

CHAPTER - ONE

INTRODUCTION

1.1 General Background

Nepal is beautiful mountainous and democratic country of the world. It lies between two big neighbors' countries, China and India. They are 65 and 22 times larger than Nepal. Some facts about Nepal is presented below.

Total Area Covered: It covers 1,47,181 sq. km about 885 km from east to west and 193 km from north to south, this area is 0.03% part of world and 0.3% part of Asia.

Budget Position: In developing countries like Nepal, agriculture remains backbone for economic development. Therefore Nepalese economic development heavily depends upon the improvement of agricultural sector. In the context of Nepal, agriculture has been the main means of income and employment generation.

United Nations Journal States "One major preoccupation of developing countries, particularly of those in Asia will be to improve social condition through provision of employment and bring about a system of development allowing for participation by all members of society". (United Nation, New Yourk,1977)

This statement urges to improve social participation in all sectors for economic development.

But for the rapid development of developing country like Nepal, development in agriculture sector along is not sufficient. It is essential to develop in Industrial sector too. Due to lack of Infrastructure, rapid and sound economic development is not possible only from the side of private sector. Therefore the systematic development program of Nepal began with the initiation of the first five year plan in 1956-57 A.D. Despite of the continual

efforts of four decades, the country has not yet been able to alleviate the poverty of the people. Even today, more than 40% of the total population lies below the poverty line. Taking this in view, the current 3 year interim plan has put a premium on poverty reduction objective. This plan has concentrated almost portion of the public investment on the rural areas and has given much focus on the development of agriculture.

Despite of the continual effort of Government of Nepal, our country has not yet been able to alleviate the poverty. The causes are lack of rapid technology, scientific ideas, poor resources mobilization and increasing corruption. The economic condition of Nepal is going very low than other developing countries. Therefore every organization needs profit to run smoothly.

1.2 An Overview of Industrial Development in Nepal

Nepal is one of the least developed countries of the world. More than 90% of population is still in the rural areas and most to them are not yet getting minimum physical facilities such as education, transportation, drinking water and healthcare.

Industrialization is major base for stable and reliable economic development. Neither government nor private sector is able to establish Industries, Nepal pursuit her development embanks upon PE's in Nepal can be ascribed to constitutional arrangement for mixed economic system where by public and private sectors co-exist to enhance public welfare by creating a society which is just dynamic democratic and exploitation free. However, the guiding rational for the establishment have been pragmatic one and such promotion in different plan document are: creation of Infrastructure, supply of essential pubic goods and services, control private sectors monopoly in market, enhance public welfare, huge capital investment etc. (Manandhar, 2057)

The history of our industrial development is not comparable with developed country. But there have been handicraft and cottage industries in

Nepal since ancient times, but modern industry was established in recent period because it was only 1937 A.D. The industrialization of Nepal's Industries began with the establishment of a few medium scale industries. At the ending period of Rana Regime our industrial development history was started.

There is not doubt the Regime of Juddha Shamsheer can be called the innovate period in Nepalese history, which contributed to the growth of industries (Giri,2053.) Juddha Samsheer, not only lunched the program of industrialization but also tried to create necessary infrastructure for industrialization in this period. First major step was the establishment of Udyog Parishad in 1936 A.D. (Bajracharya and Agrawal ;1980.). Then after various laws were also formulated. The company act was the first organized act in the sphere of industry and commerce came in 1936A.D and Nepal Private Company act was promulgated in April 1943 A.D to promote small industries. Nepal's first joint Stock Company Biratnagar Jut Mill was established in Biratnagar in 1936 A.D with authorized capital of Rs.1.6 million and paid up capital of Rs. 0.8 Millions, Nepalese and Indian capital was invested in this enterprise. Biratnagar Jut Mill was followed by the establishment of a number of industries in the field of cotton textiles, mining paper, soap ceramics, glass and furniture.

In the period between 1964 A.D. Up to the establishment of democracy, 63 companies were registered with the total combined capital of Rs 700 millions I.C. and Rs 2.1 million N.C (i bid, Giri, P.13)

For creating infrastructure of industrialization, first financial institution Nepal Bank Limited was established in 1937 A.D. to provide financial assistance and carry out banking transaction as well as to do central banking operation since 1935 A.D. The insurance services were also made available to protect the trade and industry through Indian companies. (Rajbhak,1983)

After the struggle period, the growth of Nepalese's industrial process took a race because the government had formulated various acts, policies, rules and regulations for motivating and operating industrial activities.

Different Acts, rules, regulations are amended according to time some of them are industrial policy act 1957 A.D, factory workers welfare act 1959 A.D, industrial Enterprise act 1961 A.D, Partnership act 2021 B.S. etc.

1.3 Public Enterprises: An overview

“Public Enterprises are autonomous bodies, which are operated and owned by government they provide goods and services for a price. The PEs play vital role in every sector of our country considering economy and social development as the primary objective. Nepal has aborted the mixed economy model with the implicit assumption that both the state and the private sector would be complimenting each other in the development process overtime.” (Pathak,1983)

So that various PE's established in different sectors such as trading services, social and financial sector in the country. The main objectives of establishing, these enterprises are to contribute to the rapid economic development of the country, providing qualitative goods and services at reasonable price for people. Concept of public enterprise is vague therefore some concepts are cited below.

“Public enterprises are autonomous bodies which are owned and managed by the government to provide goods or services for a price. The ownership with the government should be 51% or more to make an entry PEs.” (Joshi, 2053)

Similarly, “Public enterprise means state ownership and operation of industrial, agricultural, finance and commercial undertaking” A.H. Hanson. (Joshi, 2057)

PE's were established with the explicit objective of mobilizing resources and earning reasonable profit necessary for the development of the country. The goal was accepted in the second plan. (Pathak,1983)

Nepal started to establish Public Enterprise just before the democracy 2007 B.S. Only few industries were established in that period. But after

democracy, Government of Nepal launched the planned development program since 2013 B.S. when the first 5 years economic plan was introduced.

By following this plan, during first plan period, 7 PE's were established. There was one year gap between the 1st five year plan and the 2nd one. In that period only 3 PE's were established. After one year in 2nd plan period 11 PE's were established. Likewise in third plan period 12, in fourth 27, in fifth 8, in sixth 10 but in this plan period few enterprises were liquidated, consolidated and also sold to private sector. At the beginning of seventh plane the government developed some polices for public enterprises given greater Autonomy, less interference, performance evaluation and given core responsibility to the employees. At the same time government planned to encourage the participation to private sector enterprises and gradual transfer of private enterprise. But some PE'S were established in this period.

By considering the industrialization is only possible by participating the private sector because it brings new technology and technological skills. In eighth plan period, privatization policy was encouraged and stressed its implementation. For this purpose privatization act 2051 B.S. was enacted in this period. Two PEs were liquidated and 16 PEs were privatized. The government wholly emphasizes on the development and growth of existing PEs and government has also started the evaluation and continue process of privatization in ninth plane period.

1.4 Manufacturing Public Enterprises

Manufacturing means the physical or chemical transformation of materials or components into new products by power- driven machines or hands. Hence manufacturing industry means those industries conducting there business in the fields of physical or chemical transformation of materials or component's in new products. The study is being held on production Budgeting and production policies of Nepalese Manufacturing Enterprises

Nepal is an under developed country where most of people depends on agriculture. Nepal is a land locked country and most of the people are

poor. People are not interested to establish enterprise because of lack of entrepreneurship. For the rapid development of the developing country like Nepal, it is essential to develop in industrial sector but too rapid and sound economies development is not possible only from the side of private sector due to the lack of adequate infrastructure as well as appropriate technology required to set up the large industry. "Nepal Government of has been given due emphasis on the industrial sector. The economic survey report (1984-85) states that the emphasis on industrialization for the creation of enough job opportunities for the people and for raising their economic levels through a sizable increase in GDP appears quite relevant at a time, when the growth of population for the country pushing the rural economy down to the subsistence level." (Ministry of Finance, Economic survey report 1985, Kathmandu)

In Nepal Government has operated numerous manufactures trading and commercial enterprise both public and private sectors. Each sector private as well as public has its own merits and demerits depending upon the ideology resources available, regulation, consciousness, control monitoring supervision, mechanism etc,

Public enterprise was felt essential to create infrastructure because the public enterprises helps many areas as balanced regional development public welfare, generate employment opportunities export promotion. Various enterprises have established in the different field such as:

- Manufacturing enterprise
- Trading enterprise
- Service enterprise
- Social /public utilization enterprise
- Financial enterprise

‘ The main objective of these enterprises is to contribute to the rapid economic development of the country. But most of the public enterprises are suffering in losses.

1.5 Performance of Public Enterprises

Nepalese public enterprises were established at manufacturing sector, trading sector, social sector, public utility sector and financial sector. Profits made by different PEs are as follows;

Table no.-1.01

Gross profit of various year		Rs. In Million						
Sectors	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Manufacturing	-409.0	-357.4	-353.5	-400.4	-117.1	-157.5	-340.2	-180.1
Trading	689.4	86.5	-522.8	-2080.9	-1958.8	-2641.0	-4187.1	-1901.7
Services	26.9	-959.6	-272.7	200.8	-259.3	740.4	-57.0	499.5
Social	-24.7	-21.1	-18.1	4.4	-141.2	43.3	47.9	-48.0
Public Utilities & Others	3410.1	2166.6	2090.2	2662.1	5733.1	2344.2	3979.1	6887.8
Financial	-1288.3	-2268.2	-6398.4	-2000.4	-5780.8	1800.9	2246.0	3644.9
Total	2404.4	-1353.2	-5475.3	-1614.4	-2524.1	2130.3	1688.7	8902.4

**Source: Ministry of Finance*

1.6 Concept of Profit Planning

Profit planning is a comprehensive. Plan expressed in financial terms by which an operating program is effective for a given period of time. It includes the estimation of the service activities and project comprising the program, the resultant expenditure requirements and the resource usable for their support. (Jones, 1990)

A budget is a plan of action, which generally covers the area of revenues and expenditures. Budget presents the future forecasting, numerically in suitable format that makes proper control in profit and cost. In this competitive world, the importance of profit planning a management tools a means to accomplish an administrative end a means to get something done over a period of time. It must be prepared in advances of commencing operations. Stating what and how things are to be done. Profit plan covers the

definite ordination and control. Therefore it is important device of administration.

The term and functions of budgeting were developed for state purpose “As applied in the conduct of government affairs, budget control implies a forecast of probable further expenses and an analysis of the sources from which income is to be raised to meet these expenses. This result in the establishment of desirable totals for expenditure and revenue completed with the constant comparison of actual receipts and expenditure against the budget through act the period then offers a current measure of the extent to which the perceived plans are being realized”. (Willsmore, 1979)

All Business organizations are familiar with profit planning. But it depends upon the size of the Business. The common objective of profit planning and control system, whether applied to national finance or business administration, is to formulate policy aimed at an objective established after the consideration of the probable course of events in the future and to provide a means for the constant comparison o factual progress toward this goal against the pre- conceived results” (i bid P.No-3)

To prepare profit plan the rules and formats also varies according to the size and nature of business organization. Profit plan is prepared within the environment of relevant variables and strengths and weakness. Generally two types of profit plans are prepared. For long range objectives strategic plans are prepared and for short range objective tactical plans are prepared. Generally following plans are prepared in organization according to their needs.

- Sales planning\budget.
- Production plan\budget.
- Raw material purchase budget
- Inventory budget
- Labour cost/hour budget
- Mfg. overhead budget

- Administrative expenses budget
- Selling and distribution expenses budget
- Cash budget
- Capital expenditure budget
- Flexible budget
- Projected income statement
- Projected balance sheet
- Variance analysis and performance report.

1.7 Profit Planning in Nepalese Organization

Profit planning is important to all large and small or public and private organization. But small organization does not afford the cost and process or profit planning. Therefore only large organization has followed the steps of profit planning.

In Nepalese context, public enterprises institute a vital instrument for the social, economic development of the country. It enjoys a strategic and crucial position in our mixed economics. They have been established in many sectors for the overall development of the country with difference goals and objectives. (Shrestha ,1990)

But Nepalese PE's are run with out well determined strategy and programs, in other word with out any sound plan of actions. (Agrawal, 1982) "Execution of PPC will not occur automatically" Planning compasses the whole field of deciding what you want to accomplish in future. This involves the careful determination and establishment of objectives and the proper assignment of responsibility to individual or group of individuals .If it is impossible to build a house without a blue print without some indication of what the carpenters electricians, masons, plumber and painters are to do how we can expect to manufactures an product or render a service with out the same careful planning. (Khadka.1976)

As the importance of profit planning Nepalese PE's are running with out well- determined strategies and without sound plan of action. Profit the only way to ensure survival in a taught business environment.

Therefore each and every organization must keep profit planning in appropriate manner to boost up its economic condition better.

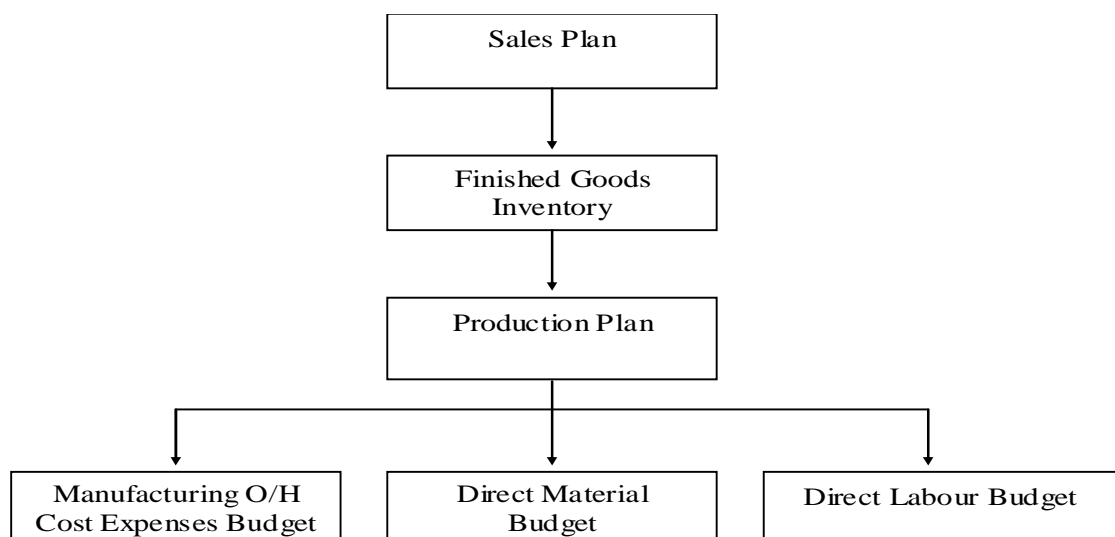
1.8 Production Plan/Budget

The second step of manufacturing organization is setting of 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 in to production program. It interlinks other planning like material planning, labor planning, overhead planning etc. Production budget assure a pattern of demand of finished product, which based on previous requirement of selling department. It is the estimates of the total volume of production, scheduling of operation by days, weeks and months in quantitative terms. The production budget can be presented in equation as:

$$\text{Production Unit} = \text{Sales forecasted} + \text{Closing Inventory} - \text{Opening Inventory}$$

According to above equation the production budget can be shown in a diagram as follows:

Figure no- 1.01



A production budget is a quantitative budget, lays down the quantity of units to be produced during budget period. It aims to maintain optimum balance between sales, production and inventory position of the organization. To develop a production budget the following step should be followed:

Step-1: To establish policies for inventory level

Step-2: To plan the total quantity sales of each products during this period.

Step-3: To schedule this production policies produce by production department.

1.9 Brief Introduction of DDC its Development

A first five years plan stressed upon the need of developing modern dairy industry in public sector. The dairy development commission was formed in 1955 AD. The dairy development section was established in the year 22010\11. As the demand of milk and milk products were gradually increasing so it was necessary to improvement of dairy development center. 1st dairy development center was established at Bhotahity on the same year. This center started to distribute the collected milk with processed to the urban people in Kathmandu. The demand of milk and milk product have been increasing day by day, the dairy plant became necessary. Due to the inadequacy of space this center was shifted to Lainchaur, which is Center Dairy Development Corporation (DDC).

It was constituted to guide the dairy development section. At that time, Swiss association provided dairy experts for technical assistance. The dairy development commission had been converted in to dairy development board in 2009, ultimately in act 2021.

But the dairy development activities in Nepal started in Tusal village of Kavre District in B.S. 2009 on experiment basis with a small-scale milk processing plant under the development of agriculture. In the year B.S. 2010-2-1 at the initiative of dairy development board, the central dairy plant was

established and starts milk collection, processing and marketing activities from the year B.S. 2014.

Dairy Development Corporation (DDC) is totally owned by government. It is also financing supported by the foreign grants and loans at interest. World Food Programmer has been supporting Dairy Development Corporation since 2030. The New Zealand and Danish Governments had contributed towards the establishment or milk processing plants.

Before established Dairy Development Corporation, there is no potential market for the farmer. To provide reasonable price for the milk producers of the rural side and also pasteurized milk DDC has been working form its set up. The demand of milk is increasing order because of rapid increase in population so the DDC is trying to collect milk occupation base. DDC has expanded it's branch offices in different parts of the counters such as Kathmandu, Biratnagar, Hetauda, Pokhara, Lumbini and DDC also produce different products such as pasteurized milk, Dahi, Ice cream, Butter, Paneer, Cheese, Ghee and skim milk powder, Which are briefly introduction below.

1.9.1 Products of Dairy of Development Corporation

Many products produce by DDC form milk, which are follows with their brief introduction.

➤ **Pasteurizes Milk**

Milk collected from rural areas standardized to contain 3% fat and 8% solid not fat (SNF) and pasteurized by a HTST pasteurizes.

➤ **Dahi**

It is formed by milk. Large-scale people consume it in solid form of milk.

➤ **Ice-cream**

It is frozen dairy product having rich source of calcium phosphorus and other mineral. Ice cream produced by DDC is available in 80 ml. cuss and 1 liter containers.

➤ **Cream**

It is obtained from cow and buffalo milk it is filled in ½ liter plastic containers and sealed well.

➤ **Butter**

Butter is the solidified fat of milk obtained from cream usually by chumming.

➤ **Paneer**

Paneer is one of the indigenous varieties of milk products obtained from fresh buffalo milk.

➤ **Ghee**

Ghee is the pure clarified fat derives solely from cow or buffalo milk in which no colour is added.

➤ **Cheese**

) Yak cheese: It is obtained from yak milk. It is produced in mountainous side of Nepal.

) Kanchan cheese: Kanchan is manufactured in Pashupatinagar in Ilam of eastern hilly region of Nepal. It is produce by pure cow milk. This is the best cheese in Nepal.

) Buffalo cheese: It is also rennet coagulated hard variety of cheese obtained from buffalo milk.

➤ **Skim Milk Powder**

DDC is also manufacturing skim milk powder in Biratnagar. Milk is dried to powder by evaporating its water content in spray drier.

➤ **Rasabari**

➤ **Lalmohan**

➤ **Peda**

➤ **Jeera mohi**

1.10 Need of the Study

Profit doesn't just happen it needs to be managed. Every business organization should systematically plan. For profit, company should be able to determine its target sales. Profit is the amount of revenue earned above the

expenses. Company's performance is measured through sales. Most Nepalese companies suffer from poor performance. The need of this study is reality examine whether the DDC is applying theoretical tools of production planning in practical way or not.

