67017         | 75376         | 76545         | 83689         | 86650         |
| Net Current Assets (a – b) II        | (46290)       | (58900)       | (56590)       | (58213)       | (60535)       |
| Deferred Revenue Expenditure III     | 646           | 569           | 949           | 992           | 998           |
| Profit & Loss Account IV             | 100527        | 118921        | 130072        | 134758        | 138602        |
| <b>Total (I+II+III+IV)</b>           | <b>151252</b> | <b>151749</b> | <b>164526</b> | <b>167167</b> | <b>171615</b> |

**Appendix 7**

**Supplementary Research Questionnaires**

Name of the Respondents

Position..... Department .....

Tenure of Service

Sex..... Academic qualification.....

Professional .....

Please tick as (√) on the one or more boxes and fill in the blanks as per question required.

1. What were the specific objectives of SGML?

- a) Expansion
- b) Optimum capacity utilization
- c) Return on capital employed
- d) Net profit margin on sales
- e) Other if any

2. Are they satisfactory or favorable?

Yes.  No.

3. Would you state of the main cause of low achievement? If any please give some reason.

- a).....
- b).....
- c).....
- d).....

4. Would you maintain the financial position of SGML?

- a) Very good  b) good
- c) Satisfactory  d) poor



5. If poor, would you mention the cause?

a) ..... b).....

c) ..... d).....

6. What management systems are applied in SGML in phase of planning, decision making and controlling?

- a) Participated management
- a. Management by objectives
- b. Centralize Decision
- c. Autocratic management

7. On what basis sales and production budget is prepared?

a) Long range  b) short range

8. Who are responsible for preparing sales plan?

a)..... b).....

c)..... d).....

9. What pricing methods are accepted?

a) Cost plus pricing  b) Marginal pricing

c) Other methods

10. How does SGML sales its product?

a) Cash  b) Credit

c) Both

11. What is the distribution channel of SGML?

a) Producer - Costumers

b) Booth man - Costumer

c) Producer - Wholesaler - Retailer - Consumer

d) Producer - Agent - Wholesaler - Retailer - Consumer

12. What are the promotion mix used by SGML to inform its Product and its quality to consumer?

- |                     |                      |                    |                      |
|---------------------|----------------------|--------------------|----------------------|
| a) Advertisement    | <input type="text"/> | b) Sales Promotion | <input type="text"/> |
| c) Personal selling | <input type="text"/> | d) Publicity       | <input type="text"/> |

13. What are the main problems in production process by SGML?

- |                          |                      |                              |                      |
|--------------------------|----------------------|------------------------------|----------------------|
| a) Old machinery         | <input type="text"/> | b) Process able Raw material | <input type="text"/> |
| c) Not excellent workers | <input type="text"/> | d) Old management system     | <input type="text"/> |

14. What are the SGML products?

- a)..... b)..... c).....  
d)..... e).....  
f).....

15. What inventory policy has been adopted?

- | Raw material   |                      | Finished Goods stock |                      |
|----------------|----------------------|----------------------|----------------------|
| a) Stable      | <input type="text"/> | a) Stable            | <input type="text"/> |
| b) Fluctuating | <input type="text"/> | b) Fluctuating       | <input type="text"/> |
| c) Average     | <input type="text"/> | c) Average           | <input type="text"/> |

16. Which production policy has been adopted?

- |             |                      |             |                      |
|-------------|----------------------|-------------|----------------------|
| a) Seasonal | <input type="text"/> | b) Flexible | <input type="text"/> |
| c) Stable   | <input type="text"/> | d) Other    | <input type="text"/> |

17. From which market raw milk is purchased?

- |            |                      |                    |                      |
|------------|----------------------|--------------------|----------------------|
| a) Farmers | <input type="text"/> | b) Domestic market | <input type="text"/> |
|------------|----------------------|--------------------|----------------------|

18. What is the wages payment system?

- |               |                      |               |                      |
|---------------|----------------------|---------------|----------------------|
| a) Time basis | <input type="text"/> | b) Work basis | <input type="text"/> |
|---------------|----------------------|---------------|----------------------|