

CHAPTER I

1.1 Introduction

Livestock rearing is an integral part of Nepalese agriculture since these are used for labor (bullock) production, manure production, religious purpose and milk & meat production. A Nepalese farmer family in average owns 3.6 cattle and 2.4 buffaloes. Major dairying animals in Nepal are cows and buffaloes. These are reared in mountain and Terai regions of country whereas yak/nak is other dairy animals of sub Himalayan regions. The population of milking cows and buffaloes within the country exceeds 0.90 & 1 million respectively and total milk production is more than 1.2 million metric tones which is in the growing trend of around 3.2% annually. Out of the total milk produced in Nepal, share of buffalo milk is higher, which is around 70% of the total milk production. The dairy sector contributes around 8% to national GDP. Productivity of cows and buffaloes is around 387kg/ year and 810kg/year respectively. The total dairy production in FY 2005 stands around 1274 thousand MT. and increase up to 1312.13 thousand MT. in 2006. The History of dairy Industrial activity in Nepal dates back to 1953 when yak cheese factory in Langtang district was established. In 1969, Dairy Development Corporation (DDC), a government parasatal was formed, which was the milestone of dairy business in Nepal. The private sector started getting involved in the dairy-processing sector from late 1970s with very small-scale operations in Kathmandu but its significant growth was seen only after the implementation and approval of "Ten-year Dairy Development Plan" by Nepal Government in 1990. With Nepal Government announcement of the policy of privatizing DDC in early 1990, private sector grew at faster rate. The private sector involvement is mostly in Katmandu Valley where large private dairies are located. Today, there are more than 250 dairies (including DDC, private sectors and cooperatives), which altogether produce more than 18 million litres milk per day with a cash contribution of more than Rs.4500 million per year. This cash directly reaches to the farmers of rural Nepal thereby helping the poverty reduction.

Likewise, the dairy farmers in many districts have organized themselves in milk producers' cooperatives and milk producers associations. There are more than 1,400 such unified farmers' organizations, which represent more than 95,000 farmer families

and the average supply by each family is around 4 liters/ per day. These associations collect the milk from individual farmers and supply it to nearby chilling center or processing plant. Some of these cooperatives have also started processing and marketing of milk from their own initiatives

. (www.dairydev.com.np & www.b2b.com.np, www.agripricenepal.com)

- I. Dairy Development Corporation established under corporation Act 2021 BS. DDC-a fully state owned corporation, initiated for the economic advancement of the poor farming communities, has flourished into a nationwide movement with an annual collection over 60 million liters of milk from more than 75 thousand milk producers through 888 milk cooperatives spread out in 33 district. With the state-of-art infrastructure comprising of fully modern dairy plants, 11 cheeses manufacturing units, 45 milk chilling plants and highly qualified dairy specialists, DDC is a precious asset in the economic development of our nation: (*Corporation Coordination Council,"Profiles of PEs in Nepal"* Nepal Government Nepal, June 1978, p-87)

At DDC, we are uncompromising about a strict adherence to quality of milk & milk products, hygiene and sanitation of the plants. We pledge to uphold the grand tradition set by our predecessors and to endorse the trust and faith placed in us by our valued customers.

The DDC was created, as full government owned corporation under the Minister of Agriculture with responsibility of overall development of Dairy Industry in Nepal.

“Processing of dairy products within the rural households and cottage type undertaking has long history in Nepal. Processing methods are simple and labor intensive process is done for a number of purposes i.e. to preserve to produce marketable products e.g. Ghee, to produce traditional dishes which are used by the households and during festivals, livestock farming has been a traditional enterprises of Nepalese farmers and has mostly been carried on in sufficient household scale and thereby benefited them as the secondary source of Income”

The history of dairy development in the organized sector is not long systematic dairy development in Nepal began in 1952 when Nepal Government requested assistance

from FAO of the United Nations in trying to better utilization of milk products in the Terai and inner Terai region in the country.

To decentralize the milk collection processing and supplying of milk and milk products through out the Kingdom to the benefit of both the milk producing farmers and scattered consumers.

Five milk supply schemes were established on Phase wise basis which are as follows:

- a. Kathmandu Dairy Development Product**
- b. Biratnagar Dairy development Product**
- c. Pokhara Dairy development Product**
- d. Lumbini Dairy development Product**
- e. Hetauda Dairy development Product**

In a view of national welfare, the objectives of the corporation is to bring timely progress in the collection, sterilization, conservation sales and distribution of dairy and dairy products with modern and scientific method for the economic upliftment of the producer and protection of health of the consumer with more efficiency and readiness.

The DDC is a public enterprises created with the aim to increase the milk production. In the rural areas by collections and available quantity of milk. Process and distribute it to the urban population at socially acceptable prices as a commercially viable operation.

DDC main objective is to:

- a. Bring improvement in production, collection, processing, preservation, sales and distribution of milk product in modern and scientific way.
- b. Provide a reliable market outlet and fair price to milk producer.

- c. Supply pasteurized milk and other dairy products to urban consumers at reasonable prices.
- d. Organize, promote and extend milk collection production, processed milk and milk products to meet demand in urban areas.
- e. Organize and promote milk product's association (MPAS)
- f. Provide a guaranteed market for milk to the rural farmers with fair price.

Develop an organized marketing system for milk and milk products in urban areas.

Public enterprise has been universally establishing most developer countries like USA, Britain and France as well as in developing countries like India, Nepal and Srilanka among others. Indeed, PEs have become an important and seemingly for developing countries.

Since the 19th and early 20th century the growth of PEs have indicated a significant change in economic social thinking among government. The concept was born out to two situations.

1. Lack of private investment capital
2. Lack of skill and professional maturity among private entrepreneurs.

Thus, government policy makers have adopted the establishment of PEs as an instrument for social- economic development.

Generally “PEs are autonomous bodies which are owned and managed by the government and provide goods and services a reasonable price and ownership with the government should be 51% or more to make an entity”

Planning is the first function of management. It is performed continuously because the passage of time demands both re Planning and making new plans moreover, current feedback often necessitate newly planned action to:

1. Current performance differences.
2. Cope with unanticipated events, that are unfavorable and
3. Take advantage of new developments.

Management planning is the process that includes the following 5 phases:

1. Establishing enterprise objective and goals
2. Developing premises about the environment of the entity
3. Making decisions about the course of actions
4. Initiating actions to activate the plans and
5. Evaluation performance feedback for re planning management planning provides the basis for performing the four other functions: organizing, Staffing, leading and controlling.

Specially, planning means setting goals for the firm, considering various ways of meeting those goals and picking out what appears be the best way to meet the goals.

Sales plan is the first and most difficult plan to prepare. It is the starting point for the preparations of the comprehensive profit planning and control. All the other budgets are dependent upon the sales budget. The sales budget is usually presented in both units and Rupees of sales revenue. The preparation of sales budget is dependent upon the sales forecast. A variety of methods are used to forecast the sales for the budget period the actual sales for past periods serve as an excellent guide to forecast future sales. The D.I. System should be used to prepare and analysis the actual sales by regions, territories, salesman, Public Enterprises of customer etc.

The sales planning process is a necessary part of PPC because:

1. It provides for the basic management decisions about marketing and

2. Based on those decisions, it is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic, most if all of the other part of the overall profit plans also are not realistic. The sales plan is the foundation for periodic planning in the firm because practically all other enterprises planning are built on it. The primary source of cash is sales. The capital additions needed, the amount of expenses to be planned, the manpower requirements, and the production levels and other important operational aspect depend on the volume of sale.
3. A comprehensive sales plan includes two separate but related plans, the strategic and tactical sales plan. A comprehensive sales plan in corporate such management decisions as objectives, goals, strategies and premises. These translate into planning decisions about planned volume (Units or jobs) of goods and services prices, promotion and selling efforts.

Strategic and Tactical sales Plans compared

In harmony with a comprehensive profit plan both strategic long term and tactical short term sales plan must be developed. Thus the usual case is a 5-10 years strategic sales plan and due a year tactical sales plan. Many sale and resources involving like span of many years basic strategic and major decisions that involve commitments of resources and long like spans are difficult to stop. Sometimes it may be helpful to view the development of due long range and short range sales plan as separate activities; however, they must be integrated because the short range sales plan should dovetail with the strategic long range plan in all major respects.

An Introduction of DAIRY DEVELOPMENT PROJECT, Hetauda

Dairy Development project Hetauda is one of the projects of 5-Dairy development projects set up in Hetauda Municipality ward No. 8 HID of Narayani Zone in the central Development region. It was established on the 19th chaitra 2032 B.S. under the corporation act 2021 with the view to fulfill the increasing demand of dairy products for its growing population. It began to collect milk and produce dairy product in 2033 B.S. at due of Rs 22,76,558.00 This project has 186 milk sales booths, 5 dealers(Hetauda, Narayanghat) and two sales centers in Hetauda itself and one

Distributer at Birgunj. Here 90 technicians (6 at Officer Level & 83 Assistant), 45 administrations (5 Officer and 40 assistant) altogether 134 personnel have been serving regularly. This project collects milk from Makawanpur, Rautahat, Sarlahi, and Mahottari only in urban areas.

1.2 Statement of the Problem

A developing and mountainous Country Nepal is an agricultural Country. Agriculture is the main occupation of most of the Nepalese people. Most of the populations rely on the agricultural products, poultry farming, fishery, beekeeping cattle farming etc are the main areas of agriculture. According to the geographical features of the nation, cattle farming can be promoted from the plain to high mountainous areas. To promote the living standard of the people and fulfill the basic needs, a cattle farming is playing an important role in the country.

Owing to its natural beauty, Nepal has become a place of attraction for tourists. The number of them is increasing yearly though the nation is facing many kinds of difficulties of its own. In other hand, the population of the state is increasing hopelessly and productivity of agricultural sector has not enough. Everyone needs foods to survive. Agriculture sector is the main sources of food. Among the different sources cattle farming has been better sources milk and meat, which is the basic foods for health.

The necessities of the fulfillment of milk and milk products

has set up branches of the corporation in all 5 development regions. Among them a Hetauda Dairy Product corporation is one.

Hetauda is a Head Quarter of Central Development region. It is one of the industrial city where a large number of people settle land are employed. The population of Hetauda is nearly about 2,50,000. People are migrating from village to town day by day as a result the farming of people for livestock's decreasing rapidly, milk is necessitated for every people from child to older. It is like as basic needs for human being. Therefore, the demand of milk product is also increasing. His Majesty Government established DAIRY DEVELOPMENT PROJECT in Hetauda. It was

established in 2032 B.S. under the coronation Act 2021 with view to fulfill the demand by increasing the dairy products for its growing number of people.

In central development region, it is in Hetauda Industrial estate where different dairy products are produced according to the demand of the market.

Public enterprises were established to prepare the infrastructure services to promote the exports, to control the price in favor of the nation, to contribute in national surplus, to provide employment opportunities, to provide required goods, services and contribute in national development as well as to assist in the country's economic advancement. DAIRY DEVELOPMENT PROJECT, Hetauda is also established for this purpose. This project covers Makawanpur, Rautahat, Sarlahi & Mahottari districts for collection of milk and Chitwan, Parsa, Dhanusha, Mahottari, Siraha, Makawanpur, Kathmandu and Morang districts for supply of Milk Products. We have simply seen that some Public Enterprises produce only goods but they are unable to obtain the essential profit as well as sufficient market area and their goods are in condition of damage, but observing seriously this project had not so much problem of sales of Dairy products in past. It is almost successful in providing the good quality products to the consumers at very reasonable price. Only the main problem that is hampering in achievement goal is lack of proper sales planning and implementation. Now a days new dairy firms are introduced. Few years back there were no any other dairy project, at that time DAIRY DEVELOPMENT PROJECT was alone. When it was alone there was not any problem of sales of its Product, because there was no competition and had full market coverage. Also, few years back most of the people were involved in farming and they produce milk and milk product themselves.

Now a day's farming trend is also decreased, demand of dairy product is high so that DAIRY PROJECT Hetauda is facing to sales problem of dairy product due lack of proper Planning and implementation to manage competition and get the optimal Profit by having control on production and optimum utilization of the resources.

Also there are many other problems with Dairy Development Corporation:

1. Similarly to other high value commodities, milk and milk products also lack efficient marketing services. Besides, milk being one of the highly perishable

commodity, it needs special infrastructures like collection and chilling centers and refrigerated trucks etc which are not adequately available.

2. Nepalese farmers lack assured market to sell milk and milk products. Limited procurement of the milk by DDC and or few petty dairies has not been able to lift surplus milk from majority of the farm households to the market. Besides, the declaration of *Milk Holiday* once or twice a week during the flush season of milk by dairy industries including the government owned DDC has created a severe problem to milk producing farmers.
3. Livestock farming in Nepal is still carried out in subsistence way rather than in a commercial scale. Thus, inability to reap the scale of economies, make both costs of production and marketing high, resulting in Nepali milk costlier compared to Indian milk (or consequently Indian powder milk).
4. Limited attempts made by both government and private sectors for the product diversification like baby food, milk whitener, condensed milk, powder milk, flavored milk drinks, cheese and ghee and confectionary etc.

In present study, I will try to find the answer of the following questions

- a. To what extent is the process of sales planning & implementation system followed by DAIRY DEVELOPMENT PROJECT, Hetauda
- b. What Kinds of Problem are facing the enterprises and why it is unable to provide milk and its products properly?
- c. What is the situation of sales activities?

1.4 Objectives of the study

The primary objective of this study is to enhance the practices of sales planning system and measure its effectiveness applied by DAIRY DEVELOPMENT PROJECT, Hetauda

The secondary objective of the study can be stated as follows:

- a. To identify the managerial process of DAIRY DEVELOPMENT PROJECT, Hetauda
- b. To examine the formulation and implementation of sales plan of DAIRY DEVELOPMENT PROJECT. Hetauda
- c. To suggest and recommend the systematic sales plan for DAIRY DEVELOPMENT PROJECT, Hetauda

1.5 Justification of the study

Profit Planning has become an important technique in the use of managerial decision making in business enterprises. But it is not possible without the proper planning of sales. Sales planning are the major instrument, which minimizes future uncertainty, maximizes profit and optimum utilization of the resources. The main purpose of the sales planning is to provide necessary information for developing other elements of a comprehensive profit plan.

Therefore, this study is very usable

- a. To entrepreneurs
- b. To decision makers
- c. To policy makers
- d. To further researchers

1.6 Limitation of the study

This study will be confined due to following points because of limited time and resources, only DAIRY DEVELOPMENT PROJECT; Hetauda is taken into account for study.

- a. It has mainly focus on planning of sales
- b. The data reveal in due to study of only 6 years (Since 062/063 to 067/068)

- c. The Study is mainly concern with due primary data as well as possible secondary data, which has been provided by DAIRY DEVELOPMENT PROJECT, Hetauda

1.7 Organization of the study

The study has been organized into Five chapters each denoting to some aspect of the study of Sales of DAIRY DEVELOPMENT PROJECT. The title of each of these chapters is as follows:

- a. **Chapter I:** Introduction, Statement of Problem. Objective of the study, Justification of Study & Limitation of Study.
- b. **Chapter II:** Review of Literature
- c. **Chapter III:** Research Methodology
- d. **Chapter IV:** Presentation & Analysis of Data
- e. **Chapter V:** Summary, Conclusion and Recommendation

CHAPTER – II

REVIEW OF LITERATURE

2.1 Conceptual Revised

I. Brief Background of DDC

The Principal organization of Dairy Development in Nepal has the Dairy Development Corporation (DDC) established under the corporation act in 1969. The DDC was created as a full government owned corporation under the minister of Agriculture with the responsibility.