Table no.-1.02

Actual production of different products in DDC

In'000 units

FY→	2059/60	2060/61	2061/62	2062/63	2063/64
Milk (ltrs.)	72910	74072	73096	69052	67802
Butter(kg)	1304	1372	1205	1301	1253
Ghee(kg)	843	806	648.3	951	760.8
Cheese(kg)	168	206	202.8	199	280
Dhahi(ltrs.)	998	1067	873.6	920	1050
Ice-Cream(ltrs.)	36	38	43	84	154
Paneer(kg)	55	68	58.9	84	99
Cream(ltrs)	0	0	250	26	46
Skimmed Milk powder(kg)	635	669	598	641	505
Raswari(pkts)	0	92	87.1	88	178
DDC Fresh Milk(ltrs)	0	0	203.2	272	540
Lal Mohan(pkts)	0	29	55.4	67	125
Peda(pkts)	0	54	61	69	101
Lassi(ltrs)	0	0	13.2	33	14
Balu Shahi(pkts)	0	0	0	15	14

(Sources: Planning Department of DDC)

Table no.-1.03

Budgeted production of different products in DDC

In'000 units

FY→	2059/60	2060/61	2061/62	2062/63	2063/64
Milk (ltrs.)	76717	78852	83653	78664	74508
Butter(kg)	1012	1518	1318	1179	1207
Ghee(kg)	902	951	917	997.8	708
Cheese(kg)	201	214	241	250.3	287
Dhahi(ltrs.)	961	1108	1182	850.2	1350
Ice-Cream(ltrs.)	39	41	186	100.7	163
Paneer(kg)	48	68	132	122.7	157
Cream(ltrs)	0	0	0	33	52
Skimmed Milk powder(kg)	548	631	698	650	636
Raswari(pkts)	0	85.3	140	121.2	185
DDC Fresh Milk(ltrs)	0	0	126	590.8	598
Lal Mohan(pkts)	0	0	88	83.1	134
Peda(pkts)	0	0	120	112.5	117
Lassi(ltrs)	0	0	16	8	15
Balu Shahi(pkts)	0	0	0	34	22

(Sources: Planning Department of DDC)

As Table no.-1.02 and Table no.-1.03 show the actual production and budgeted production made by DDC in different years, it seems more fluctuated and weak. Therefore the study is needed because planning process will significantly contribute to improve the profitability as well as the overall financial performance of an organization with the help of the best utilization of resources. Accomplishment of objectives in every organization depends up on the application of resources. The financial performance of an organization depends purely on the use of its resources. Therefore planning is the key to productive financial planning if the panning process of organization is effective and result oriented, the path of development naturally steps forwards.

Profit planning is heart of management and production planning is primal planning in overall production budgeting, therefore to achieve organizational objective, production planning should be made in careful way. The present study is intended to analyze and examine the relation of production planning with sales planning, inventory, cost volume profit analysis, leverage, ratio analysis etc and its effectiveness in DDC.

1.11 Objectives of the study

The basic objective of this study is to analyze the present production planning system of DDC review the relationship of production plan with other and evaluate the effectiveness of such plan followed by DDC. This broad objective has been further specified in following sub objectives.

- To analyze the production budget prepared by DDC with theoretical prescription.
- To analyze the cause of Production fluctuation in different month and years.
- To study the relationship of Production plan with sale plan, inventory and different
- overhead budgets etc made by DDC.
- To study about variance between actual and budgeted production.
- To evaluate the effectiveness of production plan made by DDC.

1.12 Importance of the study

In every organization production plays very vital role. Profit is the main aim of every organization and profit is made through sales of produced goods. Therefore production is needed for every successful Business organization. It is also Acts as an instrument for minimizing future risk maximizing the output from scarce resources, predicts the future uncertainty and make managerial decision because those function is made through the profit planning and production plan is one of the foundation of profit planning.

Besides, this study is designed to describe the purpose of different type of budget related with production. How they are prepared how other budget support to production budget. This study will also examine the present and historical literature. This research paper therefore holds some importance. This research will help the DDC management for better planning of production. It also helps the various interested people to minimize curiosity and overcome the certain limited problems regarding Budgeting.

Valuable suggestion and the recommendation will serve to the people (inside and outside the organization) concerned with making profit systematically in Business organization.

1.13 Focus of the study

This study focuses in evaluation the effectiveness of production budget and its effective implementation in DDC. It is designed to describe the purpose of sales budget, production budget, CVP analysis, ratio analysis etc used and their assistance in policy making of DDC. Main focus of the study is to explain and to describe production budgets.

1.14 Limitations of the study

The main focus of this study is production planning. Following factors have limited the scope of this study.

- The study has been undergone through the data only 5 years which may not be total means of analysis.
- The analysis will base upon the primary as well as secondary data, which are available.
- Primary data were collected through interview and secondary data were collected form financial statement of DDC. From national planning commission, progress report of DDC and other published and unpublished data related with study. Therefore some more limitation is raised. Thus the truth of the study base upon the data available.

- The analysis is concentrated in management financial and accounting aspect. It does not cover all area of the enterprises.
- Time and resource constraints may limit the areas covered by the study.

Since dissertation is submitted in partial fulfillment of requirement of MBS Degree, so it was not possible to carry out a detailed research in the subject area.

1.15 Research Methodology

The analysis is special base upon secondary data to fulfill the objectives of the study. The research study follows basically a case study of Dairy Development Corporation to evaluate the budgeting system. For the fulfillment of this study secondary data are collected as follows:

- Annual report of DDC.
- Financial statement and budget of DDC.
- Magazines and news papers.
- Published books, journal, relating to DDC.
- Government report, bulletin and other published statement of DDC.
- Previous studies made in this field.

This research is descriptive analytical as well as exploratory in nature .For this purpose data are managed in proper form .Interpretation and explanations is made where ever necessary. To analyze the collected data by using some financial and statistical tools, such as co-efficient of variance correlation, regression analysis, trend analysis, percentage analysis, production to profit related ratio analysis etc. will be used as required.

1.16 Organization of the study

These research paper content only five chapters, they are as follows.

Chapter 1	:	Introduction	
Chapter 2	:	Review of literature	
Chapter 3	:	Research Methodology	
Chapter 4	:	Presentation and analysis of data	
Chapter 5	:	Summary, Conclusion	and
Recommendation			

The rational behind this organization is to follow a simple research methodology. The contents of the parts of this study are briefly mentioned here.

Chapter 1 contained the introduction part of the study where the general background of the study, the main issued of production budgeting with respect to DDC is presented.

Chapter 2 is directed towards the review of literature of related studies, it contain conceptual review and major studies related with this research.

Chapter 3 describes the research methodology employed in the study. It includes research design, nature and sources of date, selection of enterprises, method of analysis, statistical tools used, limitation of the study etc.

Chapter 4 deals with the presentation and analysis of different data. Collected data were presented with necessary analysis using proper tools.

Chapter 5 states summary, conclusion and recommendation of this study.

Beside these chapters appendix and bibliography will be included in this research

CHAPTER -TWO

REVIEW OF THE LITERATURE

Review the literature is a process of learning and understanding the concept of the related literature thoroughly. Literature review helps the researchers to provide knowledge about the development and progress made by the earlier scholars on the concerned topics or field of study. It also helps the researchers in generating new idea and gets thought provoking views about the research work, undertaken by him. The objective of Review of Literature is to provide knowledge about the background of the work done by the earlier researches. It also helps to find out the lacuna in the earlier research work and to stop duplicate of the previous work.

For this, this chapter has been divided in to three sections.

- Conceptual Review
- Review of Related Literature

2.1 Conceptual Review

2.1.1 General Concept of Profit Planning

Profit planning of budgeting is forward planning and involves the preparation in advance of the quantitative as well as financial statements to indicate the intention of the management in respect of the various aspects of the business. In fact; it is a managerial technique and a business budget is such a written plan, in which all aspects of business operations with respect to a definite future period are included. It is a formal statement of policy, plan, objective and goal established by the top management in respect of some future period. It acts as a business barometer. It is complete programmed of activities of the business for the period covered. Profit planning is a predetermined detailed plan of action developed and distributed as a guide to current operations and as a partial basis for the subsequent evaluation of performance. Thus, we can say that profit planning is a tool which may be

used by the management in planning the future course of actions and controlling the actual performance.

Usually profits do not just happen; profits are managed. Before we can make an intelligent approach to the managerial process of profit planning, it is important that we should understand the management concept of profit. There are, after all several different interpretations of the term "Profit" – an economist will say that profit is the reward for entrepreneurship. For risk taking a labor leader might say that it is a measure to how efficiently labor has produced and that provides a base for negotiating a wage increase. An internal revenue agent might regard it as the base for determining income taxes. The accountant will define it simply as the excess of firm's revenue over the expenses of producing revenue in a given fiscal period.

The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phases of the management planning and control functions. Specifically, it involves

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

Profit plan is one of the most important managerial devices that plays key role for the effective formulation and implementation of strategic as well as tactical plans of an organization. Profit planning system requires the effective co-ordination between various functional budget of an organization like as sales plan, production plan, purchase plan, material requirement budget, labor cost budget, cash budget and capital expenditure budget.

A profit planning and control program can be one of the more effective communication networks in enterprises. Communication for effective planning and control requires that both the executive and the subordinate have the same understanding of responsibilities and goals. Profit plans, if developed through full participation and in harmony with assigned responsibilities, ensure a degree of understanding not otherwise possible. Full the open reporting in performance report that focuses on assigned responsibilities likewise enhances the degree of communication essential for sound management.

Profit is the most important measure of the firm's performance. In the free market economy, profit is a guide for allocating resource efficiently. An analysis of the effects of various factors as profit is an essential step in the financial planning and decision making.

One systematic approach for attaining effective management performance is profit planning or budgeting. Profit planning or budgeting is an integral part of management. The controller would be particularly invested in profit planning since it helps to regulate flow of fund, which is his primary concern.

Profit, planning or budgeting is an important short term tool of management planning and control. A profit plan is a comprehensive statement of intentions, expressed in financial terms, for the operations of the firm for a short period. It is a plan of the firm's expectations and is used as a basis for measuring and controlling the actual performance of managers and their subordinates.

A budgeting system will be successful if goals to be achieved are clearly stated with proper assignment of authority and responsibility, and if it has top management support full participation of managers should be sought while developing budgets people at lower levels should be educated for the importance of budgeting. Depending on its unique circumstance each company develops and adopts appropriate administration for carrying out the tasks of budgeting.

A profit plan/budget can be divided into three parts; functional budget, financial budget and capital budget. Functional budget provides details about the firm's operation, i.e. sales, production etc. Financial budget includes performance of profit and loss statement, balance sheet, statement of change in financial position and cash budget. Capital budget provides details of investment projects with the amount of capital expenditure planned by the firm.

At last, we can say, profit planning is a comprehensive and co-ordinate plan, which deals with overall planning picture of an enterprise and co-ordinates the various substantive plans, short-term financial term for the firm's operations and resources for a specified period of future plan.

2.1.2 Profit planning in Nepalese Public Enterprise.

"Planning involves the determination of that should be done, how the goal may be reached and what individuals or units are to assume responsibility and held accountable" (Grace,1976) So planning composes the whole field of deciding what you want human beings to accomplish that involves the careful determination of needs the establishment of objectives and proper arrangement of responsibility to individual or group of individuals.

Most of corporations in Nepal suffer from lack of corporate planning so those corporations in Nepal suffer in losses. The corporations do not perform their profit planning program settled of the short terms and long term profit planning so there is no relationship between target and achievement. Public enterprises are run without well determine strategies, programmers and sound plan of action.

Corporate planning in PEs in Nepal is of a very sedimentary form and limited to annual programme and budgets which is most cases are prepared without knowing the projected cost, products or services and limited to annual programs and budgets which is most cases are prepared without knowing the

projected demand for these product and services, and they are not commander at all long term strategic planning is missing (ICI and CCC 1980).

In manufacturing public enterprises, the profit planning program is most important for the utilization of scarce resources and effective and efficiently achieve and accomplishing the goals and objectives in sales planning. Production planning of direct Labour, material building services, Inventory, administrative expenses, capital budgeting, cash flow, strategic and tactical and manpower planning are necessary to prepare profit planning program for manufacturing public enterprises. But Nepalese manufacturing PEs have no formulated the above plans. It is because of confusion of goal, objectives and study of profit planning.

2.1.3 Budgeting as a Tool of profit planning

Budget is an expression of a firm's plan in financial form for a period of time in future. It is an estimate of the future, need calculation for a definite period. It anticipates income for a given period and costs as well as expenses of obtaining this income are set or limited within the ideas of earning a desires profit or controlling losses. A business budget is a formal expression of policies, plans, objectives and goals lay down in advance by top management for the undertaking as a whole and for every subdivision there of Budget, as a tool of planning and control is closely related to the broader system of planning and control in an organization. Planning involves the specification of the basic objectives that will guide it. In Operational terms, it involves the step of setting objectives, specifying goals, formulating strategies and expressing budget. A budget is a comprehensive and coordinated plan expressed in financial terms, for the operations and resources of an enterprise for some specified period in future. (Khan and Jain, 1984).

These days, profit planning and control is viewed incomprehensive way, comprehensive profit planning and control viewed as a process designed to help management effectively perform significant phases of the planning and controlling functions. PPC is not on fined in the traditional view of budget as a

clerically derived set of quantities schedules prepared by an accountant following the stereotyped reporting formats used in financial statements.

- PPC requires major planning decisions by management.
- PPC entails pervasive management control activities.
- PPC recognizes many of the critical behavioral, implications throughout the organization.

So comprehensive planning and control is the recent origin in the field of management but budgeting is the traditional view of accounting and presenting financial statement which can not include all management functions statement which can not include all management functions such as planning, organizing, directing, leading, decision making, coordinating, and reporting as the basic foundation of effective management.

2.1.4 Objectives of Budgets and Budgetary Control

The basic objectives of budget and budgetary control are follows.

- To smooth out seasonal variations.
- To coordinate the various divisions/departments.
- To operate most efficiently the division\department and cost centers.
- To establish divisional and departmental responsibility.
- To forecast operating activities and financial position.
- To provide a method of measurement.
- To provide more definite assurance on return on capital.
- To prevent waste to reduce expenses.
- To centralize management control.
- To obtain better inventory control.
- To ensure adequate working capital.

2.1.5 Requirements for Effective Budgeting

It is necessary for organization to prepare budget for long term operations. So some requirement effective budgeting are follows.

- Support of top management.
- Clearly defined organization.
- Accurate accounting system.
- Unambiguous policy.
- Preparation by Responsible executives.
- Logical sequence in budget preparation.
- Constant vigilance.
- Continuous budget education.
- A degree of flexibility.

2.1.6 Development of Budget

The preparation of master budget is major event in any organization. This complex process involves the efforts of many people from all level of management master budget preparation is a negotiation process in which initial proposals by responsibility center managers are subject to revision as the different components of the budget are brought together and reviewed. There are twelve basic steps in preparing a master budget for the enterprise which are presented below.

- Step 1 : Forecast demand for products or services.
- Step 2 : Identify cost patterns for responsibility centers.
- Step 3 : Estimate production cost.
- Step 4 : Specify operating objectives
- Step 5 : Develop sales budget
- Step 6 : Develop production budget
- Step 7 : Develop purchasing budget.
- Step 8 : Develop budget for responsibility centers
- Step 9 : Formulate profit plan
- Step 10 : Compare profit plan with operating objective
- Step 11 : Formulate projected cash budget.
- Step 12 : Prepare projected statement of financial position

2.1.7 Classification of Budgets

Budget can be classified according to various points of view. The following bases of classification are generally in use.

2.1.7.1 Classification According to Time Factor

- Long term budgets
- Short term budgets
- Current budget

2.1.7.2 Classification According to Function

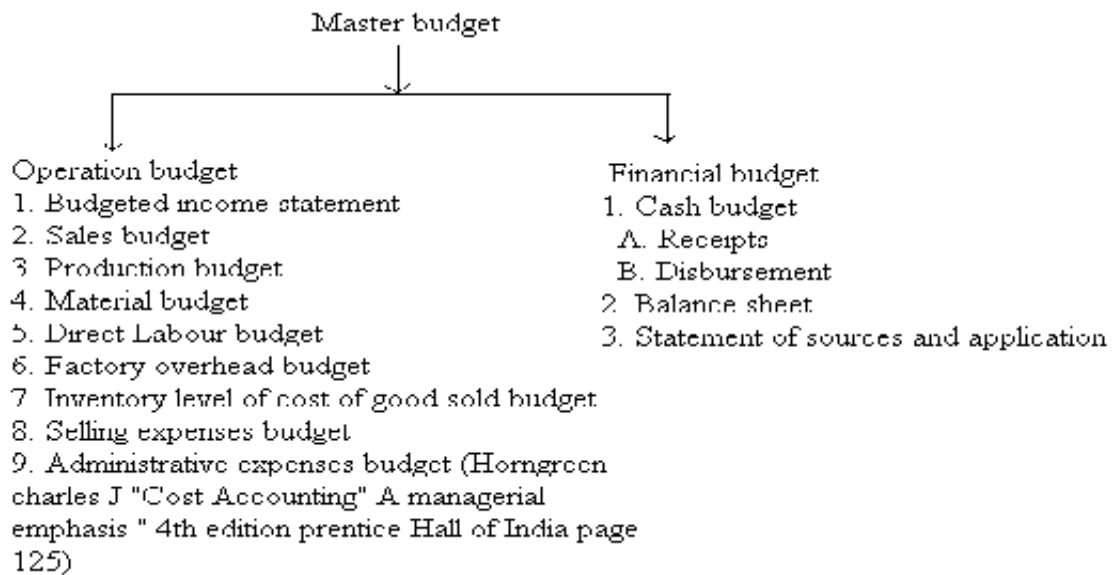
- Sales budget
- Production budget
- Production cost budget
- Purchases budget
- Personnel budget
- Research budget
- Cash budget
- Plant utilization budget
- Office and Administration budget
- Capital budget
- Master budget
- Selling and distribution Cost

2.1.7.3 Classification According to Flexibility

- Fixed budget
- Flexible budget

2.1.8 Master Budget

Budget is a guideline for a specified period to perform the future plan and objectives of an organization. Master budget is the most important tool in PPC for implementing the activities of an organization.



The master budget is the organization's primary short term budgetary device. This comprehensive budget often prepared through a standard cycle of events that occur, a specific time table each year. (Schermerhorn,1983) Master budget is a summary budget, which incorporates all functional budgets and it may take the form of profit and loss account and balance sheet as at the end of the budget period. (Gupta, 1992)

2.1.9 Sales Budget/ Sales Plan

Sales budget represents the income side of the planning budget. It forecast what the business and can expect to sell to its customs during the budge period.

Sales budget is the beginning point for the development of profit plan. According to R.M. lynch, "All budget planning begins with the forecast of sales. Using the information supplied by the sales person." (Lynch and Willamsom, 1984) Sales budget is one of the functional or operating budgets and is essentially a forecast of sales to be effected in a budget period. Sales budget forms the fundamental basis for other functional budgets and it is needed to co-ordinate for a particular product. The preparation of sales budget requires forecast of quantities to be sold and also the standard price at which these quantities may be sold. (Gupta ,1992). "The sales planning process is a necessary part of profit planning and control because (a) it provides for the basic management decision about marketing and (b) based

on those decisions it is an organized approach for developing a comprehensive sales plan if the sales plan is not realistic, most of the other parts of the overall profit plans is not realistic". "The sales budget is a forecast of total sales of all the product expressed in terms of physical quantities prices and values in respect of each product of a future budget period." (Rathnam, 1979. P.12) "Sales plan is the starting point in the preparation of the comprehensive profit planning and control. All the other plans and budgets are dependent upon the sales budget. The budget is usually presented both in units and Dollars of the sales revenue or sales volume. The preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period."(Arthou , Donald and Rabst,1991)

A reasonable degree of accuracy is frequently hard to achieve in sales budget but it is imperative owing to the dependency of other budgets on predetermined figures, particularly the production estimates will be based business. The necessity for accuracy has hastened the abandonment of the method. No method will ensure absolute accuracy but reasonable correct forecasts are more likely to result from through market research and analysis and application of this knowledge of the individual circumstances of a particular business. The preparation of a sales budget is always difficult even in cases where much experience has been gained by carrying out work over a number of years. Through such factors as experience, wise almost help, they have to be used with great care and some times, even these are useless due to the development and operation of circumstances as well as events which were impossible of prediction at the time, sales estimate were made. The sales plan have three distinct part (a) The planned volume of sales the planned sales price per unit for each product (b) the sales promotional plan (c) the sales expenses plan.

The primary purposes of a sales plan are:

- To reduce uncertainty about future revenue.
- To incorporate management Judgments and decisions into the planning process.

- To provide necessary information for developing other elements of a comprehensive profit plan and .
- To facilitate management control of sales activities. (Galenn, Hilton and Gorden, 1984)

In most cases, sales planning is not only the most important but also the most difficult to prepare. Sales plan provides basic management decisions about marketing and based on those decisions, it is an organized approach for developing a comprehensive sales plan. Since the sales planning process is a necessary part of profit planning and control. So the management should develop a realistic sales plan.

A sales plan incorporates such management decisions as objectives, goals, strategies etc. These translate into planning decisions about planned volume of goods, services, price, promotion and other sales effect.

2.1.9.1 Sales Planning and Forecasting

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

2.1.9.2 Comprehensive Sales Planning

Sales plan is an organized approach for developing a comprehensive sales plan and it is a necessary part of profit planning and control. A

comprehensive sales planning includes strategic and tactical sales plan. Both sales plans must be developed in comprehensive profit plan.

A. Strategic Sales Plan

Strategic sales plan is known as long range sales plan. Usually it is five or ten years strategic sales plan. It is to be developed as annual amounts. It requires depth analysis of future market potentials, which may build up from a basis foundation such as population changes, state of economy, industry projection and company objectives. The effect of long terms strategies are also brought bear on the long term sales plan and they would effect in pricing, new production development expansion of distribution channel and cost patterns.

B. Tactical sales Plan

Tactical sales plan is also called short range sales plan. It is to be developed for short term period in a company for future twelve months detailed by month and quarters. Tactical sales plan includes detailed plan of main products, or grouping of minor products, means developed in Terms of physical units or jobs and in sales revenue. For planning and controlling purpose it must be developed by sales responsibility for provides major consideration for planning and controlling purpose.

2.1.9.3 Development of Comprehensive Sales Plan

To development of Comprehensive Sales Plan the following process should be followed.

- Step: 1 Develop management guidelines, specifies to sales planning including with the sales planning process and planning responsibilities.
- Step: 2 Prepare one or more sales forecast consistent with specified forecasting

guidelines including assumptions.

- Step: 3 Assemble all the other data 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.

2.1.10 Production Budget

“A production budget is a quantity budget, which lays down the quantity of units to be produced during the budget period. The main purpose of this budget is to maintain optimum balance between sales, production and inventory position of the firm, production budget is based on estimated sales, production must be planned to allow sufficient time to manufacture the products before the estimated date of sales. The annual sales budget and the inventory requirements provide the framework for the production budget.” (Poudel;2003)

“The production budget is prepared simultaneously with preliminary sales budget. When a tentative sales plan is completed the next step. For a manufacturing company is development of production plan. Production budget will assure a pattern of demand for the finished product, which is based on previous requirement of the selling departments. It is the estimates of the total volumes of production, scheduling of operations by days, weeks and months in quantitative terms”. (Poudel, 2002)

“Production budget helps determine the quantity of production for a defined budget period. This budget is the sales budget adjusted for inventory changes”. (Koirala, 2002) This budget helps is deciding.

- What to produce?

- How to produce?
- When to produce?
- Where to produce?

“Production budget is the initial step in budgeting of manufacturing operations. The production budget is an estimation of planned quantity of goods to be manufactured during budget period.” (Goet ,Gautam and Bhattarai,2062)

After the sales budget has been prepared, the production requirements for the forth-coming budget period are determined and organized in the form of a production budget. Sufficient goods will have to be available to meet sales needs and for the desired ending inventory. A portion of these goods will have already existed in the form of beginning inventory. The remainder will I have to be produced. Thus, the expected volume of production is determined by subtracting the estimated inventory at the beginning of the period from the sum of the units expected to be sold and the desired inventory at the end of the period.

By preparing the production budget as a planning tool, it establishes the foundation for planning all aspects of such factory operations as row material needs, and factory labor needs, supervisory needs, factory overhead, plant capacity, and factory service activities. The coordination between sales plans, inventory policies, and production requirements comes into focus and is resolved in the production plan. It is also an important factory in the overall coordination of such functional activities as cash flow planning, financing, research and development, engineering, and capital additions. It establishes the bases for controls of production, inventories production costs, and labor in the factory. A complete production plan shows budget data classified by (a) products to be produced, (b) interim time period, and (c) activities of each responsibility center in the manufacturing process.

“To plan production effectively, the manufacturing executive must have, or overlap, information relative to the manufacturing operation necessary for

each product. They must have at hand information relative to the uses and capacities of each manufacturing department. The company cost accountants should provide certain historical data essential in planning production quantities and costs. The director of profit planning and control should provide staff assistance when needed. When the recommended production is completed by the production department, it should be submitted to the executive committee for appraisal and to the president for tentative approval prior to its use as a basis for developing the materials, labor, and factory overhead budgets.” (Goet, Goutam & Bhattarai, 2002.)

“The production budget is prepared after preparing the sales budget. A production budget incorporates the estimates of total volume of production with the scheduling of operation by days, weeks and months. It specifies the number of units of product of each product that must be produced to satisfy the sales forecast and to achieve the desired level of closing finished goods.” (Dangol & Dangol,(2061)

2.1.10.1 Development of production Budget.

The following steps should be following to develop a production budget by production managers because main responsibility of production department.

- Step 1) To establish policies for inventory level.
- Step 2 To plan the total quantity sales of each product during this period.
- Step 3) To schedule this production policies produce by production department.

For calculation planned production.

Required unit of sales
Add: closing stock of finished goods.
Total required for production

Less: Opening stock of finished good
Planned production for the year

2.1.10.2 Objectives of production budget

The objectives of production budget or plan are (Goyal ,1995)

- To bring to a common focus all the factors necessary to establish policies and to determine operation.
- To project these establish policies into the future by an analysis of past performances.
- To plan and control the operations being carried out to implement policies decided upon.
- To make provision for materials at right time and place.
- To plan the sequence of operations required for economical production.
- To co-ordinate the various sects of factory operation as to make them a vita link in the chain of profitable programs.

2.1.10.3 Production Policies

There are three types of production policies, which are as follows.

A. Stable Production Policy Vs Unstable Inventory Policy.

Fixed units are to be produced equally in every month or specified period, while the final inventory of finished goods are to be unstable in this policy. Therefore the budgeted sale of that period is unequal.

B. Unstable Production Vs Stable Inventory Policy

Units of final inventory are to be stable at the end of each period and production units are to be fluctuated in each budget period. The number of units produced and budgeted sales are directly related.

C. Flexible in Both Inventory and Production.

Flexible units are to be produced as well as flexible units of final inventory are to be maintained for specified budget period.

2.1.10.4 Inventory Level

There are different methods to be used to compute the inventory on the basis of given data. Some important methods are presented below.

A. Average Sales Method

For compute the inventory level on the average sales method, we can use following ways

I. Simple average: When the total sales for budgeted period. Total budgeted period and required stock of inventory of each period is given in the data we can use the average sales method.

$$\text{Simple average} = \frac{\text{Total sales}}{\text{Total period}} \times \text{required stock period}$$

II. Moving Average Method: When the historical data of long term is given we can use moving average method to compute inventory level.

Moving average stock–

$$\frac{\text{Previous month's sales} + \text{This month's sales} + \text{Next month's sales}}{\text{Basic period}}$$

B. Turnover Method

Under the turnover method we can use following more formula for compute inventory level.

I. Turnover Time Period.

It is only useful for stable production policy. The components of this method are turnover time, Historical sales and average inventory.

$$\text{Planned inventory} = \frac{\text{Total planned sales}}{\text{Turnover time}}$$

$$\text{Note, Turnover time} = \frac{\text{Historical total sales}}{\text{Average inventory}}$$

II. Sales to Turnover Ratio/ Average Withdrawal Method.

Through this method, we can use following formula for compute inventory level.

$$\text{Planned inventory (P.M)} = \text{Planned sales per month} \times \frac{\text{Total No of month}}{\text{Turnover time}}$$

$$\text{Note} \rightarrow \text{Turnover time} = \frac{\text{Historical total sales}}{\text{Average inventory}}$$

2.1.10.5 Strategic Production Planning in Public Enterprises.

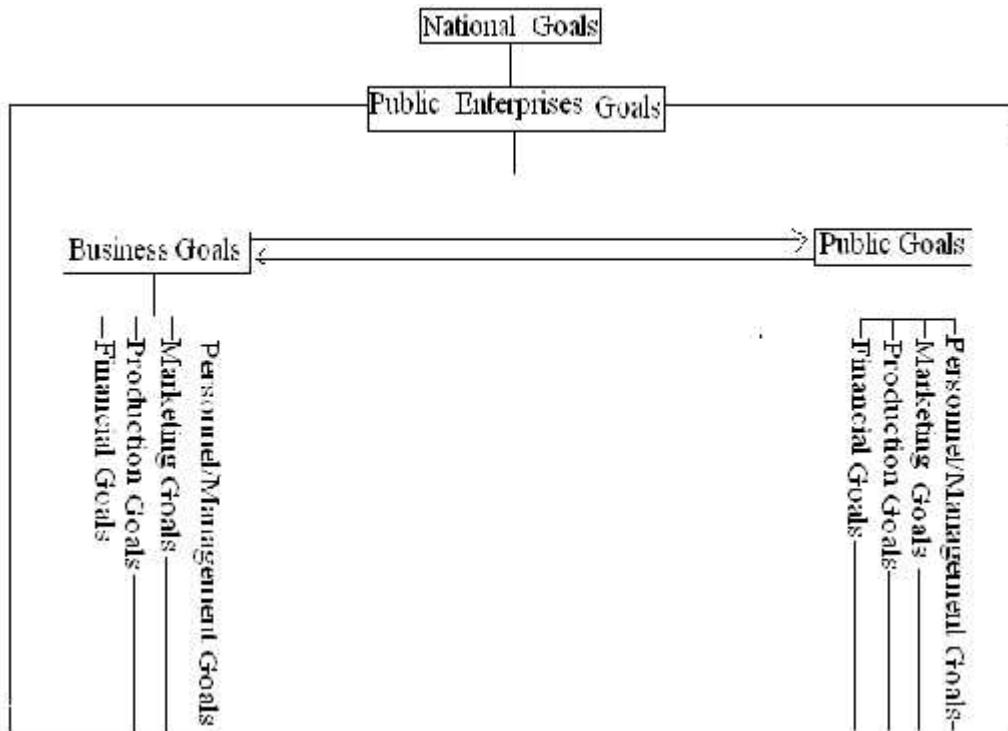
Government policy makers and public enterprise managers in developing countries have recently stressed the need to implement strategic planning methods in order to determine the priorities and policy decisions required to improve the performance of the public sector. In this paper, it is strongly suggested that the strategic planning process in public enterprises needs to incorporate the production function. Recent findings in management theory in the developed economics have recognized that performance at the production level is critical in determining the level of competitiveness of the enterprise, its marketing position, its financial health; it's contributing to economics growth and social welfare in the respective country. It has been also recognized that neglect of the production function in the strategic planning process has, in a number of situations, resulted in low productivity rates and poor performance. Empirical evidence of this aspect has been presented by skinner (1969) and recently by Wheelwright (1984)

2.1.10.6 The Process of Strategic Production Planning

Public enterprises in developing countries contribute to social and economic growth through pricing, employment, wage, human resource management, investment, distribution and production policies. The functional

areas of finance, marketing, personnel and production management (Figure 2.1) are expected to contribute to the achievement of public and business goals in public enterprise management.

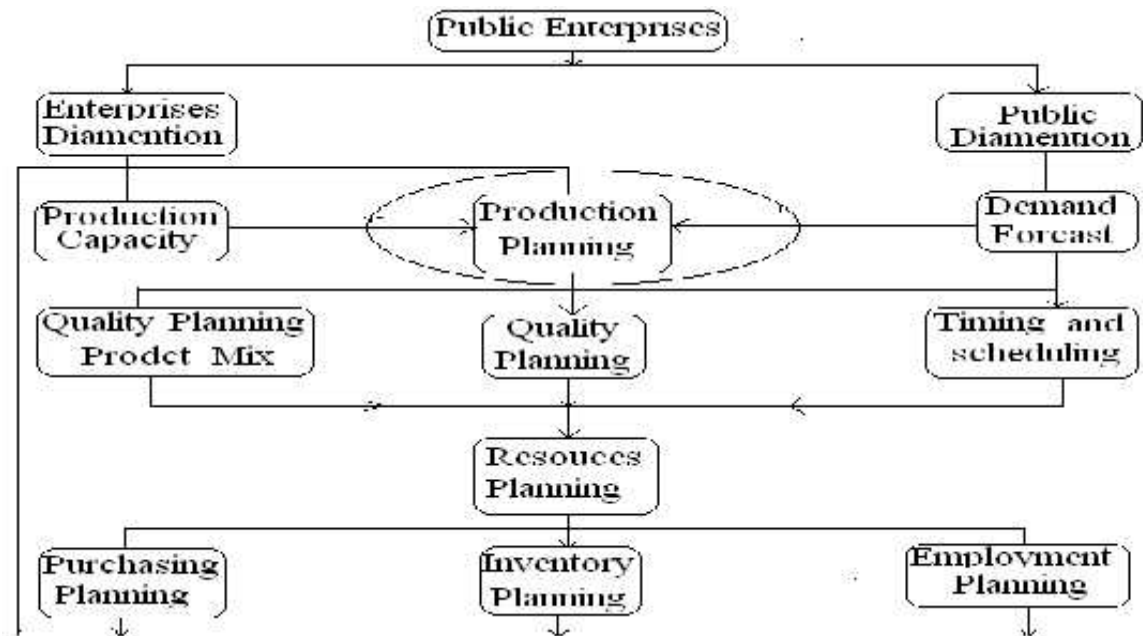
Figure no.- 2.1
Goal setting in Public Enterprises Management



(Adopted from Encyclopedia of Business, Vol-15; p309)

Public enterprises are expected to provide enough services and goods to satisfy local demand, particularly in the case of the industrial and public utilities sectors, and to provide adequate financial resources for economic and social projects in the case of oil and mineral extremely critical to achievement of public and business goals at the enterprise level and, consequently, at the national level.

Figure no.-2.2
Scheme for strategic Production Planning in PEs in Developing Countries



(Adopted from Encyclopedia of Business, Vol-15; p309)

The process presented in Figure 2.2 is based on the assumption that public enterprise has the possibility of achieving its public goals primarily (but not only) through satisfaction of demand and of meeting its business goals through its available production capacity. The total efficiency of the management of the enterprise greatly depends on the interaction between the two dimensions and on the maintenance of equilibrium between the public dimension and the enterprise dimension. As can be seen in Figure 2.2, the strategic production planning process in public enterprises can be based on two parameters: the demand forecast and the production capacity available. Public dimension and the enterprise dimension.

2.1.10.6.1 Possible strategies to meet fluctuation

In order to meet seasonal and periodic fluctuations, public enterprises may consider the use of a production plan which fluctuates in correlation with the demand. Such a strategy keeps the inventory low, but affects the

production system and its maintenance. The time required to adapt from one production cycle to another also needs to be considered. Such a solution is very often constrained by the employment policy of the enterprise. Fluctuating employment will be difficult to implement in public enterprise, since a decrease in the employment level does not accord with a policy of creating and offering stable jobs for workers. As a result, another strategy may be considered. Stabilizing the production level will result in a need to build inventory during low demand periods in order to meet peak demand. This strategy has the advantage of stabilizing production cycles and reducing maintenance and idle time, but it places a particular burden on the financial aspect, in order to keep inventories. It is important to note that strategic planning at the production level needs to be highly coordinated with the strategic plans at the finance, marketing and personnel management levels.

An intermediate possible strategy, which may be considered when fluctuations are high, consists of developing low fluctuating production plans combined with reduced fluctuating inventories. At the employment level, this combined strategy will offer the possibility of stabilizing employment but it will be necessary to consider overtime work as a means of increasing the production level. This strategy has several obvious advantages from the public point of view, but may result in low productivity rates and high cost, since overtime is usually paid at a higher rate than regular time and workers tend to be more productive during overtime than during regular time. It may happen that workers will try to do most of the work during overtime.

Public enterprises may consider the elimination of some products and planning the production of a limited number of items, which would result in specialization. It is obvious that such specialization will lead to cost reduction, productivity improvements and economics of scale.

2.1.10.6.2 Possible Strategies to Meet Saturation and Demand Decline.

Saturation of demand needs to be considered as a strategic factor to be incorporated in the production planning process. It is important that as

integrated and coordination approach to this problem be formulated between the functional areas. At the production level, three possible strategies are identified.

Strategy 1: Quality Improvement

Public enterprises in developing countries may consider the possibility of improving the quality of services or goods offered on the market as a strategy for extending their market share. The advantages of this strategy are multiple.

Quality improvement can easily be considered as a justification for price adjustment.

Quality improvement can also give the public enterprise a better public image. Quality improvement can increase the competitiveness of the public enterprise and bring new markets.

Strategy 2: Specialization

Very often, public enterprises are engaged in the production of several products, resulting in high costs and in idle time. At the stage of maturity, the services and goods which are offered by public enterprises need to be assessed in terms of their contribution to the overall performance of the enterprise and to the public in general. This will include: contribution to the profitability of the enterprise operations through out the manufacturing enterprise. Overall, it comprises the separate phases of forecasting, planning, routing, scheduling, dispatching, and follow- up. The foreman is directly concerned only with the last four of these phases-routing, scheduling dispatching, and follow-up. However, they should have basic knowledge of how the other phases affect the complete picture.

2.1.11. Cost of Production Budget

After determining the volume of output, the cost of procuring the output must be obtained by preparing a cost of production budget. The budget is an

estimate of cost of out put planned for a budget period and may be classified in to material cost budget., labour cost budget and overhead budget because cost of production includes material, labour, and overhead cost.

2.1.11.1 Direct Materials Parts Budget and Inventory Policy

The direct materials and parts budget shows the estimated amount of materials and parts required to produce the number units of finished goods planned in the production budget, it does not show dollar amounts. The basis input is number of units of each type of material and part required to manufacture each units of each type of material and part required to manufacture each unit of finished goods. We can calculate Raw materials to be purchased by using following Formula.

Raw material to be purchased = Raw material consumption + Closing inventory of raw material - Opening inventory of raw material.

Welsch, Hilton and Gordon suggest the following Points to be considered in developing inventory policies.

- Timing and quantity of manufacturing needs.
- Economic purchasing through quantity discount.
- Availability of materials and parts.
- Lead time (order and delivery).
- Perishability of materials and parts.
- Storage facilities needed.
- Capital requirements' to finance inventory.
- Cost of storage.
- Expected changes in the cost of materials and parts.
- Protection against storage.
- Risk involved in inventories.
- Opportunity cost (inadequate inventory).

Before developing the inventory policy two questions should be answered. The first is showing how much to purchase at a time? and second when to purchase? How much to purchase at a time is determined by a well known approach called Economic Order Quantity (EOQ). In EOQ, the ordering cost and carrying cost of the inventory will be minimum EOQ; (units) can be calculated by using following formula.

$$EOQ = \sqrt{\frac{2AO}{C}} \quad \text{Where,}$$

A= Annual quantity used in units

O= Average annual cost of placing one order

C = Annual carrying cost per unit

2.1.11.2 Purchase Budget

The direct materials; a part budget provides the data needed to develop a purchase plan. This requires a decisional input that is the management policy regarding the levels of materials and parts inventories to be maintained using the materials and parts budget and the inventory policy support the Production Plans can be planned. (Welch, I bid. P. 137) Purchase budget specifies.

- The quantities of each type of materials and part to be purchased.
- The timing to those purchases and
- The estimated cost of material and parts purchase

The following formula is used to compute the planned purchase of retail value.

Planned Purchases (at retail value) = Planned Net Sales + Planned Reduction + Planned Ending of Month (EOM) Stock – Planned Beginning of Month (BOM) stock.

2.1.12 Variances Analysis (Budget Variances)

Variances refer the deviation between planned and actual goals. They reflect performances above or below standard. Variances are analyzed according to their cause and the person responsible.