1. The history of Dairy Development in the organized sector is not Long, Systematic. Dairy Development in Nepal began in 1952, when HMG/N requested assistance from FAO of the United Nations in trying to better utilization of Milk Product in the mountain region of the country. Cheese Factories were established to develop during in region, the first on in 1952 in Langtang, in the same year, experimental, milk processing was also carried out in Nala Tusaal village of Kavre District. Thereafter, all livestock improvement section was opened under the Department of Agriculture as the eleven section in the same year to handle Dairy Scheme, under FAO's as corporation in order to lock after Dairy Development activities, the Dairy development section a milk processing programme was commenced at Lainchour Kathmandu with the milk Production capacity of 180 Liters per day initial year. To fulfill the increased demand of milk, the center milk branch was established in 2041 B.S with the corporation of the specialists of the United Nations, world food program and food and Agriculture Organization, which collected milk and distributed to the public. (*Ministry of Agriculture/ Winrock International," An Introduction to the Ministry and its Affiliated Agencies."* HMG, KTM, 2047, P. 229)

Main aims of Dairy Development Corporation (DDC) are to encourage the milk Producers to produce more milk and milk Products to city area. In order to achieve the objectives, a dairy development scheme was formulated and implemented by the livestock improvement section of the agriculture. During the fiscal year 2010/11, the government established a separate institution named 'Dairy Development Center'. It was established at Bhotahity, Kathmandu in a very small Scale. Then a building for the center was constructed at Lainchour, Kathmandu with a view to meet the increasing demand for milk and milk producers on one hand and the DDC became able to supply the pasteurized milk and its product in town areas in the other. In the beginning, the demand for fresh hygienic milk and its product was high, The Dairy Development Center, was also unable to meet the raising demand for the dairy products, Demand for milk and milk products, GON realized the necessity of ' Dairy Development Corporation' which could play an important role for milk collection, procurement, distribution marketing and good management, so 'Kathmandu Dairy Center' was transformed into " Dairy Development Corporation (DDC)" in 2026 B.S under the act of Corporation 2021 B.S. Then the DDC established a milk supply scheme under the name of "Kathmandu Milk Supply Scheme (KMSS)

To Decentralize the milk processing and supplying of milk and milk products to the benefit of both the milk producing farmers and consumers scattered through out the Kingdom altogether seven milk supply scheme were established on phase wise basis in Kathmandu, Biratnagar, Hetauda, Pokhara and Lumbini. The contribution of milk production to the GDP is 6 %. Thus, the milk production is an important activity.

Existing Market

2. The existing market of milk is mainly occupied by formal & informal sectors. The formal sector represents public/private dairies and milk producers' cooperatives whereas informal sector refers the milk marketed by the producers themselves. The milk marketed by these sectors is around 10% and 2% respectively of the total milk production. The remaining 88% of milk is either consumed domestically or processed traditionally to make

ghee, dahi, khuwa, chhurpi etc. The common dairy products by Nepalese processing industries are Pasteurized (whole and standard) milk, yoghurt, ghee, cream, cheese, paneer, butter, ice-cream etc. Out of the total processed products, pasteurized milk (by HTST process) in flexible pouches are mostly used and it accounts for more than 95% of the total marketed products. The private sectors are progressing towards ice cream and they are in process to introduce other diversified products such as flavored milk, UHT milk, liquid yoghurt etc.(**Website: www.b2b.com.np, & www.agripricenepal.com)**

Export-Import

In general, Nepal is a net importer of dairy products. The main dairy products of import are Skimmed Milk Powder (SMP), Butter, Cheese, Chhurpi, Khuwa and Ice creams. Condensed milks, Evaporated milk, baby foods are also in import to Nepal from different third countries and India as well. Along with the above-specified imports, it has been reported that there is unofficial import of raw milk from India due to the price difference between two countries raw milk.

A Brief History of Nepalese Dairy Industry

- a. 1952 Experimental production of Cheese
- b. 1953 Establishment of Yak Cheese Factory in Langtang under FAO assistance
- c. 1954 Dairy Development Section was established under the Department of Agriculture and also a small-scale milk processing plant was started in Tusal, Kavrepalanchowk
- d. 1955 Dairy Development Commission formed
- e. 1956 A central dairy plant with an average milk processing capacity of 500 liters per hour was established in Lainchour and mini milk processing plant was established at Kharipati in Bhaktapur district
- f. 1960 Two additional cheese factories were established

- g. 1960 Cheese Production & Supply Scheme (CPSS) was launched.
- h. 1962 Dairy Development Commission was converted to the Dairy Development Board.
- i. 1969 This Dairy Development Board again converted to the Dairy Development Corporation under the Corporation Act of 1964.
- j. 1970 Involvement of private sector in dairy processing.
- k. 1973 Biratnagar Milk Supply Scheme was established by DDC.
- l. 1974 Hetauda Supply Scheme was established by DDC
- m. 1978 Kathmandu Milk Supply Scheme established by DDC
- n. 1979 Milk Products Production and Supply Scheme (MPPSS) were established (Renamed to CPSS)
- o. 1980 Pokhara Milk Supply Scheme established by DDC
- p. 1990 "Ten Year Dairy Development Plan" was designed and approved. During this time the private dairies emerged significantly.
- q. 1991 First SMP plant in Biratnagar established
- r. 1992 Nepal Government established National Dairy Development Board (NDDDB)
- s. 1998 An association of private sector dairies viz. Nepal Dairy Association (NDA) was formed by merging the different private sector associations.
- t. 2000 Nepal Cheese Producers Cooperative was formed.
- u. 2004 Code of Conduct of dairy industries has been prepared to enhance quality production.
- v. 2004 Privatization of Pokhara Dairy
- w. 2005 Code of Conduct for dairy industries has been prepared.
- x. 2006 Community Livestock Development Programme started.

Major Actors Involved in Dairy Sector Development

1. National Dairy Development Board
2. Dairy Development Corporation
3. Nepal Dairy Association

4. Federation of District Dairy Co-operatives & District Dairy Co-operatives
5. Department of Livestock Services (DOLS)
6. Community Livestock Development Programme
7. Agro Enterprise Center/FNCCI

In 2032 B.S. Hetauda Milk Supply Scheme was established with a view to make the dairy production organized and professional in Hetauda Industrial Estate. In the beginning **62,400.00** Liters milk was collected per annum but now days **51,82,000.00** liters milk in flush & dry season is collected per annum. About 15000 farmers of Makawanpur, Rautahat, Sarlahi and Mahottari districts are able to get their milk collected at DDC, Hetauda. According to DDC, Hetauda there are 7 milk freezing centers outside factory and 6 inside the factory and 148 Dugdha Utpadak Sahakari Sangh with total capacity of 30,200 liters per day in different districts mentioned above but can collect only 13894 liters per day from the farmers i.e 46% capacity is being utilized. Similarly there are 186 Milk- selling booths, 2 Milk products selling shop, 5 Dealers to sell milk & milk products in Hetauda & NarayanGhat.

Table No. 2.1
Gross Composition of Milk

(In %)				
Mammal	Fat	Lactose	Protein	Ash
Ass	0.6	6.1	1.4	0.28
Buffalo	7.2	4.8	3.8	0.76
Camel	3.6	5.5	4.4	0.77
Cat	3.3	4.9	9.1	0.58
Dog	9.6	3.1	11.2	0.73
Elephant	19.6	8.8	3.1	0.65
Goat	4.9	4.1	4.3	0.89
Human	3.3	6.8	1.3	0.20
Llama	3.2	5.6	3.9	0.80
Mare	31.2	5.8	2.0	0.36
Porpose	48.5	1.3	11.2	0.57
Remdeer	17.1	2.1	10.2	1.50
Sheep	8.6	4.3	6.7	0.97
Zebra	4.9	4.6	3.2	0.75

Source James N. Warner "Principal of Dairy Processing" (P.4)

Meaning and Definition of PEs

Governments of developing countries have generally felt a strong urge to develop and modernize their economy at the faster pace and more importantly on a rational and socially desired footing. Therefore, they found it necessary to take substantial initiative in promoting economic and social development through the planning and development of public sector activities. Thus, "Public Enterprises" accepted as effective tools for accelerating the achievement of socio- economic goals.

Meaning of the terms "PEs continue to remain vague and varying. It is right said that Public enterprises is a notable for very untidy concept" PEs general word which make very different reality. There is no authoritative internationally accepted definition of the term Public enterprises. It is each country's prerogatives to draw the line between public enterprises and other government organizations and activities.

PE generally has legal autonomic as joint stock company as a statutory corporation as a Co- Operative Society, or as a Society under the Societies registration Act, it is not and essential ingredient of the public enterprises.(**Narayan Laxmi "Principles and Practise of Public Enterprises Management" S. Chand and Company Ltd. New Delhi: 1982: P1**)

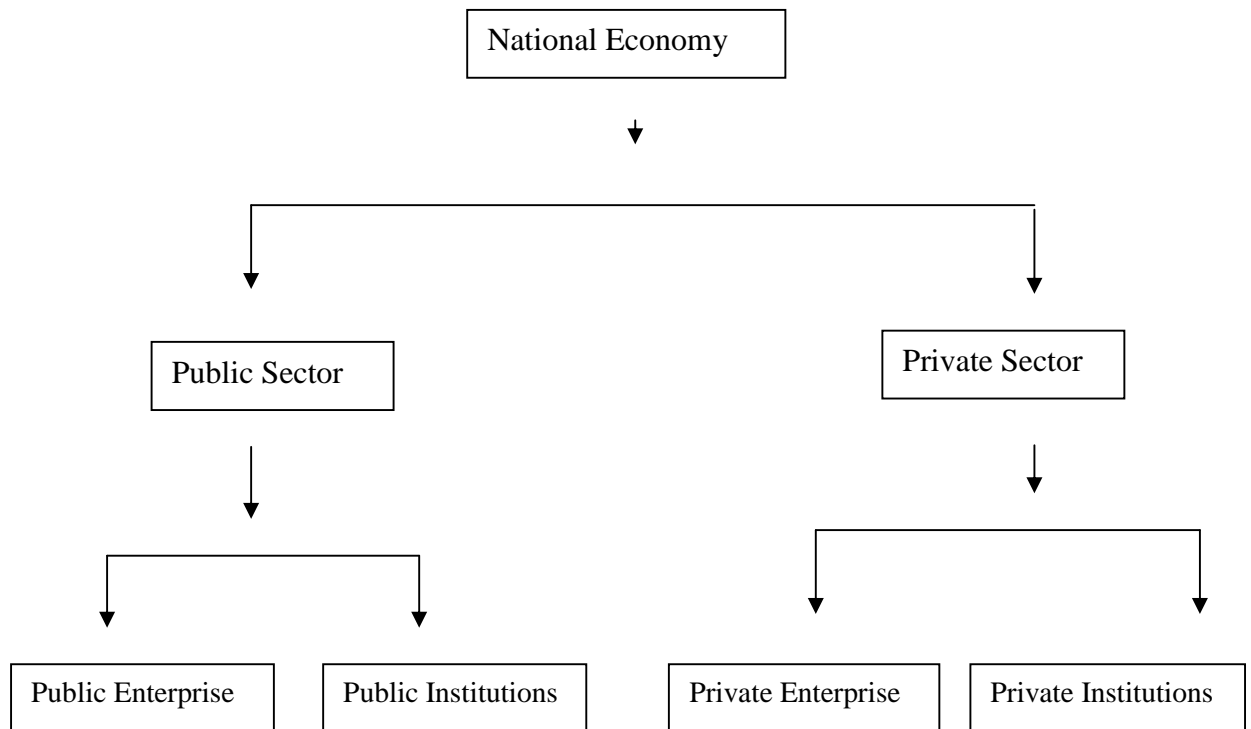
In brief PEs is an organization which is owned by Public Authorities to the extent of 50% or more, is under the Top management business character and it markets its output in the shape of goods and services in a price.

The Government of Nepal's share capital in 36 public enterprises as at the end of FY 2006/07 amounted to Rs. 75.8 billion though the net worth was reduced to Rs. 39.0 billion. Some public enterprises still need to update their audits. There is also the need for reconciling the records

between the government and the public enterprises with respect to the amounts of the former's share and loan investments in the latter.

In nature and scope of PEs can be conceptualized in the framework of the following diagrams, which attempts to represent all institutionalized activities in a mixed

enterprise into four segments. (Leory P. Jones “ Public Enterprises and Economic Development” The Korean Case KDI 1975, P. 20)



I. Position of DDC in Public Manufacturing Enterprises

Public enterprises were established in order to prepare infrastructure services, to export to help in controlling the price situation, to create opportunities for employment, to increase government revenues and to contribute significantly in the national development as well as to assist in the country’s economic achievement. DDC is one of the public enterprises which were also established to fulfill that objectives. (8 th Plan Nepal Government National Planning Commission, P. 698)

The government only wholly owns DDC its management and operation are also fully controlled by the government. As a matter of fact, the basic philosophy behind corporation act is neither to earn profit nor to run the operation in a commercial manner. The objective is to run the activities through a corporation which otherwise

should have been operated by the management. It is only for the sake of convenience that the corporation is created. It is almost like government whether DDC can be run as a commercial entity under the present legal setup.

The DDC is public enterprise created with the aim to increase the milk production in the rural areas by collecting and available quality of milk process and distribute it to the urban population at socially acceptable prices as a commercially viable operation.

3. Livestock is a fast growing agriculture sub-sector and is considered important in poverty reduction. It grew by an average of more than 3 per cent annually during the 1990s accelerating from 1.6 per cent during the first half of the decade to 3.6 per cent in the second half. The contribution of this sub sector to the gross domestic product (GDP) of Nepal is about 26.4 %, which as significant as the other sub sector of the country's agricultural system. ⁶ The contribution of milk production to the GDP is 6 %.(**Economic Survey of FY 2006/07 Nepal Government Ministry of Finance 2007**)
4. Most of the people of Nepal are engaged in the agriculture. Number of disguised unemployment is high in Nepal. So, the Dairy farming may be an important occupation for the people to reduce the degree of unemployment. An organized commercial Dairy farming i.e. DDC can largely help the people to generate income for them and hence to raise national income.
5. According to the Asian Development Bank due to improvement to agricultural and industrial estate, in 2000, the GDP in Nepal has increased by 6.4%. This increment was 4.4% in 1999. It is assumed that if there is regular and efficient macro economic management as well as better progress in agriculture, the economic growth rate will reach 5% to 5.5% in Nepal by 2001. (**Economic Survey for the FY 1998/99 Nepal Government Ministry of Finance 1999 & www.adb.org**)
6. In the year of its commencement, DDC had to fulfill the role of an agent of rural development and supply of Dairy products to the urban population but operations were commercially, not viable and as a result losses were

II. Sales Plan is a part of profit plan programme

Without the preparation of sales plan profit plan cannot be forwarded. Profit plan starts after making sales budgeting. Being the foundation of entire budgeting, it determines to large extent the success or failure of a budget program. Unless, the budget is developed with reasonable accuracy all the estimates in the operating and financial budgets will be misleading therefore, preparation of sales plan is very important to profit plan program, so, it is called end and means of profit plan, which, is the sources for production budget and cash budget. The sales plan is the foundation for periodic planning in the firm because practically all other enterprises are built on it. The primary sources of cash are sales and the capital addition needs the amount of expense to be planned. The manpower requirement the production level and other important aspects depend on the volume of sales.

The sales planning process is a necessary part of profit plan which play vital role in the formulation of profit plan in any enterprises because

1. It provides the basic management decisions about the marketing and
2. Based on those decisions, an organized approach is developed for comprehensive sales plan. If the sales plan is not realistic over all profit plans are also not realistic.

Therefore, if the management should believe that if a realistic sales plan is not developed there is a little justification for profit plan.

III. Goal and people orientation

7. **Goal orientation:** Business and non- business endeavors must have objectives and goals. In business endeavors, the primary goal orientations

are (1) return on investment and (2) contribution to the economic and social improvement of the broader environment.(**Welsch, 4th ed op. cit. P.171**)

8. Likewise, non-business endeavors have specific objectives, such as the accomplishment of a given mission within specified cost constraints. In both cases, it is essential that the managers of the endeavor, as well as the other interested parties should know the objectives and Goals Otherwise, effective management guidance of the activities and measurement of effectiveness with which desired activities are performed are impossible. Thus the responsibilities of management to specify and articulate goals & objectives are fundamentally identical in business and non- business enterprises. (**Welsh Glen A. 5th ed Op. Cit P.2**)

People Orientation: The success of an enterprise- business or other organization depends on the people associated with the enterprise. These people include both the managers and the other employees, because all of these individuals are significantly involved in the attainment of enterprise objectives. Thus, “People” Constitute the most critical part of management other than land, buildings, equipment or materials. Developing an effective staff, providing a positive working climate and positively motivating people determines in large measures the success of most enterprises.

IV. Managerial Planning

Managerial planning can be defined as the process of developing and maintaining a viable fit between the firm’s objectives and recourses, and the changing opportunities

V. Profit Planning & control

Profit planning is one of the most important management tools used to plan and control business operation. Budgets or profit plans are financial plan prepared to guide and control the future. Operational part of the financial planning includes the forecasting of future business condition and activities. A financial plan must, then be designed to serve as a guide or road map for the activities during the budget period.

Best results are obtained when the planning is the same as the company's fiscal year. The annual profit plan may then be broken down by the months, weeks and days of operations. The plan should be designed to co- ordinate the effect of the sales department, production department and all other departments.

Profit planning is a well thought out operational process with its financial implications expressed at both long and short range profit plans or budgets in the form of financial statements including balance sheet, income statement and cash and working capital projections.