Variance analysis is an important tool that can increase the usefulness of periodic performance reports. It helps management to better understand the causes of variances from planned performance and take corrective action through management by exception. The decision to investigate a variance is a cost-benefit decision. The benefit derives from the possibility of returning the production system to its efficient strategy. The cost is the use of management time to investigate the cause of the variance. Management's time is usually viewed as a scarce resource with a high cost per hour.

Comparison of actual results with planned or budget goals has been emphasized as an integral part of the control process. A basic feature of performance reports is the reporting of variances between actual results and planned goals, if a variance is significant, a careful management study should be made to determine the underlying causes. There are numerous ways to study variances to determine the underlying causes. (Lynch and Williamson, 1984)

- Conference with responsibility center managers, supervisors and other employees in the particular responsibility center involved.
- Analysis of the work situation includes the flow of work, co-ordination of activities, effectiveness of supervision and other prevailing circumstances by
 -) Direct observation
 -) On the spot investigations by line managers
 -) Investigations by staff group internal audits, special studies, and 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. It is frequently applied in the following situation. But data is related to sales, materials, labour and overhead.

- Investigation of variances between actual results of the current period and actual result of a prior period. The prior period is considered the bases.
- Investigation of variances between actual results and standard cost. The standard cost is used as the base.
- Investigation of the variance between actual results and planned or budget goals reflected in the profit plans. The planned or budget goals are used as the bases.

2.1.13 Productivity

According to R.C. Monga, "Productivity is a state of mind. It is an attitude that seeks continuous improvement of what exists. It is a conviction that one can do better today than yesterday and that tomorrow will be better than today. Further more it required constant efforts to adopt economic activities to ever changing conditions applications of new theories and methods. It is a form of belief in the progress of Humanity. (Monga, 1999)

Out put is the result of the combined input of a variety of factors, e.g. Materials, labour, capital , machines and management. Productivity in relation to that particular factor of production. Productivity is thus the power to produce and is related to better leveling standards, growth of the business and the achievement of human being. Symbolically, productivity is the ratio of

$$\frac{\text{Output}}{\text{Input}} = \frac{\text{gross income}}{\text{gross expenditure}}$$

Higher the ratio, better it is high productivity increases production and reduces cost of production per unit and therefore, reduces selling price and

increases profitability of the concern. Productivity should not be confused with production because the latter refers directly to the output while the former relates to the ratio of output of output in terms of input of materials, labor hours, machine hours, capital employed or any other factor of production. Thus in the broad sense, productivity means goods and services produced in relation to resources utilized in producing the same.

To improve productivity there two aspect play importance

- i. Human and
- ii. Technological

i) Human Aspect

The higher co-operation between capital and labour results the greater the productivity. So every effort should be made to have the willing co-operation between these two wings of production so that improvement in productivity may be made. Some of the improvement points of co-operation are listed below.

- Mutual trust and co-operation between capital and labour,
- Works participation in management to give them the feeling that they have a voice in the Administration of the concern.
- Introducing rationalization and automation by taking the workers into confidence and giving them the assurance that they will not be retrenched due to rationalization and automation.
- Adopting two way communication services where by information to and from workers would reach both ends unhampered.
- Giving various incentives to workers for greater productivity by adopting balanced wage structure an adequate system of recruitment, training, placement and promotion and a comprehensive labour welfare scheme.
- Adopting suggestion box scheme by the concern and making this scheme open to all employees for making suggestions or work simplification, improvement of working conditions or any other matter affecting the efficiency of the concern.

ii) Technological Aspect

The various technological aspects to which attention should be given for improving productivity are listed as follows.

- **Location and Layout of the Factory:** Place where the total transportation costs, both of finished goods and of raw materials should be minimum and layout of shops and machine tools to suit the flow of operations of processes.
- **Design:-** Ensuring correct production designs so that faulty designs may be discontinued and make research regular features to modify the existing minimum costs optimum quality.
- **Management:** Sure delegation of authority define live and staff relationship clearly standardization of product. Ensure application of technique of production control. Apply work-study techniques. Applications of better quality control etc.
- **Labour:** Make suitable pay scale keeping view the characteristics of job concerned. Select right man at right time and at right job. Arrange training programmed give reward for efficiency and quality make good working conditions and provisions of medical, housing, recreational and educational facilities to reduce labour turnover.
- **Material:** Purchase right type of material at right price. Fixing minimum ordering quantity for each material to avoid shortage of material. Avoid over stock of material reduce the wastage of material.
- **Machine:** Maximum possible capacity of machine and make satisfactory arrangement for repairs and maintenance of machine and tools.
- **Finance:** Finance are capital budgeting, working capital and particularly laying emphasis on management of inventory and receivables.

2.2 Review of Related Research

So far as known to the researcher, on study on production Budgeting and its effectiveness in any enterprise has been conducted yet. It means, there is numerous research made on the topic of profit planning and control related with different PEs, but few studies on production budgeting has been conducted yet and no profit planning thesis is conducted as per using research tools as per this research. Although major finding and recommendation of previous few research study on profit planning and control, which are related with this study are presented below.

1. “Profit and sales plans and their achievement in DDC with special Reference to milk production”

This study was conducted by Mr. Achyut Gyawali submitted to CDM in T.U. The main objectives of his study were Achievement of sales and production budget of milk, Analyse material and Labour budget and variance between target and actual achievement of DDC.

Major Findings

- No preparation of strategic long range profit plan, not clear objectives, lack of budgeting experts, planners, no effective program to attain goal.
- Sales budget are not prepare, profit pattern is poor faculty financing and investment decision, improper management, unscientific milk collection and distribution policy etc.

Recommendations

- Formulate strategic plan and programmers, prepare of different budget.
- Optimum capacity utilization, proper management system and policies establish separate costing section etc.

2. Profit planning in manufacturing enterprises in Nepal (A comparative study in Dairy Development Corporation and Sitaram Dairy Industry)

This study has been done by Mr. Pukar Thapa the main objective of this study were to analysis of functional budget on sales and production sector of the concern, to analysis 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

- DDC has concentrated its whole effort to the survival of the company and has been trying to minimize the loss. Both industries have to in depth analysis of company's strength and weakness.
- Employees are more careful of their duties and responsibilities in SRD than DDC no fair system of reward and punishment to them on the basis of their performance is maintained in both industries.
- SRD's capacity utilization is proper then DDC's capacity utilization.
- Both companies have positive correlation between target and actual sales.
- Both companies have not proposed profit planning except sales and production plan.

Recommendation

- Long term objectives should be clearly formulated so as to make a clear distinction between profit motive and social motive and entrepreneurships is the first requirement for any business success.
- Government of Nepal, Intervention should not be made full for function aspect of enterprise management should be given full authority responsibility and accountability for routine and major operation.
- These companies are facing the problem of under capitalization by which production is affected so to enhance the production capacity the necessary financial management should be over viewed.

- Periodic review of financial health of the corporation should be made by using financial analytical tools and techniques like ratio analysis fund flow analysis, trend analysis etc. This helps the top management to evaluation the effects, of its financial policies/strategies and to take necessary steps to avoid risks on time.

3. “Profit planning in Dairy Development Corporation”

This study has been done by **Mr. Ramesh Datta Joshi**. Submitted at CDM. The main objectives of this study were analyzing various functional budgets adopted to examine the capacity utilization to assess the financial performance and to provide required suggestion on profit planning.

Major Findings

- DDC has practiced only short term planning rather than long term planning.
- The corporation has no proper practice segregating cost into fixed and variable.
- There are not co-ordination between government sector and non-government sector.
- No proper management to supply sufficient milk in the urban areas because of the difficulty in collecting surplus milk in rural markets.
- Financial position of DDC is not good, not profit margin in very low and inventory is also status factory.

Recommendations

- DDC should analysis relevant internal and external variables and their possible impact in future for preparation production and sales.
- DDC should develop specific goal, without such goals the program may not be effective.
- Profit planning manuals should be communicated from top to lower levels. All the personal should be participated on decision- making process.

- Trained and highly qualified manpower on budgeting and planning must be hired and present manpower must be trained and developed in the field of technical, administration, finance section etc. Proper motivational programmes, reward and punishment system must be conducted there must be opened profit planning unit and have to appoint profit planning director to achieve the organizational goals.

4. “Profit Planning and Control in Dairy Development Corporation”

This study has been done by Mr. Yuda Raj Poudel Sharma , Submitted at CDM. The main objectives of this study were analyze various functional budgets adopted to examine the capacity utilization to assess the financial performance and to provide required suggestion on profit planning.

Major Findings.

- The budgeted sales of milk and dairy products higher than the actual sales but budgeted sales are historical basic.
- The capacity utilization rate is increasing year by year but DDC can't be meet profit.
- DDC has applied stable inventory policies opening stock of inventory of equal to closing stock of inventory but this policy is not applied practices closing stocks quantity is not fixed, but there is not seen the inventory of milk, because it is perishable goods.
- DDC utilized excess fund as corporation fund, can subsidy fun, can-revolving fund etc. are utilized by other private sector have not subsidy, but suffering on profit.
- Production of milk product as curd, ice-cream, ghee, cheese and other budgeted is low than actual production, although demand of products is highly increase due to case of population increase.
- No proper management is supply sufficient milk in the urban areas because of the difficulty in collection surplus milk in rural market but milk is major raw material.
- The top level Executives are only involved in planning and decision – making but not participation of lower level.

Recommendations:

- Sales and production forecasting should be made on the basis of realistic ground forecasts should include strategic and tactical forecast.
- Profit planning manuals should be communication from top to lower levels. All personnel should be participated on decision making and planning process.
- Profit planning units are not seen in DDC so it must be established by DDC units.
- The management of the corporation has broadly defined cost as variable, semi-variable and fixed cost. Research persons depend on A\C section on dairy development corporation.
- Management of DDC should promotional activities in several ways. Such as cost reduction programs, lost planning to cost incurring decision.
- Reward and punishment policy should be developed effectively to improve the DDC and workers should be motive by the management.

CHAPTER- THREE

RESEARCH METHODOLOGY

Research is defined as a search again and again to find out knowledge about different way “Research methodology is the way to solve systematically about the research problem” (Kothari, 1990) It helps to analyze examine and interpret various aspects to research work. There for the research methodology is followed to achieve the basic objectives and goals of this research work

3.1 Research Design

“The research design is the plan structure and strategy of a investigation conceived so as to obtain answer to research questions and to control variance. The plan is the overall scheme of programmer of the research. It includes and out line of what the investigation will do from writing the hypothesis and their operational implication to the finical analysis of date” (Haward and Panta, 2000).

The research design is a plan to obtain the answer research questions through analysis of data. Research is a systematic search for knowledge it is the application of scientific methods to the study of the universe. There for the main purpose of research design is conclude as to obtain answer to research question and to control variance.

The present work is done through the help of quantitative plans and financial statement for five years show by DDC. Descriptive as well as analytical research design was followed and those five years statement attempts to show the real position of DDC in regarding setting goals, defining objectives and planning strategy.

3.2 Period Covered

The study covers a time period of five years from B.S. 2059\060 to 2063\064. Date is taken from Dairy Development Corporation and the

analysis is basically made on the basis of these five years data. For the purpose of the analysis of tactical profit plan, data are taken from DDC. Both types of data such as budgeted and actual are used for the study.

3.3 Nature and Sources of Data

The required data for the study are collected from secondary as well as primary sources. Primary data were collected from interview as well as unstructured dialogues and discussions with the top level management and other employees of DDC and secondary data, which is the basis of this research were collected from the official records of DDC such as balance sheet and profit and loss statement, published and unpublished related documents, magazines and booklets published by the ministry of finance, national planning commission and CBS etc.

3.4 Research Questions

The basic research questions are.

- Whether or not the profit is effective in DDC?
- Whether the production plan is effectively implemented or not?
- Do production plans impact other functional plans?
- Do the possibilities for an increase in production exist in DDC?

3.5 Tools Used

Data gathered from various sources were in raw form. They were managed, processed, analyzed and presented in proper tables and formats through the use of financial and statistical tools such as.

Financial and Statistical Tools

Arithmetic Mean: It is a single value selected from a group of values to represent them in some way. It is supposed to stand for the whole group of which it is a part. It is calculated as:

$$\text{For budgeted production } (\bar{X}) = \frac{\sum X}{n}$$

For actual production $(\bar{Y}) X \frac{Y}{n}$

Standard Deviation: It may regard as the best and the most powerful tools of measure of dispersion and dispersion is the measure of the variation of the items. The standard derivation (\dagger) is calculated as:

For budgeted production $f \dagger_x AX \sqrt{\frac{f_x Z_{x\bar{A}}}{n}}$

For actual production $f \dagger_y AX \sqrt{\frac{f_y Z_{y\bar{A}}}{n}}$

Coefficient of Variation: It is a mathematical method for measuring the intensity or magnitude of linear relationship between two or more variables in terms of the original units of the data. The coefficient of variation (CV) is calculated as:

For budgeted production $f CV_x AX \frac{\dagger_x}{x} | 100\%$

For actual production $f CV_y AX \frac{\dagger_y}{y} | 100\%$

Regression Analysis: It measures the relationship between two or more variables in terms of the original units of the data.

Correlation: Correlation analysis contributes to the understanding of economic behavior, aids in locating the critically importance variables on which other depend, may reveal to the economist the connections by which disturbances spread and suggest to him the paths through which establishing forces may become effective. The correlation coefficient is calculated as:

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where, X is budget production and independent variable, Y is actual production and dependent variable.

Trend Analysis: It shows the figure of any item fluctuated over a time.

Graph: Graph are the devices of presenting the statistical data in neat, concise, systematic and readily comprehensible and intelligible form.

Time- series Analysis: It reflects the dynamic pace of movements of a phenomenon over a period of time.

T- Statistics: It is used to test the validity at size less than 30. The computed value of 't' is compared with the table value of 't' at certain level of significance for given degree of freedom . If the calculated value of 't' is greater than its table (critical) value, the difference is treated as significant at the level but if the calculated 't' value is less than its table value it infer the difference is not significant.

3.6 Research Variables

The basic research variable of this study was the budget practiced by DDC such budgets are respectively sales budget, production budget, inventory position, financial statement etc. DDC

3.7 Research procedure followed.

To collection data, which are obtain form different sources, are not appropriate from to analyze. So following research procedure followed to fulfill the objectives.

- The various books are collected and explored.
- Useful secondary data are used.
- Data are described and explained in the light of theoretical basis.

- The collected data are presented and arranged in tabulation forms and analyzed by applying the various necessary tools. The analyses of data are done with the help of financial and statically tools.

They are graphs, diagrams, percentage, mean, ratio analysis, CVP analysis variance analysis etc will be used as per need.

CHAPTER- FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

Presentation and analysis of data is an important stage of the research study. The main purpose of analyzing the data is to change it from an unprocessed to in an understandable presenting. The analysis of data consists of organizing data by tabulation and then placing that data in presentable form by using figures and tables. As the study is mainly focused in strategic and tactical planning of DDC. The sales, the production and other related figure of previous years are analyzed to know the overall effectiveness position of DDC.

The DDC was established in 2010 BS in the public sector as an under taking of Government of Nepal. It has played very important vole for the development of dairy farming in Nepal It has been providing dairy products at cheaper rate it has dual responsibilities providing dairy productions and collecting the milk of farmer in reasonable price and sustain in today's competitive market, by making reasonable profit.

Sales Budget

Sales budget is the infrastructure of overall budget. All other the business budgets depend upon sales budgets. The prime objectives of business are to earn profit so that the first consideration of the business must towards to make effective sales budget. Profit is amount excess of revenue over the cost. Therefore the sales plan is the foundation for profit planning in the enterprises sales is the primary sources of cash and all other function budget the efficiency of planner can be evaluated from the comparison between actual and planed sales.

“Very few enterprises prepare two periodical. Production plan in Nepalese context along vane and a short range.”(Joshi,2057) A long range

profit plans encompassing a time horizon of more than five years and short range compassing not more than one year. In The context of reprehensive company of the study past sales experience is considered to formulate long range and short range sales plan. Since the company sells the different products hence the sales of different product in quantity for five years since FY 2059/60 to 2063/64 are presented below.

Table no.- 4.01

Actual and Budgeted sales of DDC

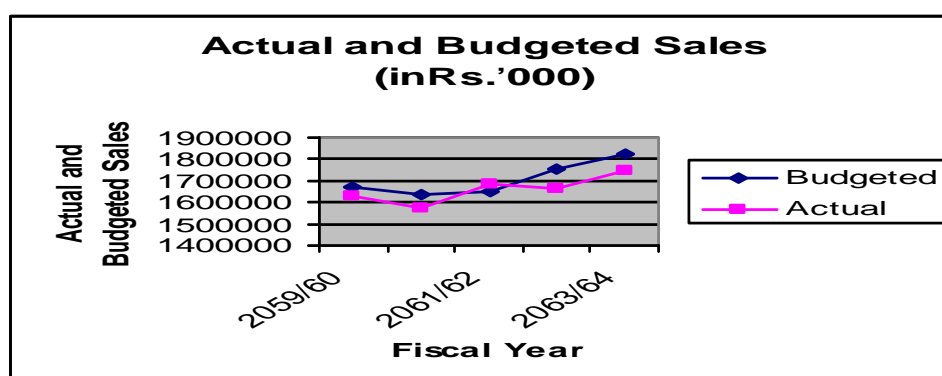
(In Rs.'000)

FY	Budgeted sales	Actual sales	% of achievement	%of Variation
2059/60	1672757	1630310	97.46	-2.54
2060/61	1639302	1573730	96	-4
2061/62	1652416	1606139	97.20	-2.80
2062/63	1751561	1663980	95	-5
2063/64	1821623	1748758	96	-4
Total	8537659	8222917	96.31	-3.69

(Sources: Planning Department of DDC)

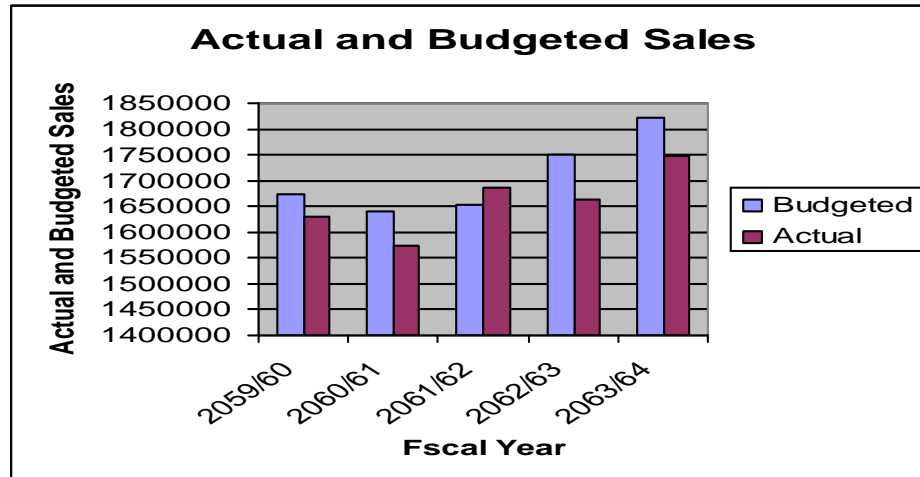
The above table no 4.01 shows the budgeted and actual sales of DDC since FY 2059/60 to 2063/64 .Here the data shows that the target sales are decreased in FY. 2060/61 but gradually increasing in 2060/62. 062/63 and 063/064 respectively. But achievement sales in fluctuating trend. Percent age of achievement is lower than its target and fluctuates. It shows that the planning mechanism of DDC is quite poor. The above tabulated data is present below in line graph

Figure no.- 4.01



The above figure no.-4.01 shows that the fluctuating trend between targeted and achievement sales for more effective presentation above information is present below through multiple bar graph.

Figure no.- 4.02



From above table no.-4.01 and fig no.4.02 it can be concluded that the corporation does not follow the part of trend analysis of sales, for sales planning as per they stated. It needs to find out the nature of variability of budgeted sales and actual sales is analyzed as follows using mean, standard deviation and co-efficient of variation of above data for five years since FY. 2056/60 to 2063/64.

4.3 Production Budget

After preparation of sales budget, the second steps followed by manufacturing organization is to prepare production budget it refers the development of policies about efficient production level and facilities.

A production budget is a quantity budget which lays down the quantity of units to be produced during the budget period. Aim behind preparing production budget is to maintain optimum balance between sales, production and inventory position of the firm.

The following tables show the production target and achievement of DDC from fiscal year 059/60 to 63/64 of different products.

4.3.1 Milk

The actual and budgeted production of milk is presented below:

Table no.- 4.02
Budgeted and Actual production of Milk

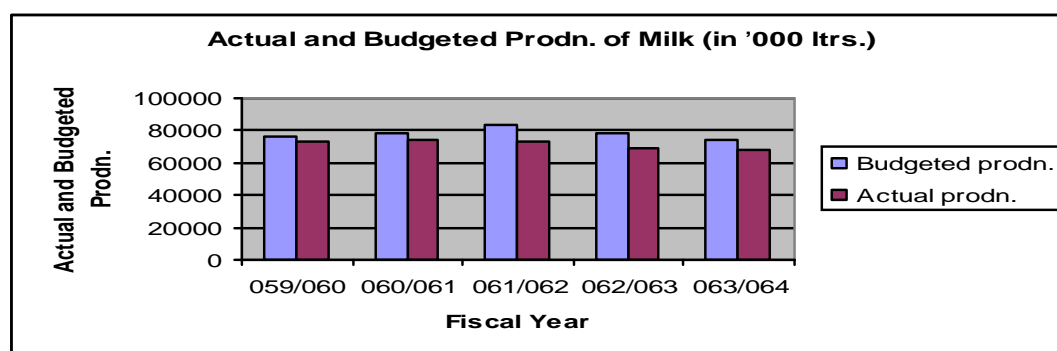
(in '000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	76717	72910	98.84	-5.16
060/061	78852	74072	93.94	-6.06
061/062	83653	73096	87.38	-12.62
062/063	78664	69051	87.78	-12.22
063/064	74508	67802	91.00	-9.00
Total	392394	356931	90.96	-9.04

(Sources: Planning Department of DDC.)

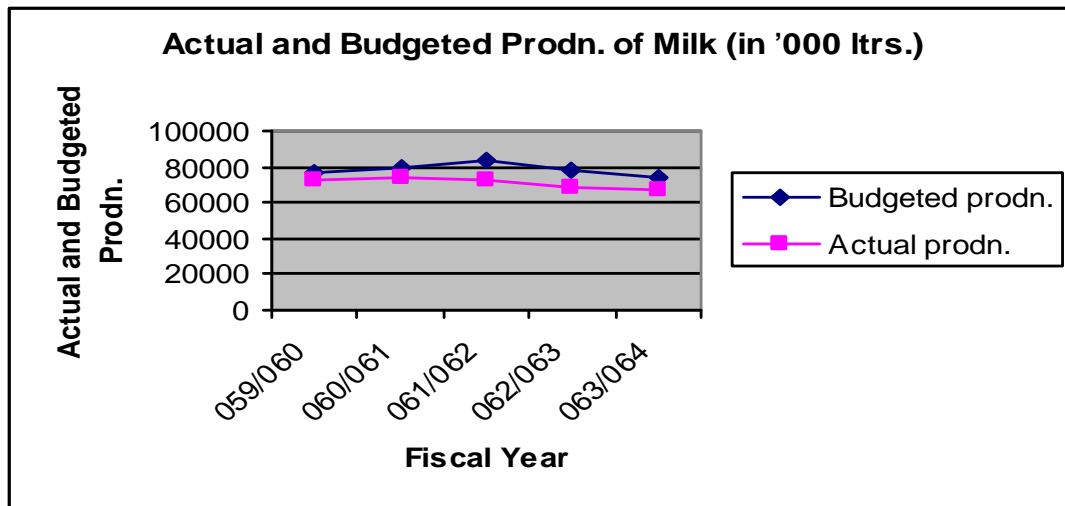
Table no 4.02 shows the target and Actual production of milk in DDC from FY 2056/60 to 2063/64. Here the target sales seem flexible and its achievement is also flexible. Achievement of target is variable during the different FY and too low, It means the production plan of milk in DDC is very poor and non-realistic. Because the achievement is maximum 94.84% and minimum is 87.38% which is 12.62% below than the target above information is presented through the bar graph for more clearance.

Figure no.- 4.03



The figure No.4.03 shows the fluctuations trend between target and actual production of milk. It can be shown in line graph as follow.

Figure no.- 4.04



In above line graph the different between the actual production and budgeted production can be seen clearly. The actual production is lower than the budgeted productions.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	784.79	713.86
Standard deviation	30.27	24.80
Coefficient of variable	3.86	3.47

Correlation coefficient (r) =0.56

Statistical table no.4.01 shows that the mean and SD of target production of milk is higher than the Actual production. And the CV of target is higher than the achievement which means the budgeted production of milk is more variable than the actual production. Let's calculate the Karl person's

coefficient of correlation (r), which shows $r=0.56$ i.e. the target production is positively changed in same direction due to change in target production

4.3.2. Butter

The actual and budgeted production of Butter is presented below as following.

Table no.- 4.03
Budgeted and Actual production of Butter

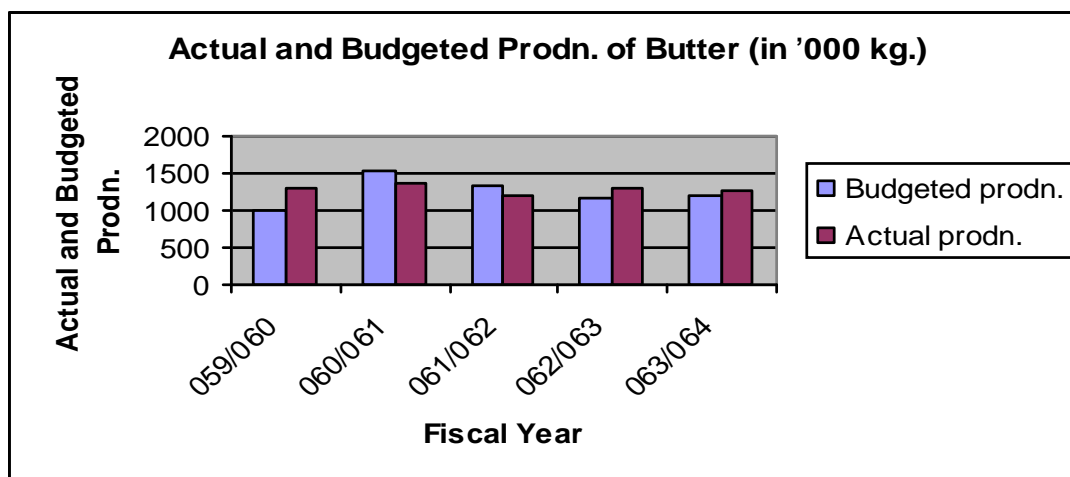
(in '000 kg.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	1012	1307	128.85	28.85
060/061	1518	1372	90.85	-9.60
061/062	1318	1205	91.43	-8.57
062/063	1179	1301	110.35	10.35
063/064	1207	1253	103.81	3.81
Total	6234	6438	103.27	3.27

(Sources: Planning Department of DDC)

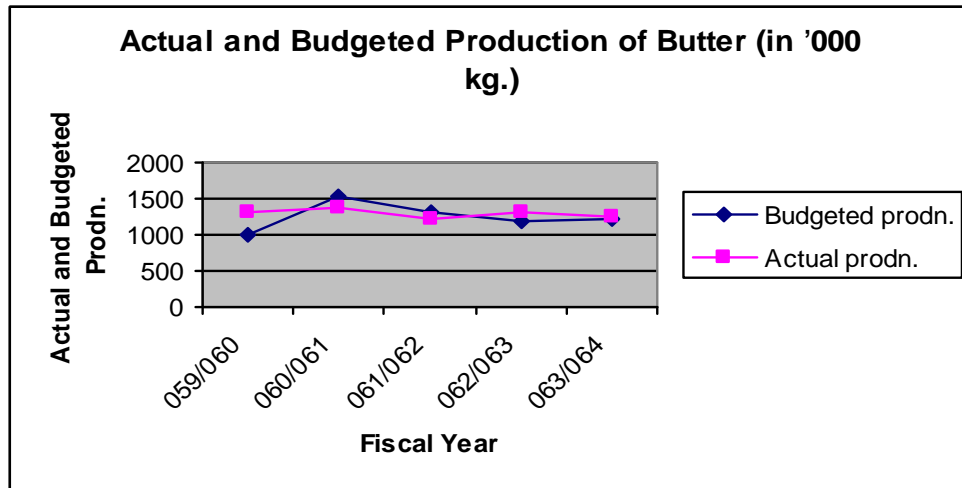
From above data, we can see the actual and budgeted production of butter of different fiscal years. There is 128.85% of achievement as a maximum achievement and falls in to 90.85% in next year. Which means there is variation in achievement according to the time period? It can be clarified through the bar graph follow.

Figure no.- 4.05



The above figure no.-4.05 shows that the achievement of target in 2059/60 is more and less in 2060/61 and 2061/62 but rises from 2062/63 to 2063/64 it means there is test deviation between budgeted and actual production of butter production for more clearance it is presented in line graph below.

Figure no.- 4.06



In the figure no.-4.06 the actual production line is followed by budgeted production line but overlapped in 2060/61 and 2061/62 and again followed in 2062/63 and 2063/64. It means there is deviation between actual production and budgeted production i.e. the production plan is not effective.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	124.68	1287.60
Standard deviation	167.29	56.03
Coefficient of variable	13.43	4.35

Correlation coefficient (r) =0.28

The statistical table no.4.02 Shows that the mean SD and CV of budgeted production of butter it move than the actual production. It shows the target is more variable than the its achievement i.e. the budget is not.

Coefficient of correlation between target and achievement $r = 0.28$ it means the achievement will be positively changed due to change in target.

4.3.3.Ghee

The Actual and budgeted production of ghee for five years FY. 2059/60 to 2063/64 in DDC is as below.

Table no.- 4.04
Budgeted and Actual production of Ghee

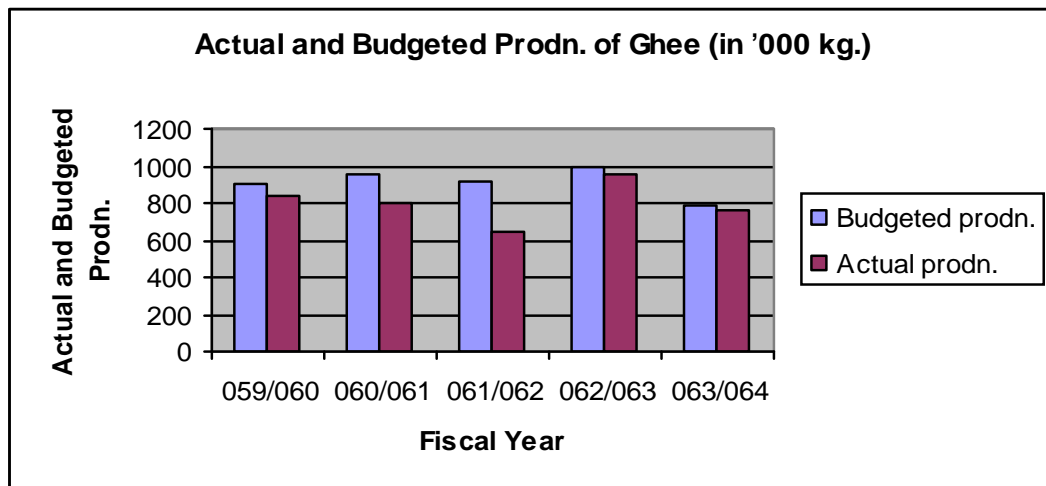
(in '000 kg.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	903	843	93.46	-6.54
060/061	951	806	84.75	-15.25
061/062	917	648	70.70	-29.30
062/063	997.8	951	95.31	-4.69
063/064	788	760.8	96.55	-3.45
Total	4556.8	4008.8	87.97	-12.03

(Sources: Planning Department of DDC.)

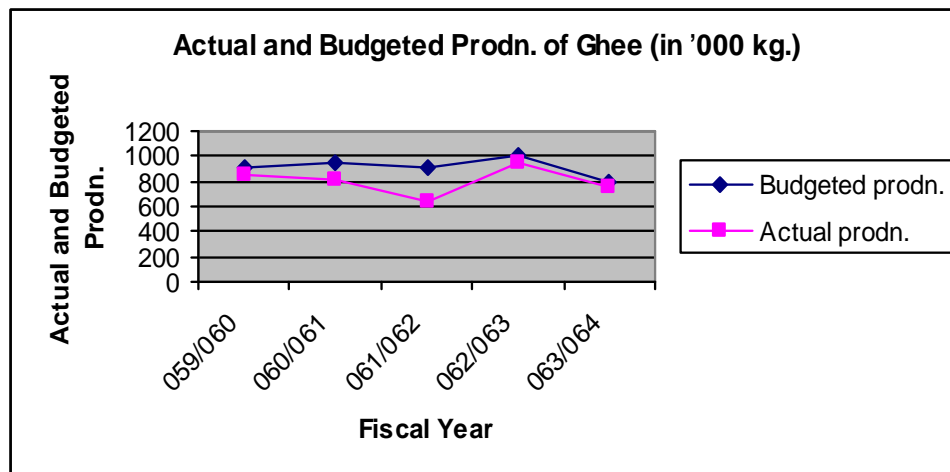
In above table no.-4.04 the budgeted production of ghee is fluctuated from 788 to 997.8 and Actual production of ghee is fluctuated from 648 to 951, but the achievement is fluctuated from 70.73% to 96.55% . It is presented in bar graph for more clearance.

Figure no.- 4.07



In above figure no.-4.07 we can see that the actual production is lower than the budgeted production of ghee in every year. It means there is not consistency between actual productions of ghee in every year. It means there is not consistency between actual production and budgeted production of ghee i.e. negative deviation.

Figure no.- 4.08



In above line graph the actual production line is over lapped by budgeted line and it never meets to budgeted production line which means there is negative difference between budgeted and actual production of ghee. i. e. the production budget is not effective.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient.

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	911.16	801.76
Standard deviation	69.83	99.31
Coefficient of variable	7.66	12.39

Correlation coefficient (r) =0.05

The above statistical table no.4.03 shows that the mean of target is more than the mean of achievement but SD and CV of achievement is more than its target. Hence, the achievement is more variable than the targeted production.

The value of $r=0.05$, it means the achievement of target is positively changed due to change in target but in tiny rate.

4.3.4 Cheese

The Actual and budgeted production of cheese is presented below.

Table no.- 4.05

Budgeted and Actual production of Cheese

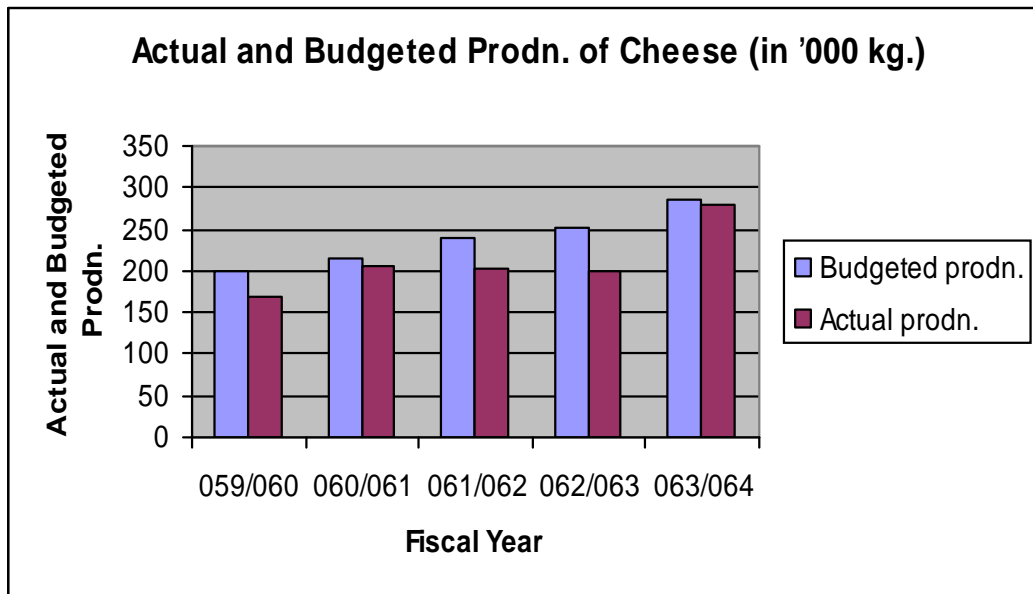
(in '000 kg.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	201	168	83.58	-16.42
060/061	214	206	96.26	-3.74
061/062	241	202.8	84.15	-15.85
062/063	250.3	199	79.6	-20.40
063/064	287	280	97.56	-2.44
Total	1193.3	1055.8	88.48	-11.52

(Sources: Planning Department of DDC.)

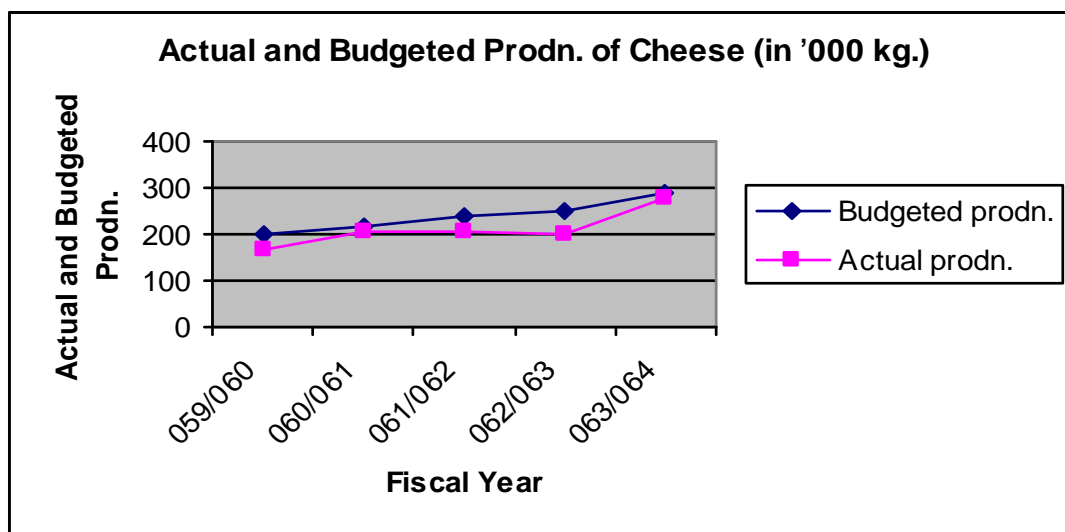
In above table no.-4.05 it can be seen that the budgeted production fluctuated from 201 to 287 and actual budgeted is deviated from 168 to 280. Regarding the achievement it is deviated from 79.6% to 97.56% but there is no positive deviation between budgeted and actual production. To make more clearance about it lets use a bar graph.

Figure no.- 4.09



In above figure no.-4.09 we can see the actual production is low then the budgeted production to cheese. From more details it is shown in line graphs.

Figure no.- 4.10



In above figure no.-4.10 we can see that the actual production line is overlapped by budgeted production line. The APL comes near to BPL in 2060/61 again falls away and comes near in 2063/64. It means there is difference between actual and budgeted production of cheese but the actual production is less i.e. the production plan of cheese is also failure in DDC.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	238.60	211.16
Standard deviation	29.99	37
Coefficient of variable	12.5	17.52

Correlation coefficient (r) =0.87

The statistical table no. 4.04 shows that the mean of target is more than the achievement but CV and SD of target is less than its achievement it means the achievement of target is less consistent than the target of cheese.

The coefficient of correlation $r = 0.87$ it mean the achievement and target are highly correlation in positive direction.

4.3.5. Dhahi

The actual production and Budgeted production of Dhahi is presented below.