A comprehensive profit planning and controlling or budgeting is a systematic and formalized approach for stating and communicating the firms exceptions and accomplishing the planning co- ordination and control responsibilities of management. It is a management technique in fact; it is a way of managing. It is the best only comprehensive approach to managing so far developed that if utilized with sophistication and good judgment fully recognized the dominate role of manager and provides a framework for implementing such fundamental aspects of scientific management as management by objectives, effective communication, participate management, dynamic control, continuous feedback, responsibility accounting management by exception and managerial flexibility.(**Pandey, I.M."** **Management Accounting"** **Bikash Publishing House Pvt. Ltd. Revised ed. 2nd reprint 1995, New Delhi: P 24)**)

There were two types PPC of DDC. The strategic long range and the tactical Short range profit plans normally should be developed concurrently, for all practical purposes, and the executives in charge of each of the responsibility centers, through out the firms should participate in their development in harmony with planning premises.

It is possible for a firm to develop their two profit plans for all aspects centrally. However, we have expressed the prevailing view that meaningful participation in the planning process generates positive behavioral effects.(**Welch Glenn A. 5th ed. Op. Cit. P.34)**)

Two concurrent profit plan, typically are the development of one strategic(long range) and one tactical (short – range).The strategic profit plan is broadened it usually encompasses three or more year in the future, The tactical profit plan is detailed and encompasses a one- year time horizon of the up coming year. The development of strategic and tactical profit plans each year is a process that involves managerial decisions and ideally, a high level of managerial participation.

The formal significance of the long –range plan includes the following basic components detailed by each year. Income statement, flow projection capital expenditure plan, manpower requirements, research plans and a long range market penetration plan. The strategic plan does not include a formal balance sheet, however, it is anticipated that important balance sheet items would be included. Then, the long – range plan covers all the key area of anticipative activity, sales expenses, capital expenditure, cash profits and return of investment.

The distinction between strategic and tactical planning is related to three dimensions.

Dimensions

Classification	Time	Scope of Entity/ Activities	Orientation
Strategic	Long-Term	Broad view of Activities, Annual	Objectives and Goals
Tactical	Short – Term	Detailed view of Activities, monthly	Means to attain Goal

The distinction between two planning is important in structuring the planning process for an entity.

VI.Projection of sales Plan

One of the most important elements is a budgetary control. It is a realistic sales estimate that is based on analysis of past sales and the present market. The demand for an entity’s product or services normally depends on forces and factors largely beyond the scope of management’s control. In most instances, this uncertainty makes expected sales the focal point of planning process.

The task of preparing the sales budget is usually approached from two different angles:

1. Judging and evaluating external influences and
2. Considering internal influences. These two influences are brought together in a workable sales budget. External influences include the general trend of industrial activity, actions of competitors, government Policies, cyclical phases of the nation economy, actions of competitors, government policies, cyclical phases of the nation economy, price level expectations, purchasing power of the population, population shift and changed in buying habits and modes of living. Internal influences are sales trends, factory capacity, new products, plant expansion, seasonal products, sales estimates and establishment of quotas for sales people and sales territories.¹⁹

A sales budget is a projection of sales during budget period. It lays down the sales potential in terms of quantity, value, period area or product etc. It shows estimate of sales either gross or net sales. It is compiled after careful analysis and estimation of sales, selling allowances and selling and distribution expenses.

Basically a sales budget is based on sales forecasting which the responsibility of the sales manager is. The basic information for budgeting is production costs, selling and administrative expenses are also provided by sales budget.

Sales in units can be computed as follows,

- + opening inventory of finished goods
- + Production Units (planned)
- = Total units available
- Closing stock of finished goods
- Planned of Actual Sales

Sales plan is the starting point in the preparation of comprehensive profit planning and control. All the other plans and budgets are dependent upon the sales budget. The budget is usually presented in both 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.

The primary purpose of sales planning is:

-) To reduce uncertainty about future revenue.

-) To incorporate management judgments and decisions into the planning process (e.g. in the marketing plans)
-) To provide necessary information for developing other element of a comprehensive profit plan and
-) To facilitate management's control on sales activities.

A comprehensive sales plan includes two separate but related plans. The strategic and tactical sales plan. A comprehensive sales plan incorporate such managerial decisions as objective, goals, strategies and premises. These translate into planning decisions about planned volume(Units or Jobs) of goods and services, prices, promotion and selling efforts, In harmony with the comprehensive profit plan, both strategic long term and tactical short term sales plan must be developed. Thus the usual case is a 5 or 10 years for strategic sales Plan and a one-year for Tactical Sales Plan. A comprehensive sales planning includes the following compartments. Management guidelines, sales forecast and other relevant information, plans for marketing advertising and distribution expenses. It is the foundation of profit plan.

VII. Control of sales & related Expenses.

The development and control of sales plan is committed to the top management. A realistic sales plan provides the foundation for effective control of sales. Plan should specify management responsibilities because this is the basis for effective control.

Control in the sales function should be viewed as a comprehensive activity encompassing sales volumes, sales revenues, and promotion costs and distribution expenses. Effective control requires that both sales volume and distribution expenses be viewed as one problem rather than two separate and different issues. The sales plan gives the goals that are to be attained by the sale function. The top marketing executive has overall responsibility for control of the sales activities. Normally sales quotas for sales persons need to be consistent with the sales plan although in some case, somewhat below realistic expectations. However in such cases the sales goals, expense budget and other objectives included in the sales plan should be realistic exception control in the sakes function, as in all other functions is attained buy management actions'

The sales goals (volume and Dollar Revenue), promotion plans (Planned expenditure) and distribution activities (distribution expenses) are basic goals. These are relatively broad goals, which suggest the need for numerous short- term and specific standards as fact of the total control efforts of the management. Example of specific standards that may be used for sales control purposes are:

1. Number of calls per period per sales person
2. Number of new qualified prospectors.
3. Number of new customers.
4. Dollars of direct selling expenses per sales person.
5. Selling expenses as a percentage of sales dollars.
6. Average size of orders.
7. Number of orders not honored.
8. Number of orders per calls made
9. Dollar sales quotas per sales person per period.

Effective control of selling activities also requires periodic performance report that includes both sales and expenses. Performance reports should normally be prepared and distributed on a monthly basis. However, certain critical sales activities (e.g. sales made) the marketing function should be prepared by financial executive's staff and distributed soon after the end of the period.

The performance report should be comprehensive for each responsibility centre e.g. the sales district performance report should show:-

1. Performance in generating sales revenue
2. Performance in controlling district distribution expenses
3. Performance of other related activities is under the direct control of the district sales manager. The performance report should compare actual results with planned results and report the variances. Normally, the report should show both the period just ended and cumulative to date performance reports should be consistent with the pyramiding principle. That is the performance reports for the lowest level of management should report specific revenues and expenses by detailed classifications (product in the case of sales and nature in the case of expenses) and for each higher level of management the pyramiding effect requires summary performance reports that show totals by responsibility center.

Sales Planning compared with Forecasting

Sales planning and forecasting often are confused. Although related, they are distinctly different purpose. A forecast is not a plan rather it is a statement or a quantified assessment of future conditions about a particular subject (eg sales revenue) based on one or more explicit assumption. A forecast should always state the assumption upon which it is based. A forecast should be viewed as only one input into the development of a sales plan. The management of company may accept, modify, or reject the forecast. In Contrast, a sales plan incorporates management decisions about such related items volume, prices, sales efforts, production and financing.

A sales forecast is converted to a sales plan when management has brought to bear management judgment, planned strategies, commitment of resources, and the managerial commitment to aggressive action to plan the sales goal. In contrast, sales forecasting is a technical staff function.

9. It is important to make a distinction between the sales forecast and sales plan primarily because the internal technical staff should not be expected or permitted to make the fundamental management decisions and judgments implicit in every sales plan. Moreover, the influence of management action on sales potentials is difficult to quantify for sales forecasting. Therefore, the elements of management experience and judgment must hold the sales plan. Another reason for identifying sales forecasting as only one step in sales planning is that's ales forecasts are conditional. It must be prepared prior changes of promotional programs, production scheduling, expansion or distribution of making activities and other resource commitments. The initial forecast is the important source of information in the development of management strategies and resources commitments and these should usually be more than one to indicate probable sales under various alternative assumptions **(Welsch, 5th ed Op. Cit. PP 172-17)**

One author emphasized the confusion between forecasting and planning as follows: When the leader of an organization says that he would like a forecast, what he often means is that he wants a plan. He wants to make something happen, and he uses this plan as a target for people in his organizations **(Armistrong J. Scott “ Long Range Forecasting” from Crystal Ball to Computer, New York John Willey : 1978, P.5)**

The short—term sales forecast provides the basis for the current year’s sales plan and finished goods inventory plan. At the same time, the influence of the long-term sales forecast is reflected in the capital expenditure plan and in the finished goods inventory plan. The long term sales forecast serves as what might be called the anchored of the finished goods inventory plan since inventory at the end of this year is the beginning inventory for next year business. It is necessarily influenced by the long term forecast. The long- term sales forecast also provides the basis for developing the rough outline of the future. The capital expenditure budget, the short Term sales forecast and resulting sales plan look in two directions. They look outside the company to define the sales budget required to obtain sales income and they look inside the company to serve as the basis for the production plan. The planning is not complete until it meets the requirement in both directions .

VIII. Fundamentals of profit Planning and control

The foundation for profit planning and control is that the management must have absolute confidence in its ability to establish realistic objectives and to develop efficient strategies to attain those objectives for the enterprises.

Basically, CPPC offers a systematic practical and proven approach to the management process. Properly viewed PPC is a comprehensive system to Co- ordinate all aspects of the management process carefully and knitting together the loose end of management and operation. **(Parajuli, Agnidhar “ Profit Planning and Control Process of an Enterprise” Pragy Manch. Nepal University Teacher Association Unit Committee, P.N. Campus, Vol 6 2052 P. 34)**

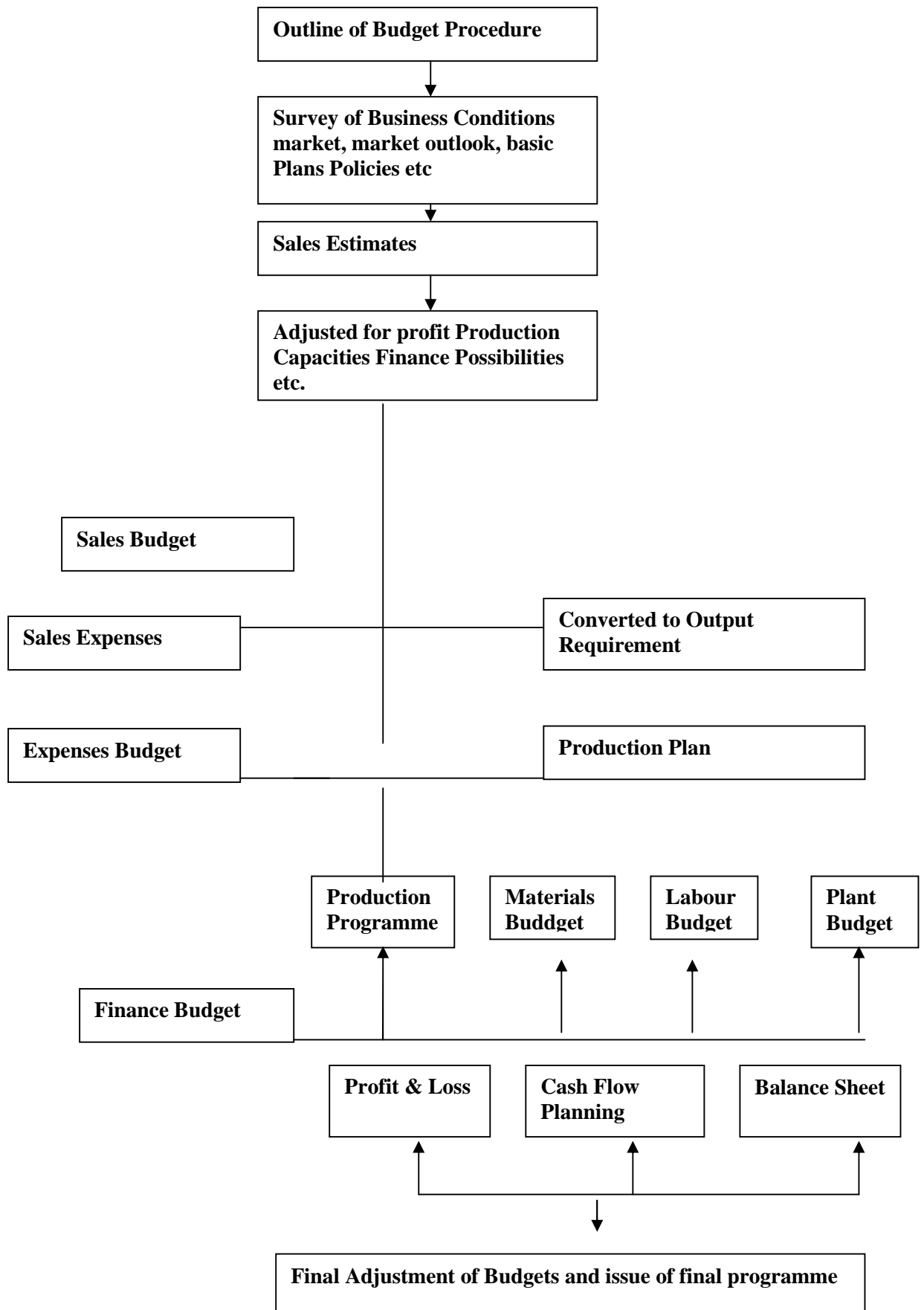
The fundamental concept of PPC includes the underlying activities or tasks that must generally be carried out to attain maximum usefulness room PPC. These fundamentals have never been codified. The concept and techniques of PPC have wide application in individual business, enterprises governmental units, charitable organization and virtually all group endeavors.

IX.Fundamental Distinction of Planning

1. The Mechanics of PPC- Mechanics are such matters as designed of budget schedules clerical methods of completing such schedules and routing computations.

2. The techniques of PPC- The techniques are special approaches and methods of developing information for managerial use in decision making process. Various techniques are made from the simple to the sophisticated one. Some commonly used techniques and methods are forecasting sales volume; break even analysis. Resource determination, cash flow analysis and variable budget procedure.
3. The fundamental of PPC- The fundamental concern of effective implementation of the management process reasonably compel endeavors. The fundamental represents desirable management orientations activities and approaches necessary for proficient and sophisticated application and comprehensive profit planning with regarding sales plan.

An Outline of the Fundamental Concept of PPC.



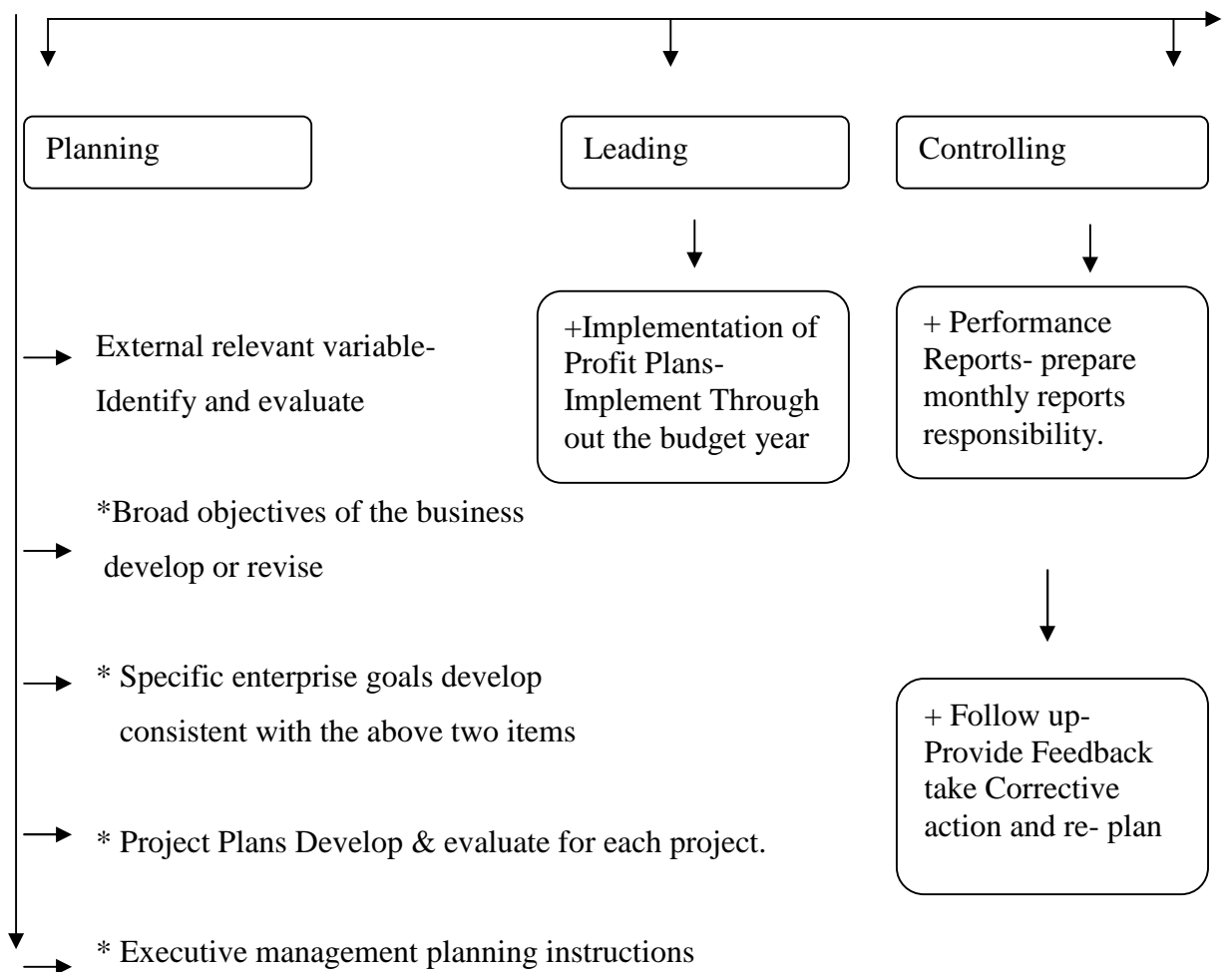
Planning and control Process

Planning and control process is a continuous process of any enterprises development. It is like as a cycle, therefore, it never ends. It is necessary because it integrates the planning, leading and controlling function of management. A PPC program includes more than the traditional idea of periodic or master budget. Rather it encompasses the application of a number of related management concepts through a variety of approach techniques and sequential steps. The term comprehensive means:

The application of the broad concept of profit planning and control to all phases of operations in an enterprise.

The application of the total system approach.

Overview of PPC



- * Specify Planning or guidelines for managers
- * Enterprise strategies specify minor thrusts to attain the objectives & goals.
- * Strategic profit plan (Long range) development for 3.5 or 10 years.
- * Tactical profit plans- develop for upcoming year

* Executive Management + All management levels.

The Planning process should involve periodic consistent and in dept- re planning so that all aspects of operations are carefully re- examined and re- evaluated. It is repeated each budget year. Thus all the basic steps in the planning phase is reviewed and evaluated annually.

Component of Typical PPC Program (For a given Years)

The previous written eleven steps of PPC process are closely relate them to the six PPC Components are given below.²⁹

A. The substantive Plan

1. Broad objective of the enterprise.
2. Specific enterprise goals
3. Enterprise Strategies
4. Executive management planning instruction(Planning Premises)

B. The Financing Plan-

1. Strategic long range profit plan
2. Sales, cost and profit projections
3. Major Projects and capital additions
4. Cash flow and financing
5. Personnel requirement

Tactical Short – range (annual) profit Plan:

I. Operating Plan

1. Planned income statement
2. Sales Plan
3. Production (or merchandise purchase) Plan
4. Administrative expense budget.
5. Distribution expense budget.
6. Appropriation- type budgets (e.g. Research and development, Promotion, advertising)

II. Financial- Position Planed balance sheet.

1. Assets
2. Liabilities
3. Owner's Equity

C. Variable expenses budgets:

Output expense formulas

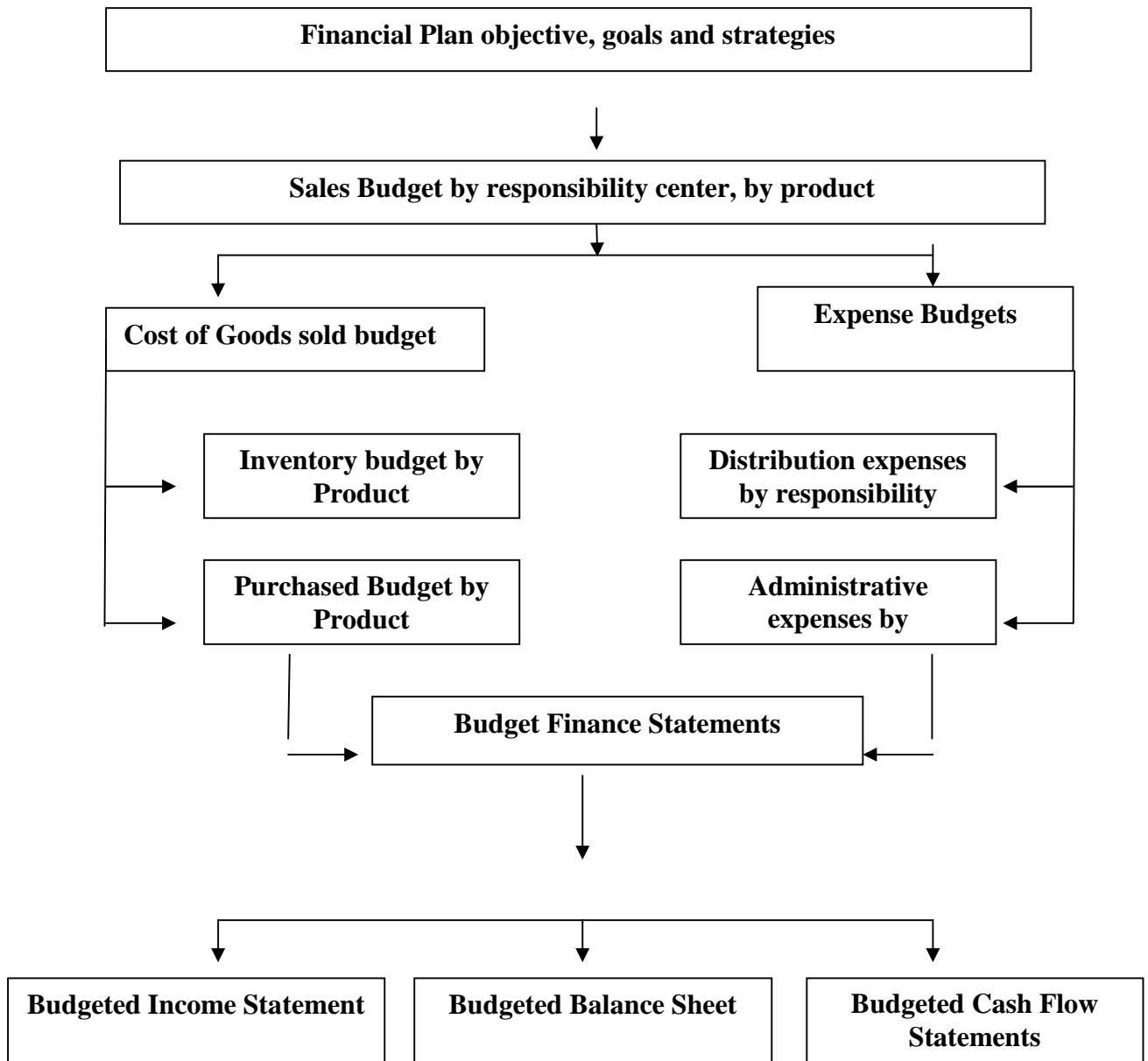
D. Supplementary Data

(E.g. Cost Volume profit Analysis, Ratio Analysis)

E. Performance Reports: Each month- end and as needed.

F. Follow Up, corrective action and re- planning.

Development of a typical short – term (Tactical Plan for a Non-Manufacturing Company)



Components:

1. External Variable identified and evaluated
2. Board enterprise objectives and goals formulated.
3. Strategies for the Company developed.
4. Planning Premises specified.

Components of a comprehensive Sales Plan:

S. No	Component	Strategies	Tactical Plan
1	Management Policies and assumptions	Broad and General	Detailed and specific for the year
2	Marketing plan (sale and service revenues)	Annual amounts, Major Groups	Detailed by Product and responsibility
3	Advertising and promotion Plan	General, by year	Detailed and specific for the year
4	Distribution(selling) Expenses Plan	Total Fixed and Total variable expenses by year	Fixed and variable expenses by months and by responsibility.

X. Management Policies and assumptions

A. The substantive Plan:

The Substantive plan is represented by the

- ❖ Broad Objectives of the enterprise
- ❖ Specific enterprise goals
- ❖ Enterprise strategies.
- ❖ Executive Management Planning Instructions (Planning Premises)

a. Development of the Broad Objectives of the Enterprise

The statement of broad objectives should express the mission, vision, and ethical character of the enterprise. Its purpose is to provide enterprise identity. Continuity of purpose and definition, one research study listed the purposes of the statement essentially as follows:

1. To define the purpose of the company.
2. To clarify the philosophy- character of the company.
3. To create a particular “Climate” within the business.

4. To set down the guide for managers so that the decisions they make will deflect the best interest of the business with fairness and justice. Development of the broad objectives of the enterprise is a responsibility of executive management. Based on realistic evaluation of the relevant variables and an assessment of the strengths and weaknesses of the organization, executive management can specify or restate this phase of the PPC process.

b. Development of specific Goals for the enterprise

The purpose of this step is to bring the statement of broad objectives into sharp focus. This component of profit planning program details specific short range and long range goals for the enterprise. This step provides definite and measurable goals for the enterprise which consists of both the strategic long range profit plan and for the tactical short range profit plan. The statement of specific goals show definite operational goals such as expansion & or contraction of product and service lines grown trends, production goals, profit margins and return on investment. These specific goals in large measure are quantified and specified for each major subdivision of the enterprise (**Poudel, Deba Raj Unpublished Dissertation “ Profit Planning of Public Enterprises” a Case Study of NTC, submitted to Central department of Management , T.U. Kun, September 2001**)

c. Development and Evaluation of Enterprise Strategies

The company strategies are the basic thrusts, ways and tactics that will be used to attain planned objectives and goals. A particular strategy may be short term or long term. The purpose of developing and disseminating enterprise strategies is to find the best possible path of bright future and for attaining the planned broad objectives and strategies should focus on “ How” Therefore , the one line a plan of action for the enterprise, Executive management must be creative and directly involved in the development of new strategies and in addition of currently on going strategy in harmony with the relevant variables with which management must cope. In the development of basic strategies for the enterprise, executive management must focus on identification of the critical areas that influences the long- range success of the

enterprise. Critical areas should be pinpointed through evaluation of relevant variables. Here are some actual examples of basic strategies:

1. Increase long Term market penetration by using technology to develop new product & improve current products.
2. Emphasize product quality and price for the top of the market.
3. Expand marketing to all states of the country. The company will not enter foreign markets in the foreseeable future.
4. Market with low price to expand volume (units)
5. Use both institutional and local advertising program to build market share.
6. Improve employee morale and productivity by initiating a behavior management program. (**Poudel, Deba Raj Unpublished Dissertation “ Profit Planning of Public Enterprises” a Case Study of NTC, submitted to Cenral department of Management , T.U. Kun, September 2001)**)

d. Preparation of planning Premises.

Planning premises explain the broad objectives enterprise goals, enterprise strategies, and any other executive management instruction needed to develop the strategic and tactical profit plans. Planning premises, issued by the top management communicate the planning foundation that is necessary for the participation of all levels of management in the development of the strategic and tactical profit plans for the up coming budget year. Executive leadership is fundamental in developing and articulating this planning foundation, including the formulation of relevant strategies consequently at this point in the planning process, the foundation has been established to articulate the broad and specific objectives of the enterprises and strategies that facilitate their attainment.

XI. Marketing Plan

B. The Financial Plan

The financial plan is represented by the

- I. Strategic long range profit Projections
 - a. Major projects and capital additions
 - b. Cash flow and financing

- c. Personnel requirements

II. Tactical short range(annual) profit Plan

- a. Operating plan

Planned income statement

- b. Sales Plan
- c. Production(or Merchandise Purchase) Plan
- d. Administrative Expense Budget

The Process of developing a realistic sales plan should be unique to each company because of the company's characteristics its product, its distribution channel and the competence of its marketing group. For different participative approaches sales force composite (maximum participation) is widely use:

Sales Force Composite

This Approach emphasizes the judgments and executive of the sales force because it provides for series evaluations and approvals. A high level of participation, from the bottom up, is emphasized. The approach is limited primarily to tactical short- term sales planning. It can be outlined as follows.

1. The home sales office provides district sales office with a record of previous sales and any new or revised managerial policies that are relevant to the sales districts in making sales estimates for the planning period. Usually, the historical sales data are listed from starting and a space should be provided to record the estimated sales.
2. Sales persons are requested to fill in their estimates based on the historical data and their knowledge of the particular territory and customers. Sales person are usually asked to base their estimates on current economic condition. When a sales person provides dollar estimates as well as units, the current selling prices are usually applied.
3. Estimate made by the sales persons are reviewed by the district sales manager. The form previously mentioned provides space or revision of each sales person's estimates by the district manager. Each district sales manager to the top sales executive transmits the two estimates by a specified date.

4. The various district estimates are reviewed and revised by the top sales executives. Significant revisions should be discussed with the concerned district sales manager. The top sales executives may also convert the quantity estimate to dollar estimates by applying unit selling prices consistent with the revised managerial pricing policies. The sales executives working in Co-operation with the company economist or with other, who have responsibility for appraising the general economic outlook, adjust the sales estimates for this factor because general economic conditions can affect, the sales potential markedly. Serious consideration must be given to this important factor in developing the sales plan.
5. The tentative sales plan is then presented to the executive committee and to the president for consideration and tentative approval. At this level, the results of steps 2 & 3 are considered and may result in revision. The deliberations at this level should be primarily concerned about the soundness of the unit and dollar estimates and may result in
 -) Tentative approval
 -) Tentative approval with creating changes or
 -) Instruction for a complete or partial reconsideration of the sales potential. The sales plan is also judged by whether it is within the capacities of the company.
6. After tentative approval, copies of the tentative sales plan are distributed to the managers and other functional sub divisions so that their planning activities can be started. As the overall profit plan is developed, it may be necessary to reconsider the tentative sales plan in some respects. This balancing of considerations and the resulting in the profit plan as it is being developed, should provide a realistic plan of operations for the company.
7. The final sales plan is distributed through the sales function. It is then the basis for sales quotas and day to day planning in sales activities. In this approach, the promotion, advertising and distribution expense components are concurrently developed during the process as outlined above for the total marketing plan

XII. Advertising and promotion Plan/ Distribution (Selling) Expenses.

-) Production (or merchandise purchases) plan.
-) Administrative expenses budget.
-) Distribution expense budget.
-) Appropriation type budgets (eg Research and Development, Promotion Advertising)

Sales divisions Managers Composite. This approach emphasizes the responsibilities of the district or product sales managers rather than the individual sales persons. This approach is commonly used for short- term sales planning. It is almost identical with that outlined above for sales force composite approach except that the initial sales estimates are prepared by the sales managers rather than by the sales persons. Thus method is widely used by companies of all sizes.

A variation of this approach is based on an informal survey of the principal customers of the company. Under this approach sales are estimated on the basis of report prepared by special company representatives who contact customers for the primary purpose of evaluating their future needs. From the sales forecasts available and the information gathered by special representatives and interpreted through their personal observational and judgments, initial sales estimated for each geographical sales division or product is developed. These estimates are then adjusted to take into account. Basic information that the higher sales managers should have about such factors as expected economic conditions, population trends, purchasing power, and other conditions that may affect the market. In addition, consideration should be given to sales of the last year or two and to stock holdover on the part or customer outlets. This method is useful in situations where the number of customers is limited.

Planning Distribution (Selling) expenses

Distribution expenses include all costs related to selling distribution and delivery of products to customers. In many companies this cost is significant percentage of expenses careful planning of such expenses affects the profit potential of the firm.

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

- ❖ Planning and Co- ordination. In the development of the tactical profit Plan. It is essential that favorable “Economic balance” be achieved between a sales effort (expenses) and sales results (revenue)
- ❖ Control of Distribution expenses a circle from planning Considerations; it is important that serious effort be given to controlling distribution expenses.

Control is especially important, since (a) distribution expenses are frequently a significant portion of total expenses and (b) both sales management and sales personnel tend to view such expenses lightly, in some cases extravagantly, such as entertainment expenditures, Distribution expenses control involves the same principles of control as manufacturing overhead.

Control must be built around the concepts of (a) responsibility centers and (b) expenses objectives.