Table no.- 4.06
Budgeted and Actual production of Dhahi

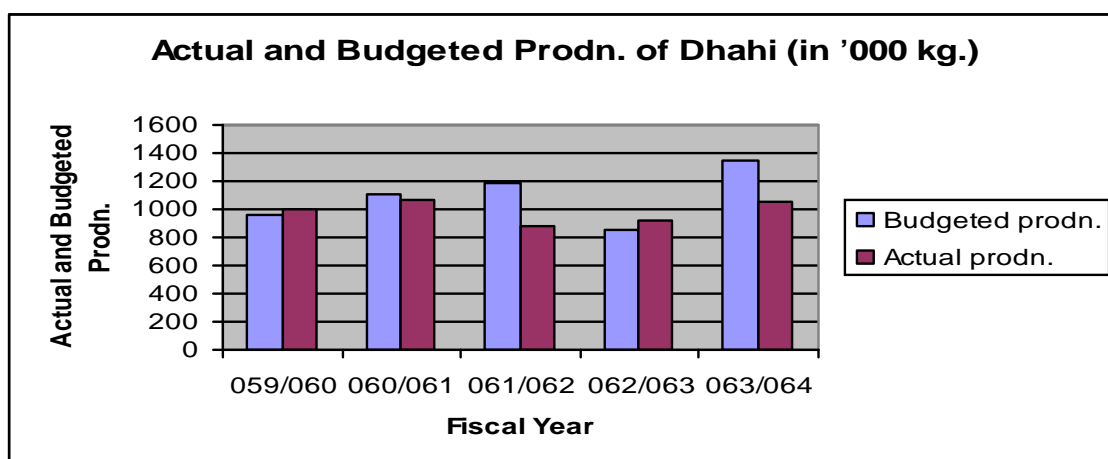
(in' 000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	961	998	103.85	3.85
060/061	1108	1067	96.32	-3.70
061/062	1182	873.6	73.91	-29.09
062/063	850.2	920	108.21	8.21
063/064	1350	1050	77.78	-22.22
Total	5451.2	4908.6	90.05	-9.95

(Sources: Planning Department of DDC.)

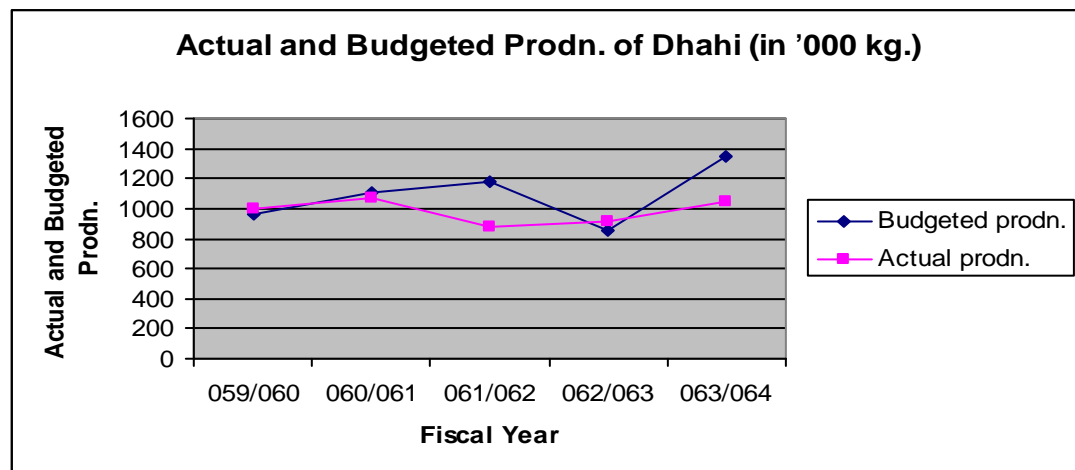
By analyzing the above table it has found that the actual production is more in FY 2059/60 and 2062/063 but less in rest fiscal year up to 73.9% only above tabulated data is presented in a bar-graph as follow.

Figure no.- 4.11



In above bar graph it can be seen that in FY 20598/60 and 2062/63 the actual production is more than budgeted production but in remaining years it is too lower than the budgeted production it means there is less signification between actual and budgeted production. It can be shown in line graph.

Figure no.- 4.12



Above fig No.4.12 shows that the APL is up in FY 59/60 and 6062/64 and BPL is up in rest years, it means there is difference between Actual and budgeted production.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient.

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	1090.24	981.72
Standard deviation	173.51	74.43
Coefficient of variable	15.95	7.58

Correlation coefficient (r) =0.34

The statistical table no. 4.05 Shows the value of mean , SD and CV is more than its achievement which means the target production of Dhahi, is highly fluctuated than its achievement.

The value of $r = 0.34$ it shows that the achievement of target will changed is same direction of target in low rate.

4.3.6. Ice-Cream

The actual and budgeted production of Ice-cream as presented in following table.

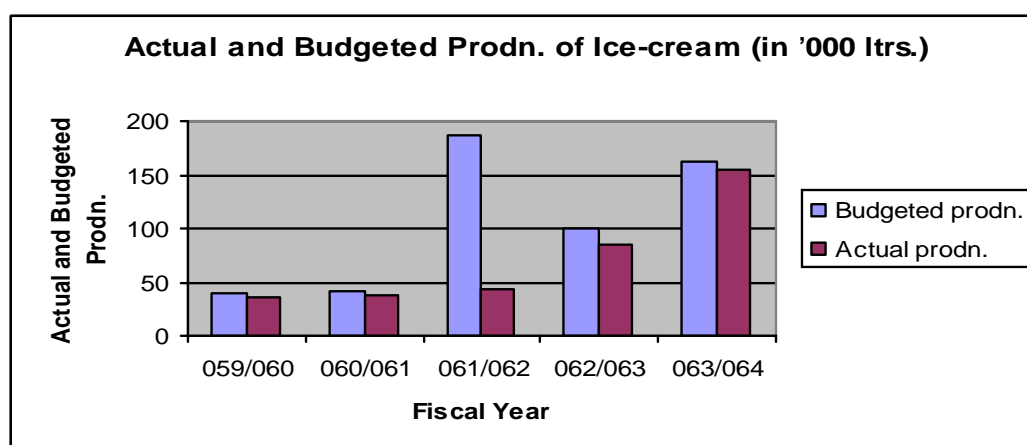
Table no.- 4.07
Budgeted and Actual production of Ice-cream
(in'000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	39	36	92.31	-7.69
060/061	41	38	92.68	-7.32
061/062	186	43	23.12	-76.88
062/063	100.7	84	83.42	-16.58
063/064	163	154	94.48	-5.52
Total	629.7	355	56.38	-43.62

(Sources: Planning Department of DDC.)

In above table the actual and Budgeted production of DDC for 5 years are presented. The table no.-4.07 shows that in 2061/62 there is only 23.12% achievement of target is 94.48% in Fy.2063/64, which means there is less achievement trend of target production.

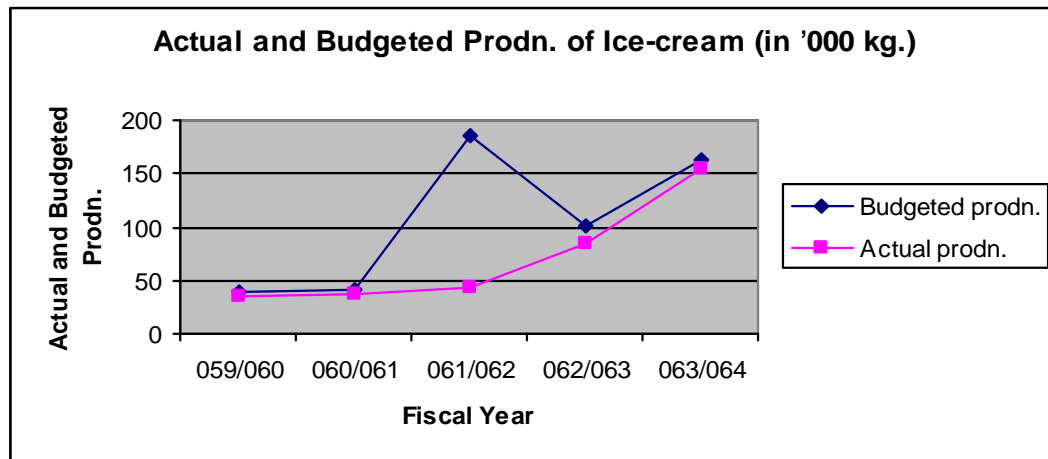
Figure no.- 4.13



In above figure no.-4.13, we can see that there is no symmetrical target in production i.e. fluctuation in target in production as it is too high in FY.

2061/62 But achievement is too poor. That target false in 2062/63 but again raises in 2063/64 and its achievement is also weak. So there is no effective mechanism in production planning of Ice-cream.

Figure no.- 4.14



In above figure no.-4.14, we can see there is far difference between actual and budgeted Production of Ice-cream in DDC.

We can conclude that there is lack of setting realistic plan in production of Ice-cream basing on historical trend. So it is not effective.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient.

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	105.94	71.0
Standard deviation	60.65	45.07
Coefficient of variable	57.25	63.48

Correlation coefficient (r) =0.49

The statistical table no. 4.06 Shows that mean of target is too high than the mean of achievement. i.e. achievement rate is very weak. SD of target is more but CV is less than the achievement, it means the achievement of target is more flexible than the target production of Ice-cream.

Value of $r=0.49$ means the target and achievement of target are positively correlated.

4.3.7. Paneer

The actual and budgeted production of paneer is presented below.

Table no.- 4.08
Budgeted and Actual production of Paneer

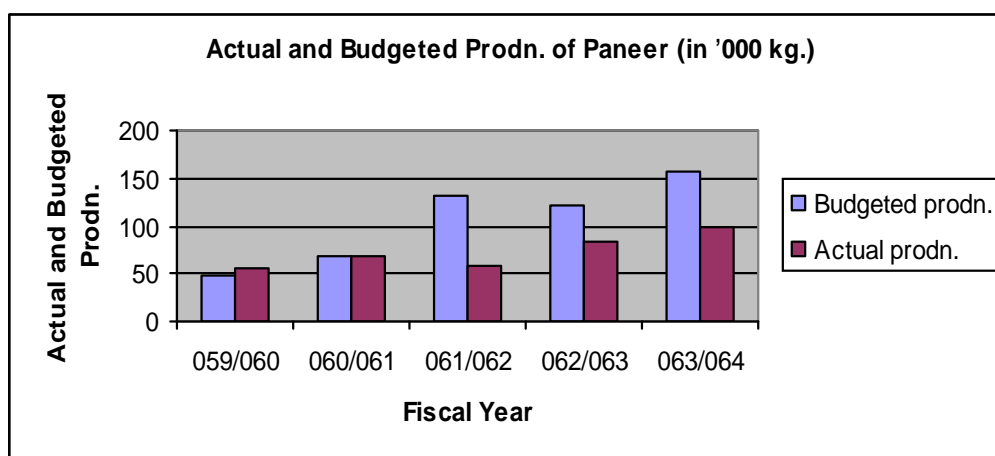
(in '000 kg.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	48	55	114.58	14.58
060/061	68	68	100	0
061/062	132	58.9	44.62	-55.38
062/063	122.7	84	68.46	-31.54
063/064	157	99	63.06	-36.94
Total	527.7	364.90	69.15	-30.85

(Sources: Planning Department of DDC.)

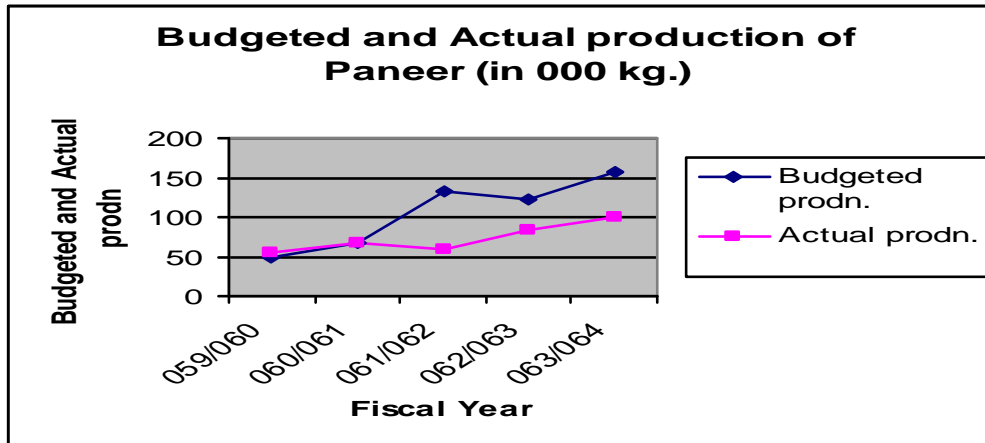
In above table no.-4.08 the actual and budgeted production of paneer has been presented for 5 years. In FY 059/60 the achievement is 114.58% and in 2060/61 exactly 100% but for the remaining years it is lower up to 44.62% only. It means there is neither goal setting is in trend basis nor its achievement is satisfaction. So the production budgeting is not effective.

Figure no.- 4.15



In above figure No 15 We can see that there is difference between actual and budgeted production of panner in DDC.

Figure no.- 4.16



In above figure no.-4.23 We can see the gap between APL and BPL which means that production Plan is not effective.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	105.4	72.98
Standard deviation	40.84	16.40
Coefficient of variable	38.75	22.47

Correlation coefficient (r) =0.71

The statistical table no.4.07 Shows that the mean SD and CV of target is too high than its achievement thus the achievement of target is not satisfactory and less flexible than the target i.e. the target is more flexible.

As the value of $r=0.71$, it means they are highly, positively correlated to each other.

4.3.8.Cream

The Actual and Budgeted production of cream is tabulated below.

Table no.- 4.09

Budgeted and Actual production of Cream

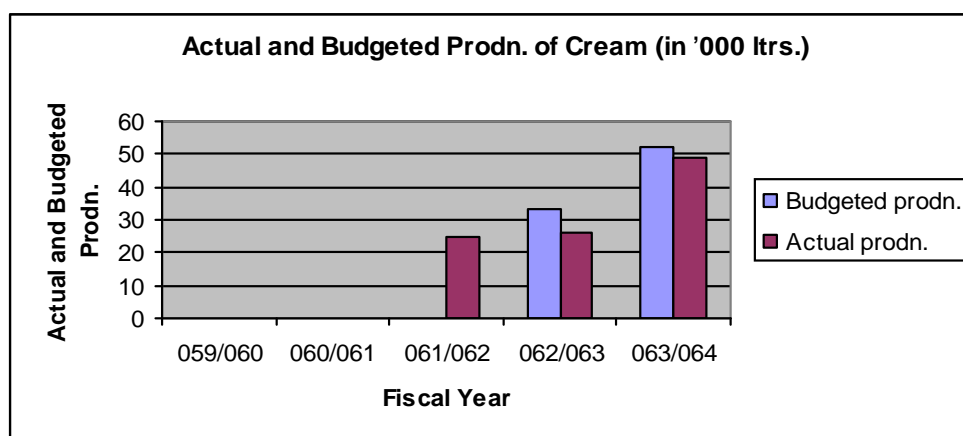
(in '000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	0	0	0
061/062	0	25	100	100
062/063	33	26	78.79	-21.21
063/064	52	49	94.23	-5.77
Total	85	100	117.65	17.65

(Sources: Planning Department of DDC.)

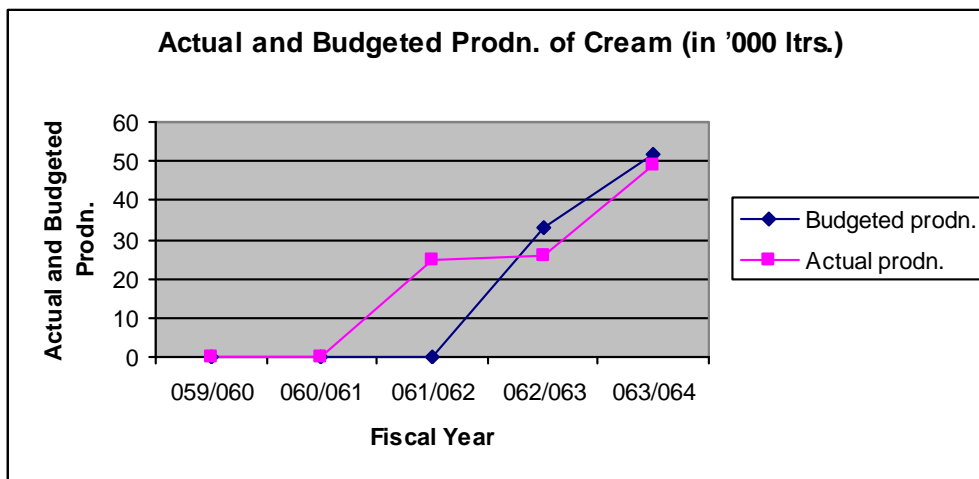
From the table no. 4.09 we can see that in FY 2059/60 neither there is plan nor achievement but in FY 2061/62 the cream was produced with out plan. For reaming year the achievement is lower than target. So we can say that the DDC has not long range goal setting.

Figure no.- 4.17



In the above figure no.-4.17 the cream was not produced in first 2 years and next 3 years the achievement in poor than the target production.

Figure no.- 4.18



In figure no.18 the APL is higher in 2061/62 as BPL is in due to production of cream with out any target and in remaining year the BPL is higher so the production planning is weak in DDC for cream production to.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	17	20
Standard deviation	21.67	18.45
Coefficient of variable	127.47	92.25

Correlation coefficient (r) =0.85

The statistical table no.4.08 Shows the mean of target is less than the achievement and SD and CV is prove than the actual production i.e. the actual production is less variable than target.

Since, the value of $r = 0.85$ which means they are highly correlated in the same direction.

4.3. 9.Skimmed Milk powder

The actual and budgeted production of skimmed milk powder is presented below

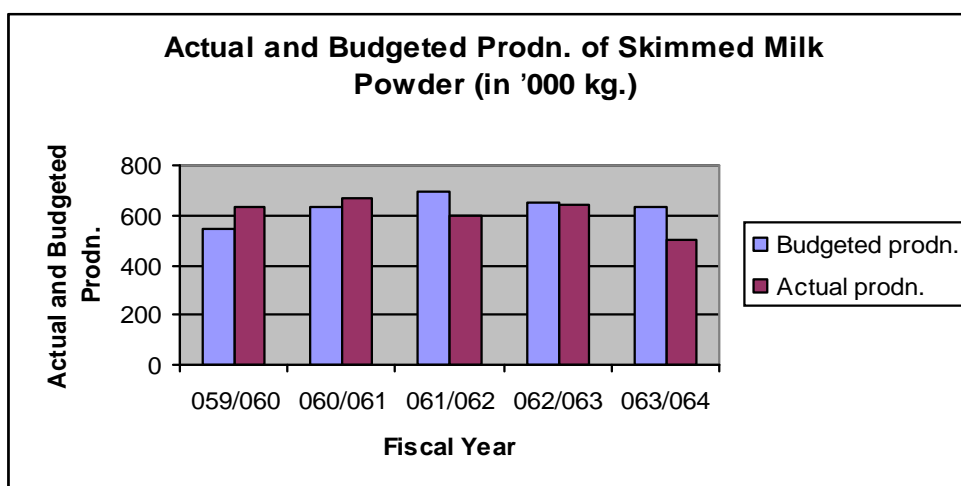
Table no.- 4.10
Budgeted and Actual production of Skimmed milk powder
(in '000 kg.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	548	635	115.88	15.88
060/061	631	669	106.02	6.02
061/062	698	598	85.67	-14.33
062/063	650	641	98.62	-1.38
063/064	636	505	79.40	-20.60
Total	3163	3048	96.36	-3.64

(Sources: Planning Department of DDC.)