Fundamentally the top marketing executive has the direct responsibility for planning the optimum economic balance (for profit Potential) between (1) The sales budget (2) the advertising budget, and (3) the distribution expenses budget, Therefore, profit planning and control views sales, advertising and distribution expenses as one basic problem rather than as three separate problems. This view is logical because of the interrelationships between them. The sales budget rests solidly upon the promotional program. The amount of expenditure to get a given amount of sales revenue is limited. The practice of some companies of starting with a sales goal, then budgeting a fixed percentage of those revenues of sales overhead, another fixed percentage for direct marketing expenses, and still another fixed percentage for advertising is not a positive management approach to a serious planning problem, In contract the sales executives in well managed companies, working as a group, develop the marketing promotional, and distribution expenses plans simultaneously, Next the expenditure essential to carry out the promotional, marketing, and distribution phases are planned. These expense estimates then become an important part of the input data for the profit plan. Although of various practices, these decisional inputs are separately included in (1) the promotional and advertising plan and (2) the budget of selling expenses.

Distribution expenses included two major types: (1) home-office expenses and (2) field expenses, from the planning and control point of view, these expenses must be planned by responsibility center.

In some cases, the planning structure should follow the basis on which the sales efforts are organized. The concepts of controllable versus non-controllable costs, fixed versus variable costs and itemization by types of expenditure should be used in planning & controlling of distribution expenses.

Preparing Distribution (selling) expense Budgets: Distribution expenses are not product costs and are not allocated to specific products. A separate distribution expenses plan should be developed for each responsibility center. (I) the distribution Function. Typically this would encompass “home-office” centers and “Field” centers. The top marketing executive has the over all responsibility for developing the distribution expenses plans or budgets. Following the principle of participation the management of each responsibility center should be assigned direct responsibility for that department’s distribution expense plan. Thus, the promotion manager should be responsible for developing the promotion both their marketing plans and their distribution expense budgets. The distribution expense budgets should separately identify controllable and non-controllable expenses, and these budgets should be detailed by interim time period. The distribution expense budgets prepared by the sales managers should be based on planned volume of activity or output. Usually the preferable activity base for the various responsibility centers in the distribution function is sales dollars.

Various approaches are used to determine the promotion and advertising appropriation. The more commonly used approaches can be characterized as (a) arbitrary appropriation (b) all available funds (c) competitive parity, (d) percentage of sales, (e) fixed sum per units, (f) previous years profits, (g) return on investment and (h) the task method.

The promotion and advertising budget should be the direct responsibility of the advertising manager. The detailed promotion budget should be presented to the budget committee along with the sales budget. These two plans should be approved or disapproved as a unit. In this way, the budget department receives the detailed and approved promotion budget for incorporation into the overall profit plan.

xiii. **Planning Administrative Expenses.**

Administrative expenses include those expenses other than manufacturing and distribution. They are incurred in the responsibility centers that provide supervision and service to all function of the enterprise, rather than in the performance of any function, Because a large portion of administrative expense is fixed/ rather than variable, the notion persists that they cannot be controlled. Aside from certain top management salaries, most administrative expenses are determined by management decisions. It is common to find administrative expenses “top heavy” when measured by the volume of business done. In recent years some informed observers have expressed the opinion that a developing characteristic of industry in the United States is the relative high cost of administration. These expenses, along with labor costs: have frequently made it difficult to price products competitively in the international market. General administrative expenses are close to top management. Therefore, there is strong tendency to overlook their magnitude and effect on profits. Each administrative expense should be directly identified with a responsibility center, and the center manager should be responsible for planning and controlling the expense. This fundamental of expense control is especially important for administrative costs because there is often a failure to pinpoint responsibility for expenses of a general nature. For this and other reasons, many companies have found it helpful to apply the fixed and variable expense concept to administrative expenses. In such cases, the variable expenses are usually related to total sales dollars.

Review of Previous Research Work

The previous research studies helps to provide the foundation to the present study. The purpose of Literature review is thus to find out what research studies have been conducted none’s chosen field of study and what remains to be done. This study has included that study which related to DDC from various researches but very few dissertations have been submitted in this field of profit planning of Nepalese Public Enterprises with their objective, findings, conclusion & recommendations.

Kamal Prasad Dumre (Dumre, Kamal Prasad unpublished Dissertation” A study on Profit Planning Practice in Nepalese Public Enterprises. A case study of Dairy Development Corporation, submitted to dept. of Mgmt. T.U. 1997) Dumre,

has submitted a research about profit Planning practices in Nepalese public enterprises. For this Study “Dairy Development Corporation” a Public enterprise has been taken into sample. He has tried to answer of certain questions as well as practices of Profit Planning and mainly concerned with DDC PE and examine to what extent, this PE is applying comprehensive profit planning.

The specific Objectives of his research work were:

1. To describe the Scenario of DDC in Nepal from its inception to the present study.
2. To analyze statistics on DDC to identify trends over time in such variables as levels of output (Volume and value) prices costs of Production of output (Cow & buffalo) profitability.
3. To analyze the various functional budgets adopted in the DDC
4. To analyze the trend of milk and milk Products , collection, production and sales
5. To examine the practice and effectiveness of profit planning in DDC
6. To evaluate the variance between targets and actual of the enterprise
7. Based on the finding of the analysis provide the suggestion and recommendations or improving profit plan.

Mr. Dumre has pointed out various findings based on the analysis of data and information few major findings of the conclusion of the study are as follows:

1. In Nepalese manufacturing PEs goal and objectives are written but are not adequate for the development of enterprise and without goals and objectives there is no foundation for the planning. Without planning there is no fulfillment of the goals and objectives.
2. To achieve the basic objectives DDC has not clearly defined its main objectives in annual goal or target. There is no defined such operational goal as expansion and contraction of the product line geographic areas, share of the market, growth trends, profit margin and return on investment. All the departmental goals and targets are fixed on paper but not in action.

3. In Nepalese manufacturing PEs Plans are prepared an adhoc basis, which is also applied, in case of DDC. Without analysis of the environment, the objectives are set by the DDC, which are not suitable or appropriate.
4. Sales Achievement is too below than sales target, past trends of sales plan and achievement are not sufficient in forecasting the sales of Dairy product because the increase of demand may affect by various causes. This also signals that sales plan is not made by considering all components affecting sales.
5. The comparative study of the production plan and sales also shows that the DDC is unable to forecast its future. Also there is no detail analysis of market situation when planning.
6. The milk payment system to farmer is based on fat percentage, cow milk which has low percentage of fat as compared to buffalo milk DDC has separate pricing system for cow milk.
7. Due to seasonal fluctuation in milk heavily during lean period starting February up to July in order to keep up demand of milk and milk products, the surplus milk in one project is delivered to another project for balancing the supply and demand portion in flush as well as in Lean Season.
8. DDC has lack budgeting experts; skilled planners and entrepreneurship plans are formulated on traditional adoc basis. PEs is not appeared on commercial basis. Planning department of DDC has not adequate authority to decide and create new ideas to formulate various plans.
9. Least square straight line sales trend of DDC shows that sales will be high in future if present efforts are frequently being improved.
10. The amount of profit earned by DDC is not satisfactory. It is unable to earn reasonable amount of profit. There is no proper planning of cost control mechanism and performance reporting and there is also no system of reward and punishment.
11. There is no detail analysis about products in DDC. The top Management of DDC neglects about product line considerations. There is no plan to drop the loss leader product. There is no clear record of each product contribution on the profit or in fulfilling the establishment objectives. The reason of failure to meet profit target by DDC is its inability to product line consideration.

12. DDC is seriously suffering from excessive fixed costs and non manufacturing expenses. But this corporation has not any effective cost reduction program.
13. DDC do not have a practice of analyzing the variances, so the management of this corporation is not conscious to rethink about the cause of variances.
14. The reporting and management information system have not been accepted and used for the purpose of controlling performance and this aspect is further complicated due to the absence of any scientific criteria or standard to compare the performance with.
15. In DDC the internal resources could not finance the expansion and growth of the enterprise, and DDC is more and more dependent upon external resources. In short faculty financing and investment decisions and under utilization of fixed assets have been the factors responsible for the poor profitability of DDC. **Agnidhar Parajuli (Parajuli Agnidhar Unpublished Dissertation on “ A Study of Profit Planning in Manufacturing PEs (Bansbari & Dairy) in Nepal” submitted to Departmnet of management, TU 1991**

Mr. Parajuli has conducted research about profit planning in manufacturing public enterprises. For this study two public enterprises have been selected for case study and these are Bansbaari Leather Shoe Factory & Dairy Development Corporation. In this study, he has attempted to point out some features and problems of profit planning. Revealing practices and premises for implementing profit planning in these two manufacturing public enterprises.

The basic objective of this research works is to:

1. Examine how for the profit planning system of BLS factory LTD. And DDC has been applied.
2. Sketch the end of Profit planning in BLS factory Ltd. & DDC.
3. Depict a picture of planning diversification (Utilization of Resources)
4. See the BLS and DDC Profit Planning on the basis of overall managerial budgeting.
5. Examine the course lying (Make as statement) behind the managerial problem of Profit Planning.

For accomplishing the above stated objectives, Mr. Parajuli has made his research covering the time period of Seven Years from 2038/39 to 2040/45.

Research methodology was followed through primary sources of data with the help of questionnaire & personal interview and Secondary sources of data for data gathering procedure.

Mr. Parajuli concludes that these two PEs were adopting profit planning on an unrealistic premise, resources were inefficiently utilized and management was occupied by false perception that they are highly end owned to adopt comprehensive profit Planning based on overall managerial budgeting. He has pointed out various findings and recommendations and among them few major finding and recommendations are as follows:

1. There is not adequate Co – ordinations system and realization of objectives between the different level managers.
2. Very few managers are competent to identify the relevant factors variable & manipulate them for the successful formulation and implementation of the plan.
3. Enterprises have no any financial plan; they have only sales and production plan.
4. There is no any practice of profit planning there is the necessity to practice profit planning.

Tilak Bahadur Thapaliya (Thapaliya, Tilak Bahadur Unpublished Dissertation “ A study of Comprehensive Budgeting in Manufacturing Enterprises “ A case Study of Dairy Development Corporation” Submitted to Shankar Dev Campus Department of Management T.U. 2001 April.)

Thapaliya has submitted a research about comprehensive budgeting in manufacturing enterprises. For this study “Dairy Development Corporation” a public enterprises has been taken into sample. The present study highlights the analysis of effective problems and solution of the problems in respects of DDC.

The basic objectives of present Study are to highlight the present practice of profit Planning. This broad objective has been further specified as following sub – objectives.

1. To examine the present practice of PPC and its effectiveness in DDC.
2. To analyze the marketing plan.
3. To evaluate the financial performance of the company.
4. To trace out a picture of profit planning process adopted in DDC.
5. To point out the suggestions & recommendations for improving the profit plan.

Mr. Thapaliya has pointed out various findings based on the analysis of the data and information. Few major findings & conclusion of the study are as follows:

1. The management of the DDC applied annual sales and production budget. There is a substantial gap between sales target and achievement each year.
2. Objectives of DDC are not clear and measurable. Top level management executive are only involved in planning and decision.
3. DDC's sales are in increasing trend. It is lacking of autonomy, suffering from over staffing and corruption, Lack of moral & motivation in Employees.
4. There is not intra and inter department coordination and lack of Co Ordination with other concerned authorities.
5. Purchasing price of milk set by government in accordance with the recommendation of NDDDB. Price of the other products is set by DDC.
6. DDC should try to avoid losses of milk and quality of milk while collecting the milk through MPAS and MPCPS.
7. DDC should focus on the milk and milk products market. It should think to increase the market of the other milk products.
8. There is poor policy as to sales, production, inventory and material budgets; Attention toward cost structure and control programmer do not exist.
9. There is not complete and comprehensive budgeting system. DDC does not prepare the long term strategic profit plan but prepares a short – term plan which is referred as budget and the time period covered is one year.

10. DDC does not fix the target for specific goal for the budgeted period. E.g growth objective, capacity utilization, return on capital are not targeted to achieve some specified level. DDC has not adequately considered controllable and non – controllable variables affecting it.

Prakash Pahari (Profit Planning in Dairy Development Corporation “A dissertation submitted as a partial fulfillment of MBA Degree to the Faculty of Management, Shankar Dev Campus, T.U. Nepal 2000.

Mr. Pahari has submitted a research about profit planning of Dairy development Corporation. A public enterprise has been taken into sample. The main objective of present study is to examine the techniques or approaches of comprehensive profit planning system applied by dairy Development Corporation and to test the achievements of planning.

The special objectives are as follows:

1. To examine the present profit planning premises adopted by DDC.
2. To analyze the various functional budgets that is prepared by DDC.
3. To evaluate the variances between budgeted and actual achievement of the enterprise.
4. To sketch the trend of profit and loss of DDC.
5. To provide the suggestions and recommendations for improving the profit planning.

For accomplishing the above stated objectives Mr. Pahari, has taken a time period for 5 years from FY 2051/52 to 2055/56. Data were taken from secondary as well as primary. Various statistical tools have been used to analyses the data.

Mr. Prahari has pointed out various findings based on the analysis of data and information’s few major findings of the conclusion of the study are as follows:

1. DDC has planned only short-term plan rather than long – term planning. The time covered only for one year.
2. DDC has collected milk by only 39 districts and distributed their products only a few urban cities.
3. The collection, production and sales of milk and milk products have smoothly increasing trend.

4. There is not separate planning department and there is not planning experts, so that planning is made only an adhoc basis.
5. The pricing policies of the corporation is not scientific and the government directly interference to the price of Raw Milk and milk products.
6. There is not proper Co- ordination between collection production, inventory and sales department. Due to the above causes sometimes the supply is lower than demand and sometimes they destroy their products.
7. The corporation is not trying to meet BEP, in fact the actual sales is lower than the Break Even sales.
8. A systematic cash flow plan has not been prepared.
9. The corporation has not prepared the periodic performance report.
10. DDC has not been able to grant the loan to the farmer's requirement.
11. DDC has not collected all the milk offered by the farmer's especially during the flush season. On the other hand, it has to purchase skimmed milk powder from foreign countries during the lean period.

Critically Analysis

By the study and analysis of the previous research work it is found that the objectives of the DDC are assigned by Nepal Government as well as there is not adequate Co – Ordination and realization of objectives between the different level of managers. The communication system among the different level of managers is very weak. The Nepal Government has taken the authority in every activities of the Corporation. Less interfere in monitoring and evaluating, punishment and rewarding system according to their performance is negligible. The planning system is in traditional way. DDC has not study about external and internal relevant factors, not tried to adopt the new technology for the improvement of quality of products, do not have any plan to evaluate the profitability of each product separately. There is not clear record of each product contribution on profit. There is not complete and comprehensive budgeting system. There is little practice of profit planning so must required to practice comprehensive profit planning and control.

CHAPTER – III

RESEARCH METHODOLOGY

1.1 Introduction

The basic objective of this study is to highlight the degree of application of profit planning concept of manufacturing public enterprises with respect to different plans or budgets, especially for sales plan. In order to attain the objective maintained in this research study the following methodologies have been employed.

1.2 Research Design

The formidable problem that follows in the task of defining the research is the preparation of design of the research project, popularly known as research design. In other words, research design means definite procedure and technique, which guide to study and propounds way for research viability. Therefore to fulfill the objectives of any study a well set research design is needed.

The present work is related with the qualitative and quantitative plans and accounts of DDP, Hetauda. So analytical approach has been considerably adapted to the present data, but the qualitative aspects of research, such as: effectiveness of profit planning problems of formulating and implementing the profit plans, specially for sales plan, view of top personnel of this enterprise, and the theoretical prescription are explained in words where necessary. Therefore, the present study has followed both analytical as well as descriptive approaches of research design.

1.3 The population and Sample

The research work is related with sales planning aspect of Dairy Development Project, Hetauda branch. So the present number of PEs in Nepal is the population of this study.

Due to various constraints, like time, resources etc I have conveniently selected only one PE for the purpose of my research work which is DDP, Hetauda. (Hetauda Milk Supply Scheme)

At this research time only 27 officer level and sub –officer level employees were working in the administrative field. I distributed 27 set of questionnaire but only 15 employees filled up completely and replied the answers. So, the sampling percentage is only 55 %

1.4 Period covered

Profit planning has two dimensions long – range and short – range. For strategic long range planning. I have analyzed six years data from F/Y 062/63 to 067/68 and the tactical short range plans have covered the data of one year which is taken from the accounting records of F/Y 064/65.

1.5 Nature and source of data

Since the significance of research depends upon the nature, availability and accuracy of information, together the true information data collection is major task. To fulfill the objective of this study, data has been used. The secondary data are gathered from sources such as magazine & publications, official report, concerned documents, sales, budgets and achievement, previous studies made in this field etc. The sources of primary data include personal interview and questionnaire taken from staffs of DDP Hetauda who are mainly concerned with sales budgeted and official works.

1.6 Statistical Tools Used

The collected raw and crude data are managed and analyzed in proper table and format. Interpretation and explanations are made wherever necessary. To analyze the collected data several Statistical tools such as Means, Standard Deviation, Correlation Coefficient, Regression, Coefficient of variation, Percentage method etc are used, Financial tools are also applied wherever necessary.

1.7 Research Variables

The substantive plan, financial plan and sales of dairy products mainly related to long Term period of DDP Hetauda are the variables of the present study.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Managerial Process

This Chapter has been divided into two parts, the first part deals with the managerial process i.e. implementing procedure of sales plan in DDP, Hetauda. For that purpose, the data are collected from top and middle level personnel by distributing questionnaires and the managerial activities of DDP, Hetauda are analyzed with the help of their responses. Similarly the second part is devoted to analysis of the development of sales planning and its implementation and drawn major findings.

Part –I

Analysis of Managerial process i.e. implementing procedure of sales budget in DDP Hetauda.

There are 90 technicians (6 at Officer Level & 83 Assistant), 45 administrations (5 Officer and 40 assistant) altogether 134 personnel who have been serving regularly.

According to the filled questionnaire, following are the respondent's detail:

Table no.4.01

Respondent Detail

Department	Academic Qualification	Number of Respondents
Trainee	+2	1
Technical	Graduate	1
Financial	Post Graduate	2
Marketing	Graduate	3
Management	Post Graduate	3
	Graduate	5

Sources: DDP, Hetauda

Table no. 4.02

Category of Goals & Objectives

S. No	Objectives	No. of Response	Total	Overall Rank
a	Clearly written	14	15	93 %
b	Adequate but not Clear	1		7%
c	Inadequate but Clear	-		
d	Neither Adequate nor Clear	-		

Sources: DDP, Hetauda

Among the 15 respondents 1 was Trainee, 1 was from Technical, 2 were from Financial Department, 3 were from Marketing Department and 8 were from management side. Almost all respondent said that DDP, Hetauda has its definite goal and objectives except one from Technical Department. He might not be involved in Goal setting Programmes. It is shown in the above Table No. 4.1 & 4.2.

Involvement and commitment of management

The management of any enterprise formulates goals and objectives and centralizes its activities to achieve them in certain time. The personnel of different levels should be involved in management for formulation and achievement of the goals and objectives of the enterprise. The goal and objectives of DDC have been clearly defined, but mainly top-level personnel are involved in developing the goals and objectives with 60% of responses. For the commitment of goals and objectives, the respondent gave the first priority to “to top level management” with 60 % , ‘middle level management’ are completely ignored for commitment of goals and objectives. Second priority have been given to ‘all of them “i.e. (top, middle and lower level management) with 33% only. One respondent gave the ‘lower level management’ for commitment of goal and objectives, which is shown in following table.

Table No. 4.03

Involvement and Commitment of Management

S. No	Objectives	No. Of Responses	Total No. Of Responses	Percentage
a	Top Level Management	9	15	60%
b	Middle level Management	-		-
c	Lower level Management	1		7%
d	All of them	5		33%

Sources: DDP, Hetauda

Objective Formulation

Any enterprise has its own objectives for operational purpose. Most of the activities of the enterprise are firmly centralized within the objectives. Objective must represent the destiny of the enterprise. Every enterprise has its own separate objectives to meet the government's targets; DDC is one of the enterprises of Nepal which has its own objective for its long – range destiny.

A list of questions regarding managerial activities was distributed to the top and middle level manager of DDP, Hetauda. All respondent replied that there is clearly define goal and objectives.

The DDC is a public enterprise created with the aim to increase the milk production in the rural areas by collection and available quantity of milk process and distribution it to the urban population at socially acceptable prices as commercially viable operation.

Planning and Clarity of Objectives

The objectives of the enterprises may be different and can be achieved them in short run and long run. It is difficult to achieve the goals and objectives with out proper planning. The planning for the objectives should be systematic. Clearly defined objectives can be adopted in planning system. The respondents indicated with 93% that the goals and objectives are clearly written in Table- 4.2. So it seems that DDP Hetauda has formulated its goals and objectives. The respondents gave the first

priority to “Broad and long range goals” with weighted mean 3.86 and second priority to “system of periodic performance report (detail)” with weighted mean 3.53.

Similarly, the least priority has given to “Long – range profit Plan developed” with weighted mean 2.33, among, of the six major objectives.

The management gave the moderate priority to “Follow up procedure “and Specification of enterprise goals” with weighted mean 3.46 and 3.26 respectively.

Short range profit planned develop has mean weight of 2.86. To some extent it seems to be satisfactory.

Table no. 4.04
Planning for objectives

S. No	Objectives	Rank wise no of Response					Weighted Mean	Overall Rank
		1	2	3	4	5		
a	Broad and long range goals	-	2	3	5	5	3.86	1
b	Specification of enterprise goals	1	3	4	5	2	3.26	4
c	Long range profit plan developed	5	3	4	2	1	2.33	6
d	Short range profit plan developed(in detail)	4	2	3	4	2	2.86	5
e	System of periodic performance Report (in detail)	-	3	4	5	3	3.53	2
f	Follow up procedure	-	2	6	5	2	3.46	3

Interference in Policy

The Policy of each enterprise may be different but it should concentrate to its goals and objectives, it indicates the duties and responsibilities of the personnel to achieve the goals and objectives. DDC has also formulated certain policies which can be

effective if they are properly applied. The respondents indicated that the board of directors of DDC highly interferes in long –term policies with 53% but less interfere in day to day operation policies with 13%. Quarterly interference is 27%.The management has given autonomy for the day to day operation, which is shown in table below.

Table No. 4.05

Interference in policies

S. No	Objectives	No. Of Responses	Total No. of Responses	Percentage
a	Day –to – day operation	2	15	13%
b	Weekly	-		-
c	Monthly	1		7%
d	Quarterly	4		27%
e	Long Term Policies	8		53%

Sources: DDP, Hetauda

Achievement of objectives

The objectives of the enterprise are not only for formation of Objectives. It needs to achieve them in certain time. So those objectives are meaningful which can be achieved in the certain period. The management of DDP, Hetauda is requested to rank the objectives, which are achieved in the certain period. The respondents gave the first priority in formulated objectives to “expending and satisfaction of Consumers” with weighted mean 4.80. Similarly to ‘quality maintenance and Social responsibility’ got the second and third priority with weighted mean 4.60 and 3.93 respectively.

The respondents gave the moderate priority to ‘marketing innovation’ and ‘employees welfare’ with weighted mean 3.40 and 3.06 respectively. But the respondent gave the least priority to ‘Create & Maintain Environment’, ‘research & development’, ‘growth of sales’ and ‘employment growth’ with mean weight 2.86, 2.73, 2.67, 1.93 respectively.

Table No. 4.06
Achievement of objectives

S. No	Objectives	Rank wise no of Response					Mean Weight	Overall Rank
		1	2	3	4	5		
a	Create and Maintain Environment	2	4	4	4	1	2.86	6
b	Expending and Satisfaction of Consumers	-	-	-	3	12	4.80	1
c	Quality Maintenance	-	-	1	4	10	4.60	2
d	Research and Development	3	5	2	3	2	2.73	7
e	Growth of sales	-	1	6	5	3	2.67	8
f	Marketing Innovation	1	2	5	4	3	3.40	4
g	Employee Welfare	1	3	6	4	1	3.06	5
h	Social Responsibility	-	2	2	6	5	3.93	3
i	Employment growth	9	2	1	2	1	1.93	9

Sources: DDP, Hetauda

Duty and Responsibility

The achievement of goals and objective of any enterprise depends on its managerial activities. The managerial activities may be effective only when the duties and responsibility of the different level personnel are made clear. 93 % of respondents indicated the duties and responsibilities of employees are clearly and adequately defined. Only one respondent said inadequately defined. May be he was not satisfied with his job. It is shown below.

Table No. 4.07

Clarity of Duties and Responsibilities of Employees

S. No	Objectives	No. of Response	Total No. Of Responses	Overall Rank
a	Clearly and adequately defined	14	15	93.%
b	Ambiguously defined	-		
c	Inadequately defined	1		7%
d	Not defined at all	-		
e	Unknown	-		

Sources: DDP, Hetauda

Operational Activities (Sales Plan) of the Enterprises

The manufacturing public enterprises develop the numerous plan to achieve their goal and objectives. The sales plan is an important part of overall planning process. To watch the operational activities of sales plan in DDP, Hetauda, the respondent has given the 13 objectives. Among of these, the respondent gave the first priority to “quality of Product” with weighted mean 4.80, 2nd Priority have given to “Managerial Knowledge of Market” with weighted mean 3.67 and least priority has been given to “Political System” with weighted mean 2.33.

The management gave the moderate priority to “Location of company”, “Information system”, “Responsibility marketing”, “Responsibility marketing”, “Knowledge on market study”, “Effective sales strategy”, “Employee motivation” with weighted mean 3.60, 3.53, 3.47, 3.33, 3.27, 3.26. It seems that respondents are ignoring “technology use in sales “Study of Environment” Political system, frequently changes of Govt by providing the weighted 2.80, 2.60, 2.53, 2.47, and 2.33 respectively.

Table No. 4.08**Operational Activities of Sales Plan**

S. No	Objectives	Rank wise no of Response					Mean Weight	Overall Rank
		1	2	3	4	5		
a	Information system	1	3	2	5	4	3.53	4
b	Technology used in sales	2	6	3	1	3	2.80	9
c	Training in sales force	2	6	4	3	-	2.53	11
d	Knowledge on market study	1	2	5	5	2	3.33	6
e	Managerial knowledge of market	-	3	2	7	3	3.67	2
f	Effective sales strategy	-	4	5	4	2	3.27	7
g	Responsibility marketing	1	3	3	4	4	3.47	5
h	Study of environment	2	6	4	2	1	2.60	10
i	Quality of product	-	-	-	3	12	4.80	1
J	Location of company	1	3	2	4	5	3.60	3
K	Employee motivation	2	1	6	3	3	3.26	8
L	Political system	4	6	2	2	1	2.33	13
m	Frequently changes of Govt.	4	5	2	3	1	2.47	12

Sources: DDP, Hetauda

Responsibility in preparing sales Budget:

Sales budget is one of the chief budgets of all other budget. If it is not realistic all other budgeting will also be misleading. Therefore the people, who are mainly concerned for the preparation of sales budget, must be responsible and careful. For the responsibility in preparing sales budget, the respondent gave high priority to “all of them” (i.e. Marketing Manager, other departmental manager and chief executive) with 60%, similarly 33% with marketing manager, no one responded to other department manager. Only one response gave the priority to “chief executive”. To some extent budgeting of sales seems to be good.

Table No. 4.09

Responsibility in preparing sales Budget

S. No	Objectives	No. Of Responses	Total No. Of Responses	Percentage
a	Marketing Manager	5	15	33%
b	Chief Executive	1		7%
c	Other Department Manager	-		-
d	All of them	9		60%

Sources: DDP, Hetauda

Monitoring and evaluating the sales Budget

To achieve the goals and objectives in certain period all departments should be correlated, as well as, they should apply the process of evaluating and monitoring. For evaluating and monitoring the sales budget, the respondent gave the first priority to 'Both of them' (marketing manager and Chief executive with 60 %). Some respondents had view that the responsibility of monitoring and evaluating of sales Budget is on Marketing Manager This is shown in the following table:

Table No. 4.10

Monitoring and evaluating the sales Budget

S. No	Objectives	No. Of Responses	Total No. Of Responses	Percentage
a	Marketing Manager	4	15	27%
b	Chief Executive	2		13%
c	Both of them	9		60%
d	Unknown	-		-

Sources: DDP, Hetauda

Approaches to Sales Forecasting

Sales Forecasting is the first step for Preparing Sales Budget. Forecasting means analyzing the future in advance. There are various methods which can be used for forecasting. Proper sales forecasting is missing in DDP, Hetauda.

Following Table shows few approaches which is used for Forecasting of Sales.

Table No. 4.11

Approaches to Sales Forecasting

S. No	Objectives	Rank wise no of Response					Mean Weight	Overall Rank
		1	2	3	4	5		
a	Statistical	3	3	4	2	3	2.93	3
b	Time Series Smoothing	1	2	3	4	5	3.67	2
c	Advance time Series	5	3	3	3	1	2.46	5
d	Simple Regression	4	2	3	4	2	2.86	4
e	Multiple Regression	6	5	3	1	-	1.93	6
f	Modeling	-	2	3	5	5	3.87	1

Sources: DDP, Hetauda

For monitoring and evaluating the sales Budget, DDP uses Modeling and Times Series Smoothing which has been ranked 1st and 2nd in over all with weighted mean 3.87 & 3.67 respectively.. Simple statistical tools and Simple regression are also used to some extent. The weighted mean for Statistical Approach and Simple regression approach has been given 3rd & 4th rank .Advance Time Series and multiple regression approach has not so much demand at DDP, Hetauda.

As per their perception the reason behind selecting those above particular (Modeling, Time Series Smoothing) approaches are reliable and less time consuming.

Component in preparing Sales Budget

The overall responsibility of preparing sales budget is upon sales manager, although other department! Manager including chief executive should also be involved in formulation and development of ideal and realistic sales budget. All organizational

operations are directly linked with sales budget thus sales budget should be prepared as realistic as possible.

Forecasting of sales is the first step of preparing sales budget of plan. Generally, four steps or components are involved in preparation of sales budget such as

1. The sales forecast
2. The marketing Plan
3. The advertising expenses plan
4. The selling expenses budget.

Four objectives were provided to the respondents to rank from least prominent to high prominent. The respondent gave the first priority to “Marketing Plan” with weighted mean 3.80, 2nd Priority to “Selling expenses budget” with weighted mean 3.40 and least priority to “advertising plan” with weighted mean 2.53. Sales Forecast secured the moderate response with weighted mean 3.33.

Table no. 4.12

Component in Preparing Sales Budget

S. No	Objectives	Rank wise no of Response					Mean Weight	Overall Rank
		1	2	3	4	5		
a	Sales Forecast	2	2	3	5	3	3.33	3
b	Marketing Plan	1	2	3	2	7	3.80	1
c	Advertising Plan	4	4	5	2	-	2.33	4
d	Selling Expenses Budget	1	3	4	3	4	3.40	2

Sources: DDP, Hetauda

Table NO. 4.13

Detailed Marketing Plan Milk (FY 2067/068)

Chitwan & Makawanpur		Parsa & Rautahat		KTM & Morang		Siraha, Mahotari & Dhanusa	
Unit(in ltr) per day	Amount (in rs)	Unit(in ltr) per day	Amount (in rs)	Unit(in ltr) per day	Amount (in rs)	Unit(in ltr) per day	Amount (in rs)
3000	10,80,00.00	1000	3,60,00.00	3000	10,80,00.00	1000	3,60,00.00

Sources: DDP, Hetauda

Table No.4.14

Comparative Study of sales Component on the FY 2067/68

Product /year	Panned Sales in Unit	Advertising Expenses	Dist/ Selling Expenses (in total)
2067/68	Milk 25,00,000	Rs. 1,00,000.00	Rs 50,00,000.00
	Ghee 1,00,000	<ul style="list-style-type: none"> ▪ Advertising expenses are not specially for sales increasing. 	
	Butter 10,000		
	Curd 3,35,000	<ul style="list-style-type: none"> ▪ It is non-effectiveness 	
	Punier 10,000	<ul style="list-style-type: none"> ▪ Specially for non-media Choice 	
	Ice- Cream 6,000	<ul style="list-style-type: none"> ▪ sometimes it had done by central office in news paper and TV 	
	Cheese 4,000		
	Sweet 20,000	<ul style="list-style-type: none"> ▪ The expenses had kept in traditionally only 	

Sources: DDP, Hetauda

This project has 186 milk sales booths, 5 dealers (Hetauda, Narayanghat) and two sales centers in Hetauda itself and one Distributer at Birgunj. This project collects milk from Makawanpur, Rautahat, Sarlahi, and Mahottari only in urban areas. The distribution strategy of DDP, hetauda Products are booths, distributor and Retail Centres appointed by DDP, Hetauda itself. Promotional activities are rarely applied. Promotion is not emphasized in DDP, Hetuada .Few advertisement on Radio, FM & Newspaper is done. The distribution channel used by DDP, Hetauda is

) Producer----- Consumer

) Producer ---- Dealers---- Customer

Part II

Analysis and developing the sales Plan

The sales Planning process is necessary part of profit plan because it provides for the basic management decision about the marketing and based on those decisions, it is an organized approach of developing a comprehensive sales plan. If the sale plan is not realistic most it not all of other parts of the overall profit plan also are not realistic. Therefore, if the management believes that a realistic sales plan cannot be developed; there is little justification for profit plan.