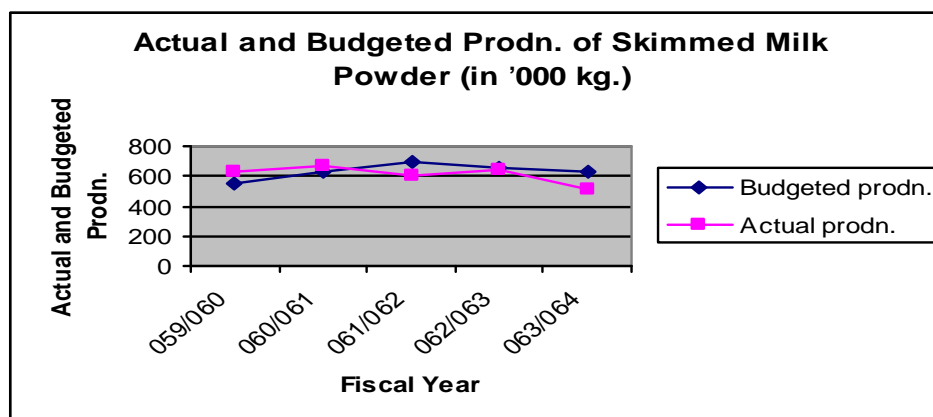
In the above table no.4.10 It shows that the planned production is not in trend and the achievement is also fluctuated. There is 79.40%to 115.88% of achievement. So the planning department is failure in production planning of skimmed milk powder.

Figure no.- 4.19



In the above figure.4.19 In the first and second FY the achievement is more than planned production and less in remaining three fiscal years.

Figure no.- 4.20



In the figure no.-4.20 the APL is higher in first 2 years and lower in remaining 3 years than the BPL. Which means the production plan of Skimmed milk powder in DDC is not effective since it is less or more than budgeted production units.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	632.6	609.6
Standard deviation	48.48	96.98
Coefficient of variable	7.66	9.35

Correlation coefficient (r) = -0.20

The statistical table no.4.09 Shows that the men of achievement is less than the target and SD and CV is more than the target which means the actual production is more flexible than its target.

The value of $r=0.20$ Which means the target and achievement have low degree of correlation but in negative which means the target and achievement have the opposite relation in increment and decrement.

4.3.10. Raswari

The actual and budgeted production of Raswari for five years in presented as follows.

Table no.- 4.11
Budgeted and Actual production of Raswari

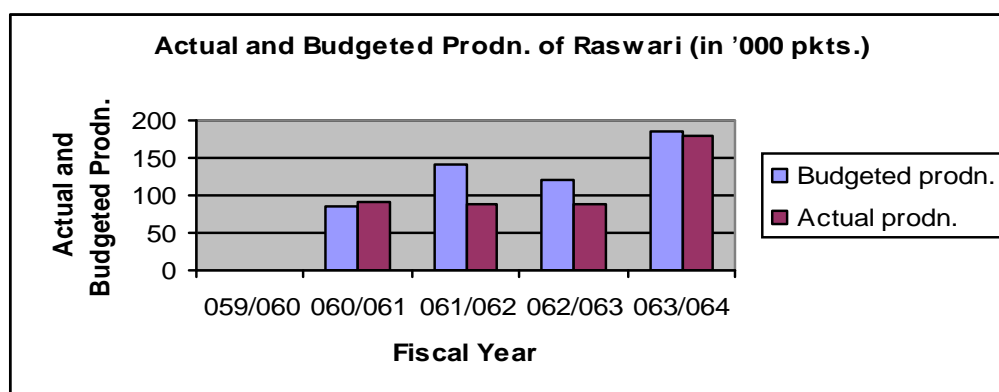
(in '000 pkts.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	85.3	92	107.85	7.85
061/062	140	87.1	62.21	-37.79
062/063	121.2	88	72.61	-27.39
063/064	185	178	96.22	-3.78
Total	513.5	445.1	86.68	-13.32

(Sources: Planning Department of DDC.)

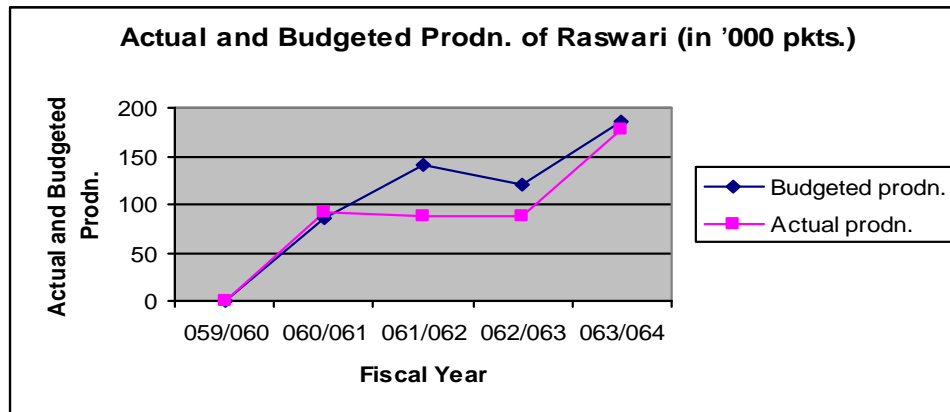
In the above table no.-4.11 the target and achievement production of Raswari and its variation has been shown which shows tat the there is not any signification relation between the plane production of different year and the achievement is either night i.e. 107.85% or low i.e. 62.21% which means the setting of goal i.e. planned production unit is not realistic. It can be clarified through a bar graph too.

Figure no.- 4.21



In the above figure no.-4.21 the budgeted and actual production of Raswari has been shown. In FY 2060/61, there is the difference between the actual and budgeted plan as the actual production is lower than the target. Thus the production budgeting mechanism of Raswari in DDC is not effective.

Figure no.- 4.22



In the above figure no.-4.22 the APL a line is higher in FY 2060/61 but falls in 2061/62 and comes closer in 2063/64 with the BPL , it mean there is difference between actual production and budgeted production of Raswari in DDC. Thus, the planning is not effective.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	106.3	89.02
Standard deviation	62.12	56.31
Coefficient of variable	58.43	63.26

Correlation coefficient (r) =0.96

The statistical table no. 4.10 shows that the mean of achievement is for less than the target i.e. no proper achievement is for less than the target i.e. no proper achievement of target SD of target is more than the actual production but CV is less which means the achievement has more variability.

The value of $r=0.96$ it means they are highly correlated in the same direction.

4.3.11. DDC Fresh Milk

The Actual and budgeted production of fresh milk is presented below.

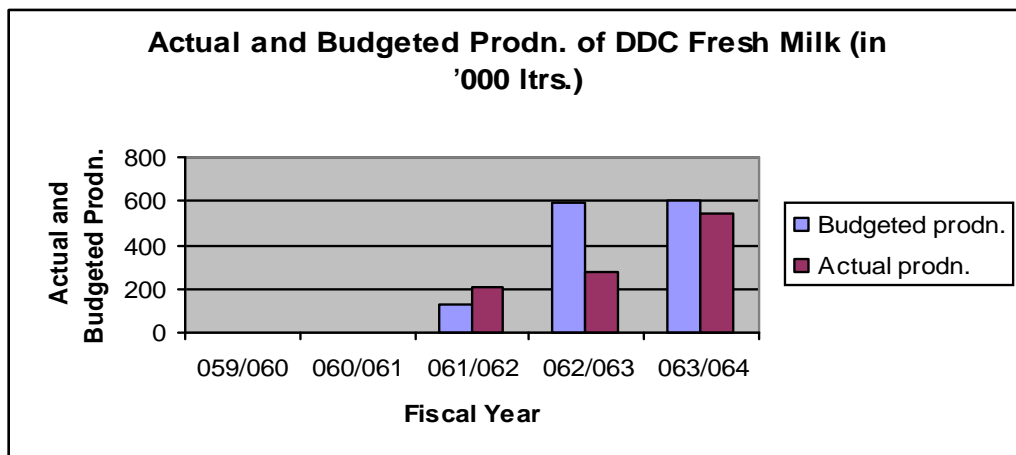
Table no.- 4.12
Budgeted and Actual production of DDC Fresh Milk
(in '000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	0	0	0
061/062	126	203.2	161.11	61.11
062/063	590.8	272	46.04	-53.96
063/064	598	540	90.30	9.70
Total	1314.8	1015.2	77.21	-22.79

(Sources: Planning Department of DDC.)

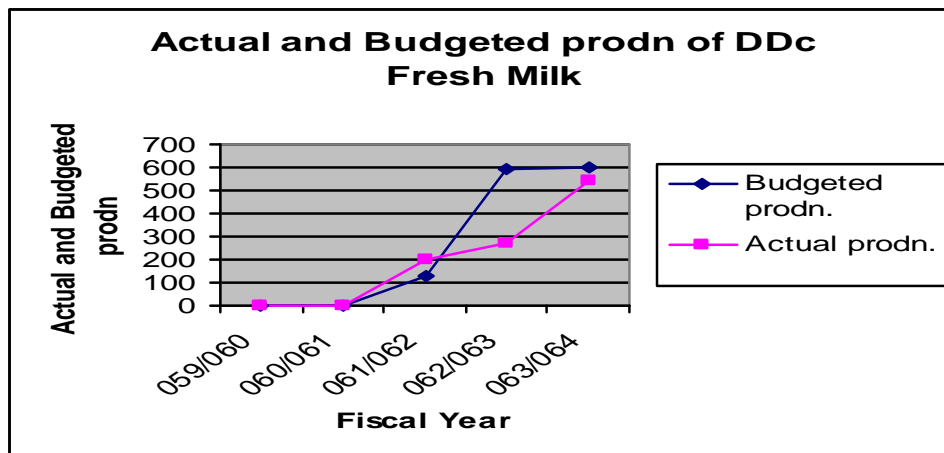
In the above table the actual and budgeted production of fresh milk is presented of different 5 FYs. In first 2 FY there is neither plan to production nor achievement. But in FY 061/62 the achievement % is 161.11 in 2062/63 the achievement is 46.04% and in 063/64 it is 90.30%. It means there is lack of setting realistic production plan in DC for fresh milk. Let's present the above tabulated data in bar graph.

Figure no.- 4.23



In the above figure No.4.23 in first 2 years there is no any plan of production and its achievement in 2061/62 the achievement is high and in 2062/63 and 063/64 the achievement is too low. Thus we can conclude that the target setting of fresh milk is weak and not realistic in DDC.

Figure no.- 4.24



In the figure no.4.24 the budgeted and actual production of fresh milk has been shown it shows that in beginning there is no production and began from F/Y 2061/62. At first APL is higher than BPL but in last 2 years BPL is more than APL and the budgeted production is quality similar in last fiscal years.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient.

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	262.96	203.04
Standard deviation	274.51	200.37
Coefficient of variable	104.39	98.69

Correlation coefficient (r) =0.88

Statistics table no. 4.11 Shows that the mean SD and CV of target is more than its achievement which mean there is tendency of low achievement and the budgeted production extremely high although the CV of actual production is not so less.

The value of $r=0.88$ means the target and achievement are positively highly correlated.

4.3.12. Lalmohan

The actual and budgeted production of Lal mohan is given below.

Table no.- 4.13
Budgeted and Actual production of Lalmohan
(in' 000 pkts.)

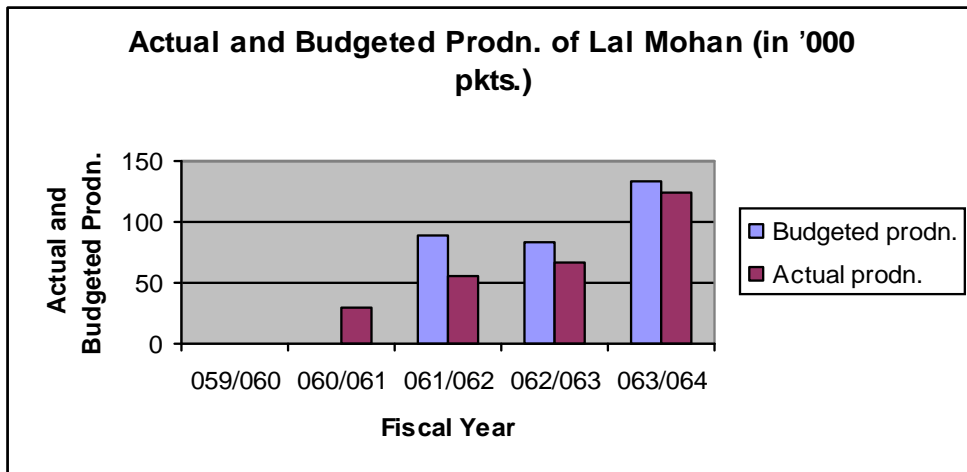
FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	29	100	100
061/062	88	55.4	62.95	-37.05
062/063	83.1	67	80.63	-19.37
063/064	134	125	93.28	-6.72
Total	305.1	276.4	90.59	-9.41

(Sources: Planning Department of DDC.)

The above table no.-4.13 shows that the production of lal monan in FY 2059/60 is 0 and in 2060/61 there plan production is 0 but its achievement is

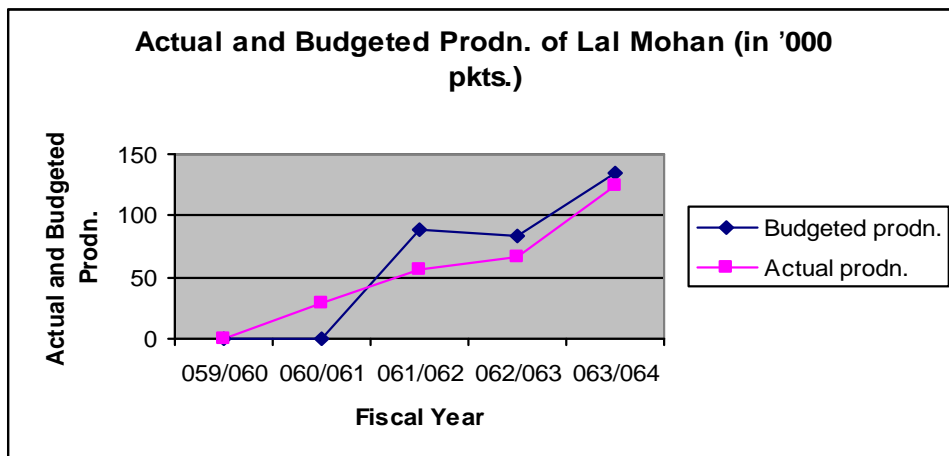
29 and for remaining fiscal years the achievement % too lower than budgeted production units. It means there is not significant between budgeted and actual production of Lal mohan. It can be shown is bar graph for more clearance.

Figure no.- 4.25



In the above figure no.4.25 the budgeted production is more than its achievement again it can be shown in line graph.

Figure no.- 4.26



In the above figure no.4.26 the APL is higher than the BPL but APL falls and again raises to close the BPL which means there is different between

budgeted and actual production of lalmohan i.e. the planning is not effective in DDC.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	61.02	55.28
Standard deviation	52.89	41.82
Coefficient of variable	86.68	75.65

Correlation coefficient (r) =0.93

The statistical table no.4.12 shows that mean, SD and CV of budgeted production is more than the achievement. It mean the trend of achievement of target lower and the target is more variable even though the CV of actual production is also not so less.

The value of $r = 0.93$ which means the target and achievement are highly correlated positively.

4.3.13. Peda

The actual and budgeted production peda is tabulated below.

Table no.- 4.14

Budgeted and Actual production of Peda

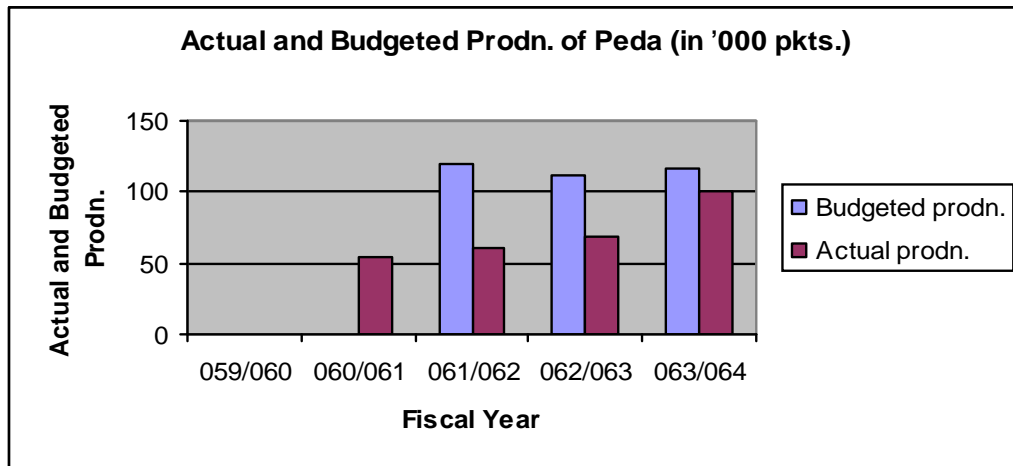
(in' 000 pkts.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	54	100	100
061/062	120	61	50.83	-49.17
062/063	112.5	69	61.33	-38.67
063/064	117	101	86.32	-13.68
Total	349.5	285	81.55	-18.45

(Sources: Planning Department of DDC.)

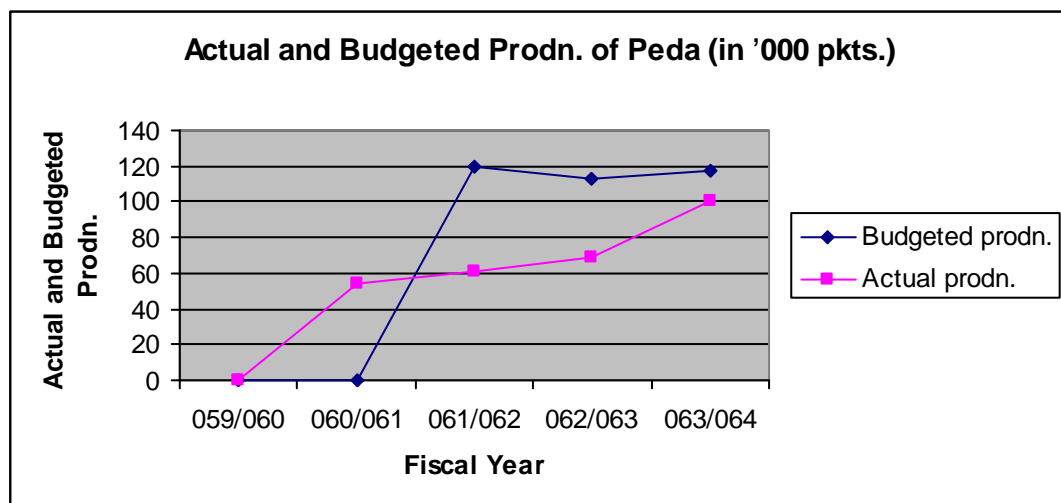
In the table no.-4.14 the budgeted production is more than its achievement it means it is not effective and realistic in setting .

Figure no.- 4.27



In the figure no.-4.27 it shows that the actual production is too poor than the its target thus the target setting is too high than it is to be. So it is not effective. It is presented in line graph below.

Figure no.- 4.28



In the above figure no.4.28 the APL is higher than the BPL but APL falls and again raises to close the BPL which means there is different between budgeted and actual production of Peda i.e. the planning is not effective in DDC.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	69.8	57
Standard deviation	57.05	32.72
Coefficient of variable	81.73	54.41

Correlation coefficient (r) =0.75

The statistical table no. 4.13 shows that the mean, SD and CV of target is more than the achievement. It means the target is more flexible than its achievement.

Value of $r=0.75$ it means the target and achievement are highly correlated in positive direction.

4.3.14. Lassi

The actual and budgeted production of lassi is tabulated below.