In Nepal, there is no problem of sales i.e. Supply side is more important than demad side because the Nepalese manufacturing PEs are not in position to fulfill the national demand. The demand of milk and milk product in urban site of Nepal is very high than the supply of milk and its product, this is the situation of market in Nepal.

The manufacturing public enterprises of Nepal are facing many difficulties for the planning of sales. The public enterprises have achronic problem of Top- level management commitment and serious attention and resource planning. In an enterprise, fixing the sales target without consideration of enterprises objectives, strategies and sales forecasting techniques.

The long range sales Plan of Dairy Product

Table No. 4.15

Sales Target and Achievement

S.No	Products	062/063	063/064	064/065	065/066	066/067	067/068
1	Milk Sales Target	3,500,000	3,000,000	2,750,000	2,750,000	2,750,000	2,500,000
	Achievement	3,113,000	2,744,000	2,660,000	2,640,000	2,300,000	2,571,000
	Achievement %	88.94	91.47	96.73	96.00	83.64	102.84
2	Ghee Sales Target	5,000	50,000	85,000	60,000	100,000	100,000
	Achievement	7,000	81,000	59,000	64,000	87,000	87,000
	Achievement %	140.00	162.00	69.41	106.67	87.00	87.00
3	Butter Sales Target	80,000	5,000	5,000	4,000	6,000	10,000
	Achievement	93,000	4,000	3,000	6,000	9,000	5,000
	Achievement %	116.25	80.00	60.00	150.00	150.00	50.00
4	Dahi Sales Target	150,000	165,000	165,000	250,000	300,000	335,000
	Achievement	162,000	160,000	180,000	278,000	331,000	340,000
	Achievement %	108.00	96.97	109.09	111.20	110.33	101.49
5	Punier Sales Target	10,000	5,000	4,000	5,000	10,000	10,000
	Achievement	2,000	3,000	2,000	3,000	7,000	8,000
	Achievement %	20.00	60.00	50.00	60.00	70.00	80.00
6	Ice cream Sales Target	3,000	2,000	4,000	4,000	5,000	6,000
	Achievement	2,000	2,000	3,000	3,000	6,000	6,000
	Achievement %	66.67	100.00	75.00	75.00	120.00	100.00
7	Cheese Sales Target	5,000	4,000	4,000	4,000	3,000	4,000
	Achievement	3,000	4,000	3,000	3,000	4,000	3,000
	Achievement %	60.00	100.00	75.00	75.00	133.33	75.00
8	Sweets Sales Target	0	0	0	10,000	20,000	20,000
	Achievement	0	0	0	12,000	19,000	19,000
	Achievement %	0.00	0.00	0.00	120.00	95.00	95.00

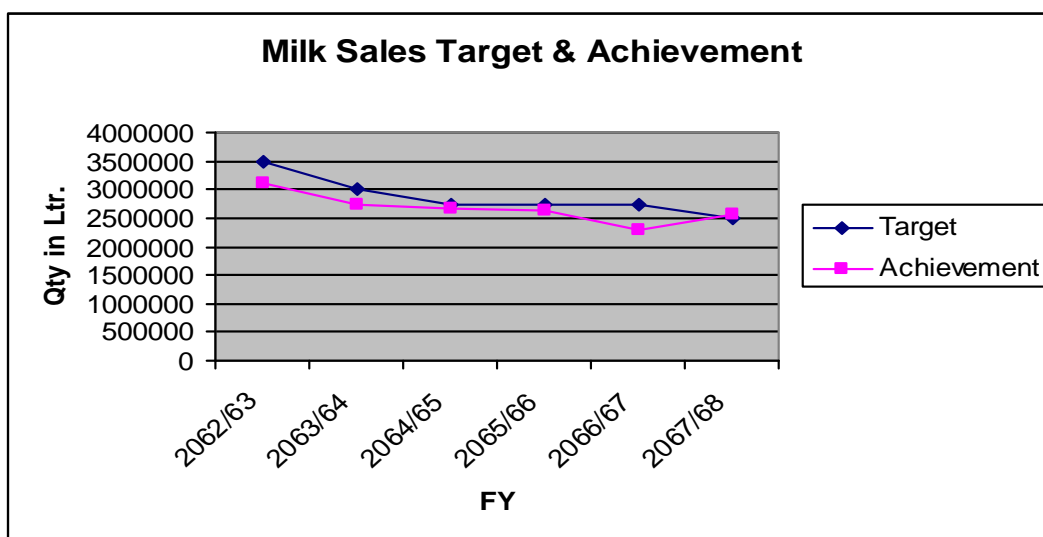
Sources: DDP, Hetauda

The analysis of above table shows that there is no Realistic and scientific sales plan. The sales plan is rarely satisfactory for some product only but not all. Sometimes actual sales is below than target and sometimes- targeted sales have not deal with actual sales. There is neither continuous increment nor decreased in sales of the Dairy products except Dahi, Ice Cream & sweets. But the sale of these products doesn't match with the targeted sales. It seems that the performance of planning section of DDC is poor and it prepares the sale plan on adhoc basis. It seems that the DDC is unable to forecast the future. This is the weakness of company. I can present the above figure in separately more effectively by the following table and Line diagram with analysis of the data.

Milk Sales target and achievement

Table No. 4.16
Milk Sales Target & Achievement
FY 062/063 to 067/068

Fiscal Year	Target (X)	Achievement (Y)
2062/63	3500000.00	3113000.00
2063/64	3000000.00	2744000.00
2064/65	2750000.00	2660000.00
2065/66	2750000.00	2640000.00
2066/67	2750000.00	2300000.00
2067/68	2500000.00	2571000.00



Sources: DDP, Hetauda

According to the above data it is clear that the ratio of achievement of the target is not consistent. There is neither continuous increment in the achievement nor decrease. The worst achievement is the year 066/67. The management of DDP needs to try to implement a follow up procedure in planning of sales. May be increase of the private sector and decrease in collection of milk, have caused sales decrease. Also frequent Nepal Banda, conflict in the management, gradual increase in the price etc. may be the cause of decreased sales. However the sales are going upward in the FY 067/8 which can be a positive sign.

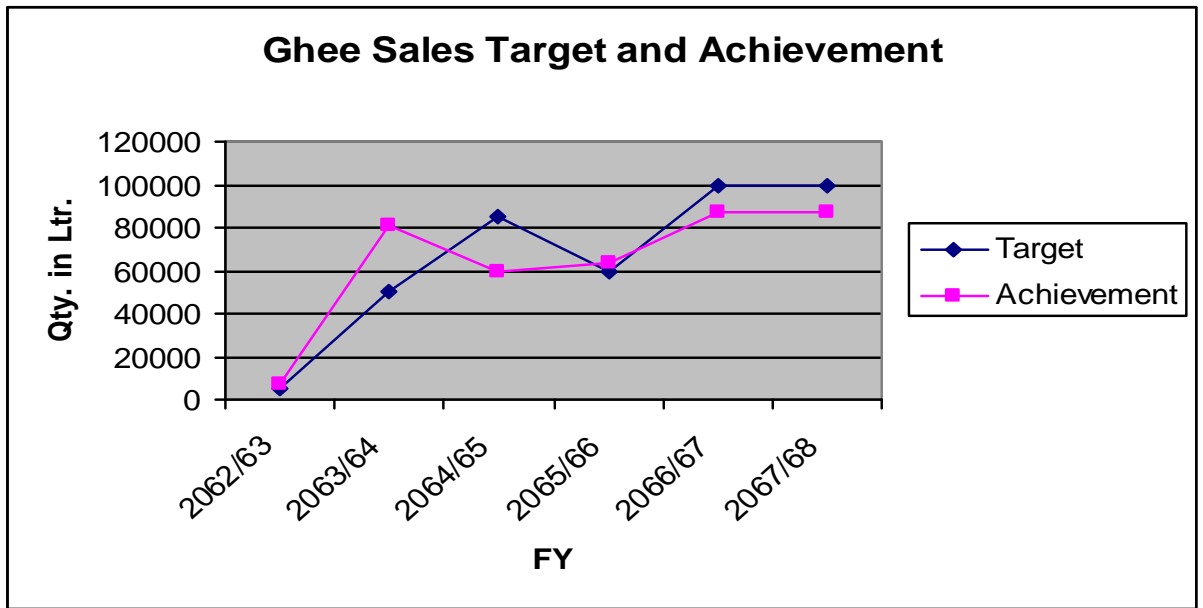
Ghee Sales Target and Achievement

Table No.4.17

Ghee Sales Target and Achievement

FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	5000	7000
2063/64	50000	81000
2064/65	85000	59000
2065/66	60000	64000
2066/67	100000	87000
2067/68	100000	87000



Sources: DDP, Hetauda

As the above chart shows that there is satisfactory achievement in comparison to the budget presented. Though there are some unexpected outcomes of it. In the year 064/065 and 066/67 & 067/068, the achievement is less than the budget and in the year 062/063, 063/064 & 065/66, the sales is more than the Budgeted. Overall, the plan is good, but it is also necessary to bring sincere improvement in the planning because target is not so far-off the actual. Ghee is a common Dairy product, so may be due to the increase of private sectors and lack of proper environmental scanning, actual sale is not according to the targeted.

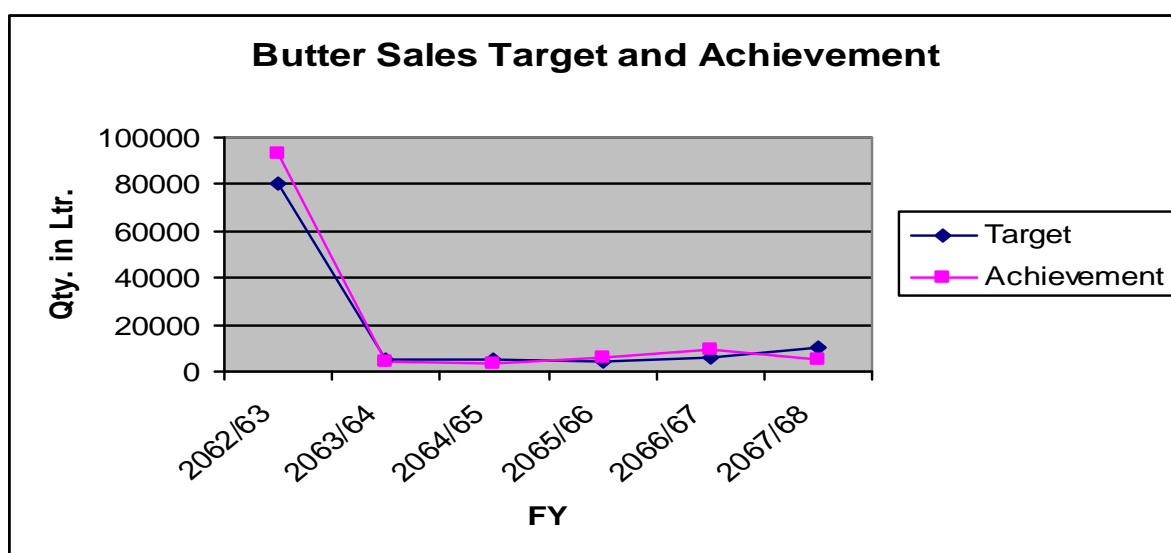
Butter Sales Target and Achievement

Table No. 4.18

Butter Sales Target and Achievement

FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	80000	93000
2063/64	5000	4000
2064/65	5000	3000
2065/66	4000	6000
2066/67	6000	9000
2067/68	10000	5000



Sources: DDP, Hetauda

As we read the above graph the targeted and achievement of sales budget during six-year plan is discontinuous. There is either decrease in the achievement or increment. It means the evaluation of the target is not good and is on the basis of adhoc decision of the plan. In the FY 062/063, 065/066 & 066/067 there was increment of sales than the budgeted. But the sales are not either in increasing trend or in decreasing trend. Target is set according to the previous year sales. May be the lack of advertisement and proper sales technique, fluctuation in sales has occurred. In the year 062/063, DDC butter sales was very high and suddenly the sales decreased by almost 89000

Units. This may be due to the bad quality of the butter in comparison of the Indian butters.

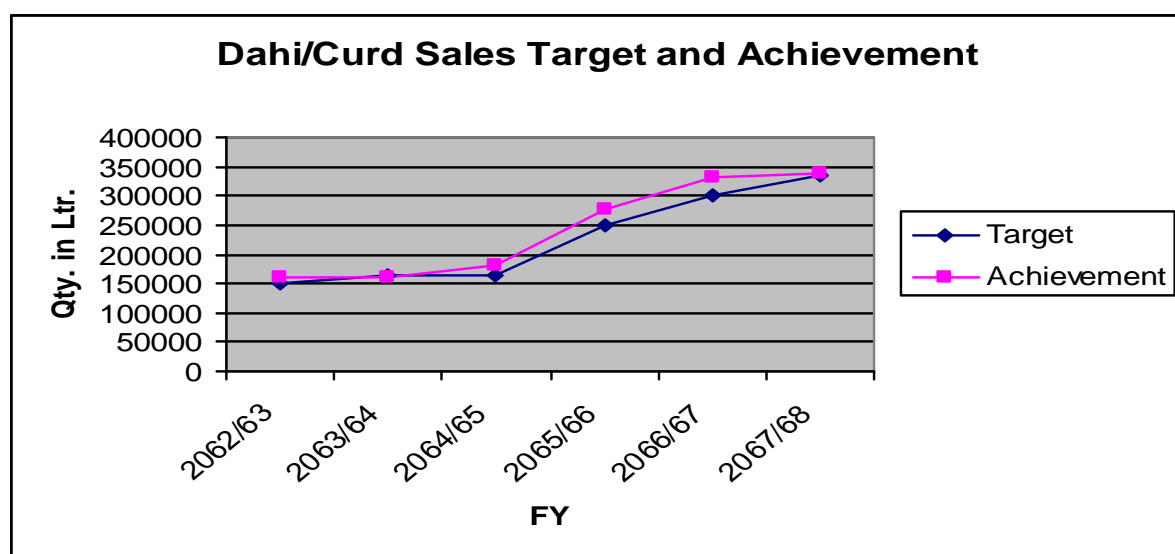
Dahi/Curd Sales Target and Achievement

Table No. 4.19

Dahi/Curd Sales Target and Achievement

FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	150000	162000
2063/64	165000	160000
2064/65	165000	180000
2065/66	250000	278000
2066/67	300000	331000
2067/68	335000	340000



Sources: DDP, Hetauda

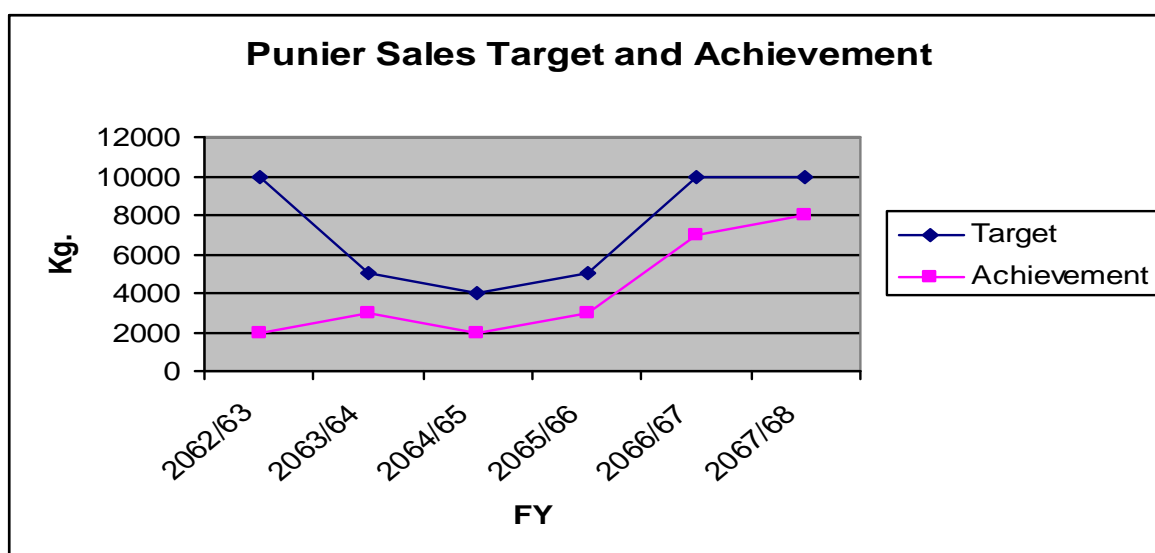
The above chart shows that the achievement of the sales is more than the target in all years except in FY 063/64. The planning for Dahi/ Curd is more or less satisfactory. Planner have kept in mind that the achievement should be reliable with the comparison of the target. The planner did not care about the consumer taste and demand. Proper survey and market research was lacking and forecasting was only on

the basis of previous year sales. If Sales had properly forecasted, this product would have contributed more profit.