Table no.- 4.15
Budgeted and Actual production of Lassi

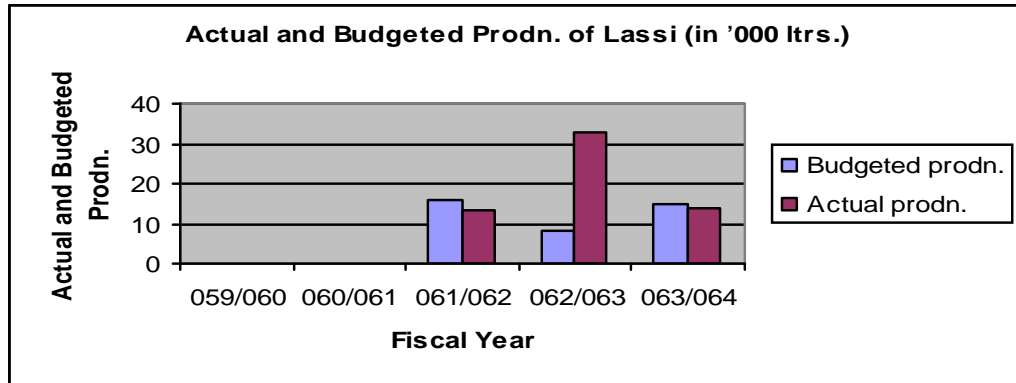
(in '000 ltrs.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	0	0	0
061/062	16	13.2	82.5	-17.50
062/063	8	33	412.5	312.5
063/064	15	14	93.33	-6.67
Total	39	60.2	154.36	54.36

(Sources: Planning Department of DDC.)

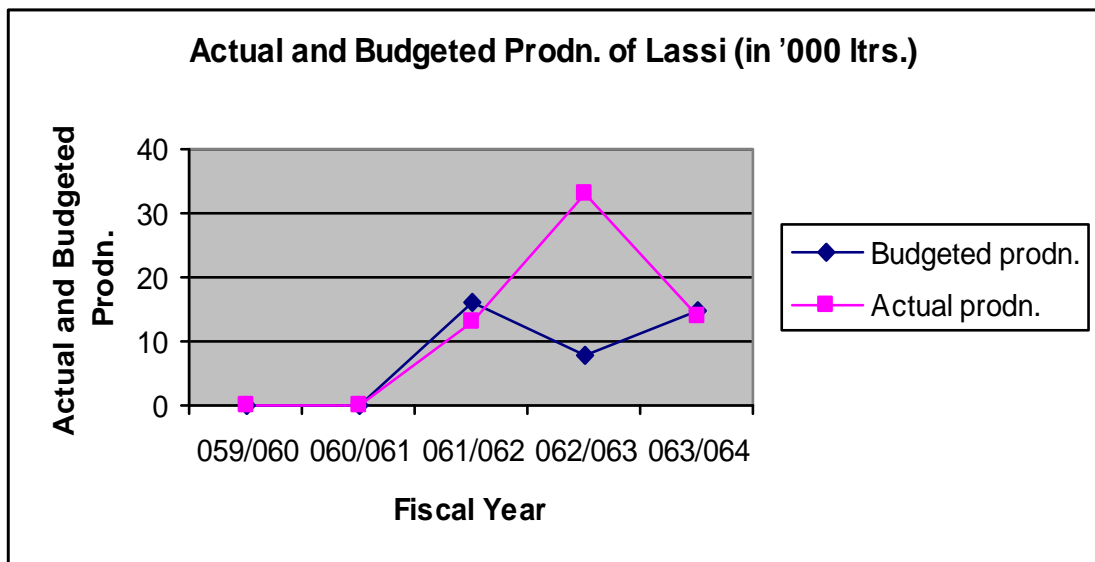
In the above table no.4.15 it shows that the achievement of target in 2062/63 is 412.5% and less up to 82.5 % in the remaining years. This means the planning is not realistic and effective It can be show in graph as below.

Figure no.- 4.29



In the above figure no.-4.29 the actual production is lower than budgeted production but in FY 2062/63 its too high than the target, so it is not the model target thus the production budgeting is not effective.

Figure no.- 4.30



The above figure no.-4.30 shows that the deviation of APL and BPL there is less consistency between actual and budgeted production of less in DDC.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	7.8	12.04
Standard deviation	6.94	12.12
Coefficient of variable	88.97	100.66

Correlation coefficient (r) =0.51

The statistical table no.4.14 shows that the mean, SD and CV of achievement is more than the budgeted production of lass. The achievement trend is more than the target and it is highly variable.

The value of $r = 0.51$ which means the target and its achievement are positively correlated.

4.3.15. Balushahi

The actual and budgeted production of Balushahi is tabulated below.

Table no.- 4.16
Budgeted and Actual production of Balushahi

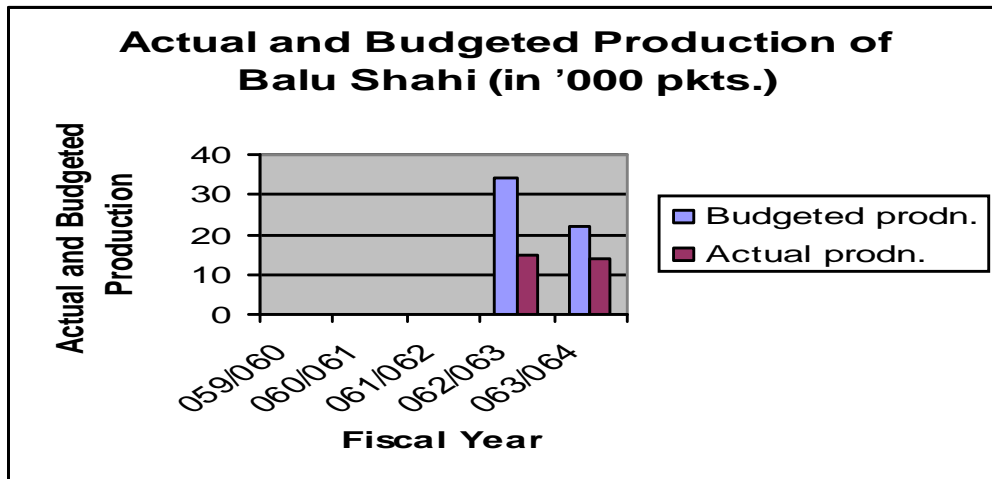
(in 000 pkts.)

FY	Budgeted prodn.	Actual prodn.	% of Achievement	% of Variation in achievement
059/060	0	0	0	0
060/061	0	0	0	0
061/062	0	0	0	0
062/063	34	15	44.12	-55.88
063/064	22	14	63.64	-36.36
Total	56	29	51.79	-48.21

(Sources: Planning Department of DDC.)

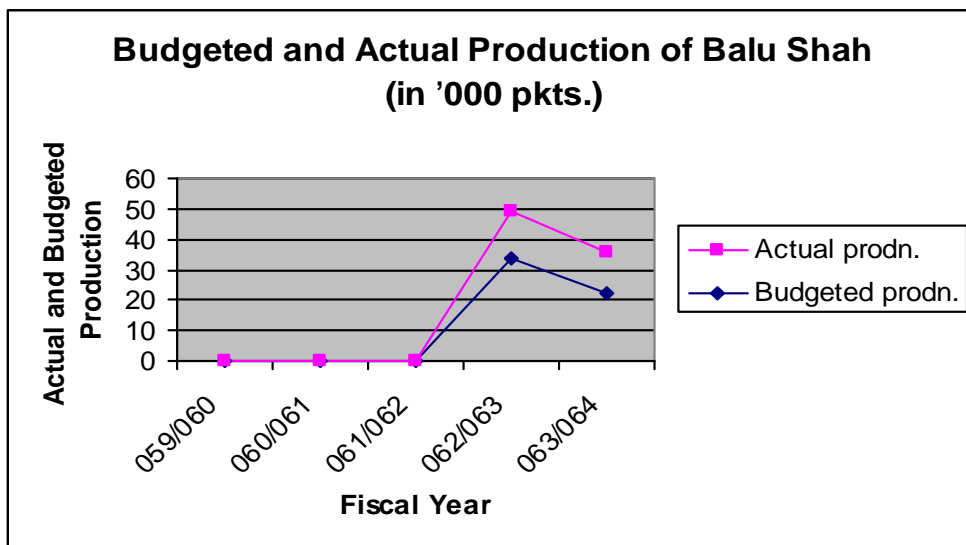
In the above table no.-4.16 it shows that the target and achievement of target in 2059/60, 2060/2061 and 2061/62 is 0 and less up to 44.12% in the remaining years. This means the planning is not realistic and effective It can be show in graph as below.

Figure no.- 4.31



In the above figure no.-4.31 the actual production is lower than budgeted production but in FY 2062/63 and 2063/64, its too low than the target, so it is not the model target thus the production budgeting is not effective.

Figure no.- 4.32



The above figure no. 4.32 shows that the deviation of APL and BPL there is less consistency between actual and budgeted production of less in DDC.

The above data is presented by using the different statistical tools like mean, S.D. C.V. and Correlation of Coefficient

Statistical Information Table

Particulars	Budgeted production (x)	Actual Production (Y)
Arithmetic mean	11.2	5.8
Standard deviation	14.23	7.11
Coefficient of variable	127.07	122.6

Correlation coefficient (r) =0.97

The statistical table no.4.15 shows that the mean , SD and CV of target is more than the achievement. It means the target is more flexible than the achievement.

The valued of r=0.97 shows that they are never to perfect correlation in same direction.

CHAPTER- FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Nepal is a small landlocked and developing country and it adopted mixed economy where both the private and public enterprises were forward to create infrastructure in the country for developing trend for public welfare So Dairy Development Corporation is established in Nepal B.S. 2013 and its main objective is to provide service to urban people by supplying hygienic milk and dairy production other than earning profit economic condition of rural people. DDC is providing nine types of products and there are eight projects, which are collection milk form 32 districts and is operated their work in 40 districts from the study of production plan of DDC.

Most of the Nepalese public enterprises are established to utilize natural resources even generation employment opportunity and providing profit earnings to the government but the achievement is far from objectives due to the various aspects and careless.

Profit planning is a significant and also essential tool of any business organization s for achieving objectives. Budget plans are financial plans, prepared as a guide and control of future operations and profit planning is a part of overall profit planning process of an organization.

Total five years data FY 2059/060 to 2063/064 is analyzed to find out the strength and weakness of DC. Data are used in this Study mean, standard correlation coefficient of variance to find out the nature of data. It is operating under production target.

The study is centered on production budget and its accuracy of data are depends upon the published data and unpublished articles, official records, book and booklets of DDC and financial reports of National Planning Commission.

5.2 Major Findings

After conduction a deep research in the given topic of DDC I have found the following major findings

- The achievement of target Milk collection lower and the value of SD and CV of target is more than its achievement which means the budgeted production is more flexible.
- The mean, SD and CV of target production of Butter is more than its target. It means the achievement rate is lower and target is more variable than its achievement.
- The mean of target is more than the achievement of Ghee and SD and CV of target is less than the actual production. So, the achievement is more variable.
- The mean of target production of Cheese is more than achievement and CV and SD is less i.e. the achievement rate is lower than the target and more flexible.
- The mean, SD and CV of target production of Dahi is more than its achievement. So, the target is more and highly variable than its achievement.
- The achievement rate of Ice-Cream is too as the mean of budgeted production is far less than the actual production and CV shows that the achievement of CV is more than flexible than the target.
- The mean, SD and CV of target production of Paneer is more than its achievement which means the achievement is lower and consistent than its budget.
- The mean, SD and CV shows that the achievement rate of target production of Cream is higher than the target but it is more consistent than the target.
- The mean, SD and CV of Skimmed Milk Powder shows that its achievement is less than target and target is less flexible than its achievement. Target and achievement are negatively correlated.
- The mean of target production of Raswari is more than its achievement. It means more achievement rate and CV shows that the

target is less variable than the achievement as they are positively correlated.

- The Mean, SD and CV show that the target production of DDC Fresh Milk is more than its achievement. The target is too flexible even though the achievement is not so consistent and they are positively correlated
- The mean, SD and CV of Lalmohan is more than the achievement. It means the target is more and more flexible than the achievement of target though they are positively correlated.
- The mean, SD and CV of budgeted production and actual production of Peda show that the achievement rate of target is less and positively correlated though the target is more flexible.
- The target and actual production of Lassi are positively correlated and the achievement is quite more than the target though it is highly variable than the target.
- The mean, SD and CV of Balushai shows that the achievement rate is low than the expected though it is more consistent than the target and they are positively correlated.

5.4 Conclusion

This study concludes the following points, after detail analyzing the current practice of Production system in Dairy Development Corporation.

Planning

- DDC has not done long range forecasting generally it has only short range forecasting but it has not short terms planning of FY 063/64.
- The management of the company has applied annual Production budget but there is substantial gap between production target and achievement of each year.
- Dairy Development Corporation has six production projects with Center Office of Lainchour.

- Sales and production is below the estimated and actual of previous year.
- DDC has no any effective program to achieve desired and formulated goals and objective and to overcome the existing problem and challenges.
- Accepts few years the achievement of target is too lows, it means the target is nigh then it is to be.
- The budgeted and achievement production of milk. Butter, Ghee, Chease, Dhahi Ice-cream, paneer, cream, raswari, fresh milk, lal mohan, peda lassi and Baludahi are positive correlated but skimmed milk powder is negatively correlated.

Financial Analysis.

- DDC has not analyzed of any financial performance but it is suffering in loss.
- DDC has not prepared flexible budget and capital expenditure budget.
- Budgeted production is made in accordance with the budgeted sales.

Employee

- There is not detail plan of manpower systematic approach of human resource planning.
- There is not well-developed system of performance evaluation for employees.

Management

- Top level executives are prepared planning and decision making but lower level participation are not encouraged.
- There are not co-ordination between government sectors and non-government sector for aching of objectives.

- No proper management to supply and collection sufficient milk in the urban areas although it is a major raw material but it is difficult to collection surplus milk rural market.
- Management has not fixed rule of pricing for potential market. DDC has not practiced of analysis the variance. So the management of this corporation is not conscious to re-think about causes of variance.
- DDC is seriously suffering from excessive fixed cost but corporation has not any cost reduction program.
- The management of the company has applied annual production budget but there is substantial gap between production target and achievement of each year.
- Selling and Distribution channel of DDC are a) Production to consumer b) Production to Retailers to Consumer and c) Production to Booth Centre to consumer and collection system is milk both man to consumer.
- Strengths and weakness
 - Strengths
 -) Foreign donors
 -) Government subsidy
 -) Local milk collection
 -) No problem of sales
 - Weakness
 -) Frequent political target and plans
 -) Competition
 -) No available sufficient milk
 -) Huge amount of employee personal advance

5.5 Recommendations

On the basis of above study DDC is operating at large amount of loss since a long period. Financial statements are not audited internally and externally in regular way. The following suggestions are recommend

developing and implementing the process of production planning in this corporation from the very beginning to the end of the following.

- Sales and production forecasting should be made on the basis of realistic ground forecasts should include strategic and tactical forecast.
- Profit planning manuals should be communicated from top to lower levels. All personnel should be participated on decision making and planning process.
- Profit planning units are not seen in DDC so it must be established PPC units.
- The management of the corporation has broadly defined cost and variable semi variable and fixed cost. Research persons depend on A\C section on dairy development corporation.
- To achieve the organizational goal and to fulfill the demand of milk there should be greater efforts to increase milk production on the farms in other words collection of raw milk should be increased removing the hindrances in this regard and creating infrastructure for live stock farming.
- To reduce collection cost uneconomic collection center must be closed up and some of the milk collection center should keep only in season when enough milk supply is obtained so that profit plan becomes attractive.
- Management of DDC should promotional activities in several ways. Such as cost reduction programs, lost planning to cost incurring decisions.
- Reward and punishment policy should be developed effectively to improve the DDC and workers should be motive by the management.
- CUP analysis, financial ration cash flow and cost of production must be analyzed while pricing and it should be determined on the basis of production and principles of profit-planning.
- Variance analysis has to be effectives variance must be categorized as favorable and unfavorable and causes of unfavorable variance should be identified and diagnosed in time effectively.

- DDC should maintain proper co-ordination with in the organization line and staff authorities and responsibilities and should be clearly defined this will considerably help to solve the problem of conflicts between departmental managers.
- DDC should try to increase collection centers for collection of milk and sales depots for market share to increase sales revenue.
- Cash budget should be prepared monthly, half yearly and yearly basis to control the cash balance.
- To develop the production target, the goal setter should use the different statistical tools such as regression line, trend analysis techniques etc to design the best policy of production and the realistic plan.
- The goal is not perfectly achieved in any years of any productions so. The considerable goal should be targeted i.e. it should not be more ambiguous.
- Since the achievement of each product is negative the in most of the year so, the proper environment for implement at of the plan should be managed. It should be communicated with concern departments.
- Management by Objective (MBO) techniques should be adopted to achieve the goal properly.
- Inter department and inter project activities should be associated properly to clear the duty and responsibility for the proper achievement of goals.
- According to the employees of production department, the plant installed in DDC are old and low efficient to produce the production so, Advance machines should be installed either or proper preparing should done to up date and to run according to the production plan.
- For the adoption of changed environment the essential training should be given to the labor of production department to run the machine in its full capacity.
- For the by production each product should be supplied in to the another processing department to reduce the idle time due to lack of raw materials.

- The strategies and method adopted for milk collection should be change so the milk can be delivered in the concern places for its processing.

Above recommendations are useful for DDC for earned profit for coming year by making effective production plan.

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Appendix-I

The total production of milk and milk products in the Fiscal Year 2061/2062 and 2062/2063 and 2063/2064 is as under:
(In M.Tons)

Particulars	2061/2062	2062/2063	2063/2064
Milk Collection	56,305.00	5,41,200.00	53684.00
Milk Production	70,138.00	6,76,14.00	62663.00
Butter Production	854.00	1,232.00	1125.00
Ghee	649.00	665.00	803.00
Yoghurt	999.00	1,282.00	1712.00
Cheese	171.00	168.00	166.00
Ice-Cream	38.00	37.00	55.00
Paneer	38.00	58.00	78.00
Skimmed Milk Powder	529.00	548.00	505.00

Appendix-II Fiscal Achievement of Biratnagar Milk Supply Scheme (In Metric

Tonne)

S.No	Particulars	F.Y	F.Y	F.Y	Sale	Production	Sales
		2059/060	2060/061	2061/062			
		Production	Sales	Production			
1.	Milk Collection	9499	-	9127	-	8430	-
2.	Milk	12092	3056	12393	3315	10754	3322
3.	Skim Milk Powder	638	-	651	-	529	-
4.	Ghee	342	161	306	117	283	96
5.	Butter	384	384	391	5	349	5
6.	Dahi(Yoghurt)	269	267	302	302	331	330
7.	Paneer	4	4	4	4	2	2
8.	Ice-Cream	3	3	1	1	-	-
9.	Cheese	-	3	-	3	-	3

Appendix-III

Fiscal Achievement of Hetauda Milk Supply Scheme

(In Metric

Tonne)

Particular	F.Y 2059/060	F.Y 2060/06 1	F.Y 2061/062			
	Productio n	Sales	Productio n	Sal e	Productio n	Sale s
Milk Collection	3690	-	3127	-	3617	-
Milk	335	267	323	260	308	218
Butter	5	7	5	5	4	4
Ghee	9	39	4	27	24	34
Dahi(Yoghurt)	29	37	28	28	24	23
Paneer	2	2	0.2	0.2	-	-
Cheese	-	2	-	2	-	2

Appendix-IV

Fiscal Achievement of Milk Product production & Supply Scheme

(In Metric

Tone)

Particular	F.Y 2059/060	F.Y 2060/061	F.Y 2061/062			
	Production	Sales	Production	Sale	Production	Sales
Milk Collection	2267	-	2485	-	2289	-
Butter	22	175	27	146	25	152
Cheese	174	124	172	124	171	126
Dahi (Yoghurt)	410	399	437	433	410	402
Paneer	50	50	59	58	45	44
Ghee	201	268	151	351	142	390
Rasabari	18492	18000	74	76	71	71
Ice- Cream	25	24	35	32	34	35

**Appendix-V
Employees Record**

There are 788 Permanent staffs are working in the organization. A part from these, there are also temporary staffs working in the organization.

S.No	Projects	Technical	Administration
1.	KMSS	203	127
2.	BMSS	88	48
3.	HMSS	80	54
4.	LMSS	25	16
5.	MWMSS	14	2
6.	MPPSS	83	48
Total		502	286