Punier Sales Target and Achievement

Table No. 4.20
Punier Sales Target and Achievement
FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	10000	2000
2063/64	5000	3000
2064/65	4000	2000
2065/66	5000	3000
2066/67	10000	7000
2067/68	10000	8000



Sources: DDP, Hetauda

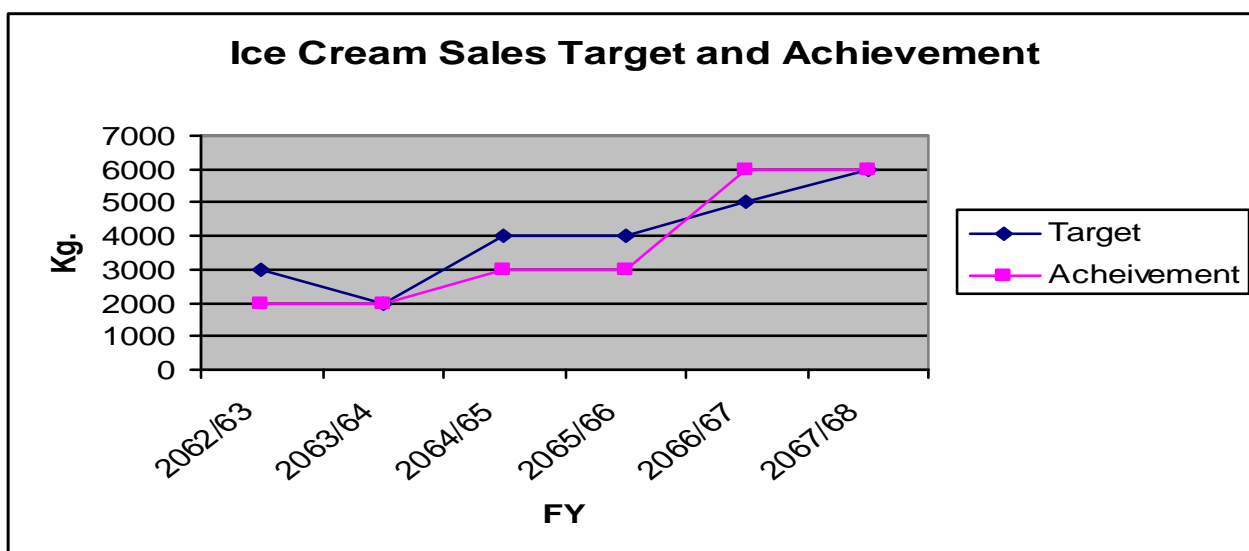
This above table shows that there is nearly continuous increment in the target and achievement despite the year 064/065. In comparison with the target the achievement

is satisfactory to some extent in spite of a slight decrease in the year 064/65. Although the sale was in increasing position couldn't achieve the target. This might be due to frequent Nepal Banda and loose distribution.

Ice Cream Sales Target and Achievement

Table No. 4.21
Ice Cream Sales Target and Achievement
FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	3000	2000
2063/64	2000	2000
2064/65	4000	3000
2065/66	4000	3000
2066/67	5000	6000
2067/68	6000	6000



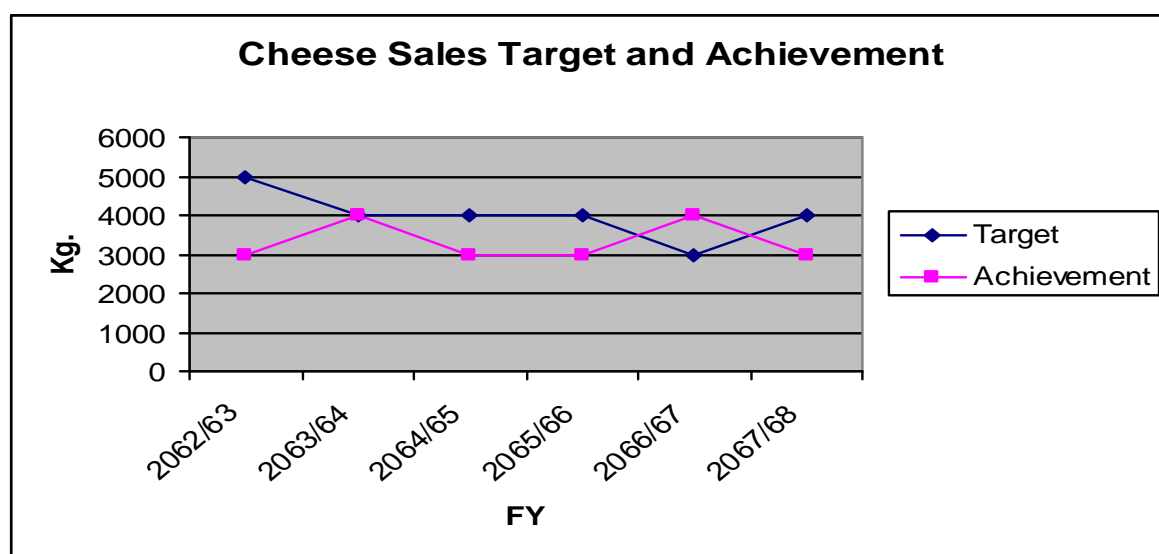
Sources: DDP, Hetauda

There is continuous increment of the Ice Cream sales in the market. Target is also set up in ascending trend except the year 2063/64. The target and achievement for the FY 063/64 & 067/68 is equal. There was decrease in achievement for the FY 062/63, 064/65 & 065/66 than the target and increase for the FY 066/67. Overall achievement is satisfactory and the sales trend is in upward direction. There was increase in the achievement in every year because no private sector had produced this product & quality was also good.

Cheese Sales Target and Achievement

Table 4.22
Cheese Sales Target and Achievement
FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	5000	3000
2063/64	4000	4000
2064/65	4000	3000
2065/66	4000	3000
2066/67	3000	4000
2067/68	4000	3000



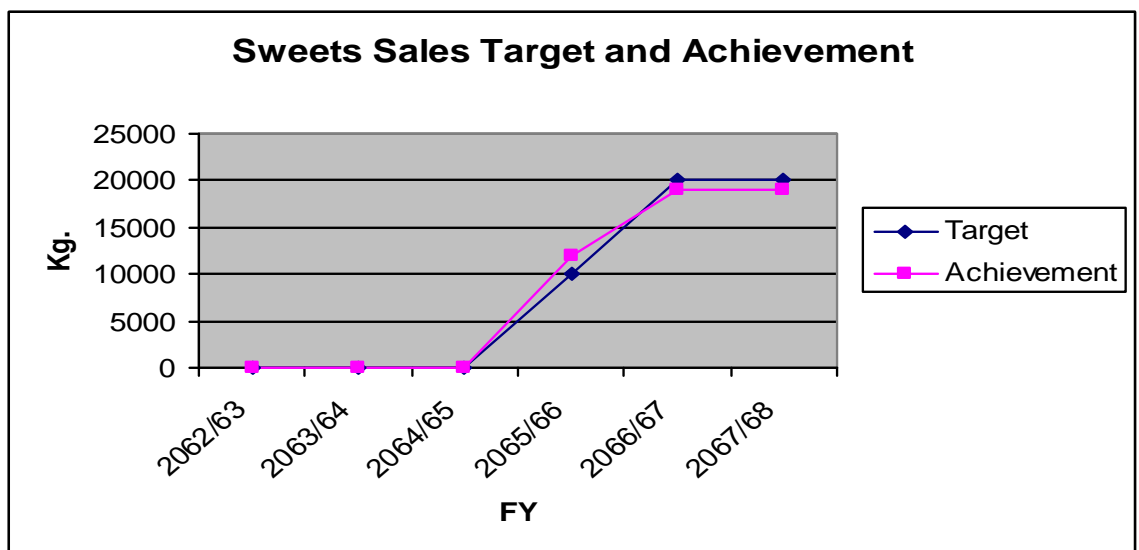
Sources: DDP, Hetauda

From above table, it is clear that there is fluctuation in sales. The planner had not planned or had not forecasted the sales at the beginning of every year using various statistical tools. Market study was lacking. Achievement has not met the target in any Year except the year 063/064. Sometimes sales is less than the target and sometime more than the target. The planner has not gained knowledge from the failure in the budget plan of previous years. Cheese is not produce by DDP, Hetauda itself. It is purchased from other Branch of DDP. The reason for decrease in the achievement in the FY 067/068 might be due to the problem of time to time. “Nepal Banda,” frequently government change, conflict in the management etc.

Sweets Sales Target and Achievement

Table No. 4.23
Sweets Sales Target and Achievement
FY 062/63 to 067/68

Fiscal Year	Target	Achievement
2062/63	0	0
2063/64	0	0
2064/65	0	0
2065/66	10000	12000
2066/67	20000	19000
2067/68	20000	19000



Sources: DDP, Hetauda

From above table, it is clear that the market coverage of sweets is satisfactory. This is the new product of DDC. The taste & quality of these sweets are good in comparison of the sweets from the local sweet Shops. There is also no private company producing this product. Although the sales are in upward direction, sales have not met the target. The sales department should use some advertising medium to increase the number of consumer and sales. This product can contribute in profit maximization.

Karl Pearson's Coefficient of Correlation

A most widely used tool to measure the relationship between two variables is Karl Pearson's Co-efficient of correlation. Most widely used tool to measure the relationship between two variables is Karl Pearson's co-efficient of correlation. It is denoted by 'r'. In the present context the coefficient of correlation is calculated in order to examine relation between targeted and actual data in various items.

In data analysis and examining activities the projected and planned data are comparatively fitted in various activities form. The basic purpose of computing coefficient of correlation is to justify whether the planned data are significant for future activities or not and whether the actual data are far from targeted data or not. So to find out the position of both targeted and actual data we can use these tools.

In this research paper it has been examined both the targeted and actual data for various terms i.e. Milk, Ghee, Butter, Dahi, Punier , Ice Creams, Cheese & Sweets. These are calculated in appendix no. 12-19 respectively. The above items are calculated by using following formulas;

Coefficient of Correlation (r_{XY})

$$r_{XY} = \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}}$$

Where, $\sum X = \sum X - x$

$\sum Y = \sum Y - y$

$\sum X$ = Budgeted Data

Y = Actual Data

r = Co- relation Coefficient

The value of coefficient of correlation is obtained by the above formulas it should always lie between +1 to -1, +1 denotes the perfect positive correlation , '0' no correlation and -1 denotes the negative correlation between the two variables i.e. Actual and budgeted data. Calculation of coefficient correlation between sales targeted and actual of Ghee data of DDP, Hetauda from FY 062/063-067/068 is as below (See appendix no 13)

Coefficient of Correlation (r_{XY})

$$r_{XY} = \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}}$$

$$r_{XY} = \frac{46.73}{\sqrt{66.83 \times 46.21}}$$

$$r_{XY} = \frac{46.73}{\sqrt{8.17 \times 6.80}}$$

$$= 0.84$$

The figure of the value or 'r' shows that there is high degree of positive correlation between target and actual sales of Ghee,

Probable error (PE) of the coefficient of correlation:

P.E of 'r' is very useful in interpreting the value of 'r' and is worked out under for Karl Pearson's coefficients of correlation.

$$P.E. = 0.6745 \left| \frac{1 - r^2}{\sqrt{N}} \right|$$

If 'r' is less than its P.E. it is not at all significant. If 'r' is more than P.E. there is correlation. If 'r' is more than 6 times its P.E and greater than 0.5 then it is considered significant.

The significance of the value of 'r' is shown as under:

$$P.E. \times 0.6745 \mid \frac{1Zr^2}{\sqrt{N}}$$

$$\frac{0.6745 \times \{1 - (0.84)^2\}}{6}$$

$$\frac{0.6745 \times \{1 - 0.71\}}{2.449}$$

$$\frac{0.200}{2.449}$$

$$0.0817$$

Since $r > 0.08$ the value of 'r' is highly significant, from this analysis, we can say that actual sales will go on same direction than that of target sales.

Table No.4.24

Coefficient of Correlation and probable error of coefficient of correlation.

Appendix No.	Dairy products	Coefficient of Correlation	Probable error of Coefficient of correlation
12	Milk	0.8220	0.0898
13	Ghee	0.8411	0.0817
14	Butter	0.9975	0.0013
15	Dahi	0.9881	0.0053
16	Punier	0.1100	0.2700
17	Ice Cream	0.9231	0.0410
18	Cheese	-0.6000	0.1800
19	Sweets	0.9900	0.0100

From the above table it shows that there is a positive correlation between planned milk & actual milk, planned Ghee & actual Ghee, planned Butter and actual Butter, Planned Dahi and actual Dahi, planned Ice Cream & actual Ice Cream and planned Sweets and actual sweets and the correlation is greater than 0.75 or nearer to +1. Other items like Punier & Cheese is bad. Punier Coefficient of Correlation is positive but less than its P.E. and Cheese is negative. Therefore, Punier & Cheese is not at all significant.

Sales Forecast

Now we can forecast the Dahi based on sales figure for coming six years with the help of a least square method. A table simplifies computation of a & b values. The y-values are the five years sales figure for achievement. The computation of trend line of Ghee for DDP, Hetauda is below is given below:

Table No. 4.25

Trend line Sales of Dahi/Curd (in '0000)

Fiscal Year	Achievement Y	X	X ²	XY
2062/63	16.20	-2	4.00	-32.4
2063/64	16.00	-1	1.00	-16
2064/65	18.00	0	0.00	0
2065/66	27.80	1	1.00	27.8
2066/67	33.10	2	4.00	66.2
Sum	111.10	0	10.00	45.6

We know that

$$Y = a + bx$$

Where Y = Actual Sales

x = time

The Least squares formulas for a & b are

$$a = \frac{\sum Y}{N} \quad \& \quad b = \frac{\sum XY}{\sum X^2}$$

substituting these values

$$a = \frac{111.10}{5}$$

$$= 22.22$$

$$\& \quad b = \frac{45.6}{10}$$

$$= 4.56$$

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

$$\& \quad b = \frac{N \sum XY - \sum X \sum Y}{N \sum X^2 - (\sum X)^2}$$

Here $\sum X = 0$

Fiscal Year 2064/65 is assumed as base year Therefore, the Value of x or mid time is Zero, negative before the base year & positive after this Fiscal year. Substituting the value in st. line equations $yc = a + bx$, $Y = 22.22 + 4.56$

Table No. 4.26
Sales Forecast value of Dahi Sales (in '0000)

FY	a	b	X	Trend Value
2063/64	22.22	4.56	-2	13.10
2064/65	22.22	4.56	-1	17.66
2065/66	22.22	4.56	0	22.22
2066/67	22.22	4.56	1	26.78
2067/68	22.22	4.56	2	31.34
2068/69	22.22	4.56	3	35.90
2069/70	22.22	4.56	4	40.46
2070/71	22.22	4.56	5	45.02
2072/73	22.22	4.56	6	49.58

The trend line shows the positive sales figure for future. If the sales trend of previous years continues in the future, the Curd/Dahi sales will be increased by 45600 Kgs every year. By the help of this trend line equation, we can estimate that actual sales for 2067/68 to 2070/71. The value of X in the equation will be +3 in 067/68 because the base year 2064/65 then ,

$$Yc = a + bx$$

$$22.22 + 4.56 \times 3$$

$$35.90$$

if the past sales trend doesn't change, then the possible sales will be 40,46,00 kgs in fiscal year 2066/67, similarly of other fiscal years.

Statistical Tools & Interpretation

To test consistency of budgeted and actual sales of Dairy Products in different Year's statistical tools as arithmetic mean, standard deviation and coefficient of variation have to be calculated (detailed calculation is given appendix 12 to 19)

Table No. 4.27
Dairy Development Project

Statistical Summary of Actual & Targeted Sales of Dairy Products

Products	Mean(X)		Std. Deviation		Coefficient of variation (%)	
	Target	Actual	Target	Actual	Target	Actual
Milk	287.50	267.13	31.46	24.13	0.11	0.09
Ghee	6.67	6.42	3.34	2.77	0.50	0.43
Butter	1.83	2.00	2.76	3.27	1.51	1.64
Dahi/Curd	22.75	24.18	7.20	7.72	0.32	0.32
Punier	0.73	0.42	0.78	0.48	1.06	1.15
Ice Cream	0.40	0.37	0.14	0.17	0.35	0.46
Cheese	0.40	0.33	0.06	0.05	0.15	0.15
Sweets	0.83	0.83	0.90	0.87	1.08	1.04

The above result shows that sales are more variable than targeted sales incase of Butter, Punier & Ice Cream, targeted sales are less variable, or more consistent or more uniform, more stable, than actual sales. The coefficient of variation of actual sales is greater than the coefficient of variation of targeted sales for these products. Higher the value of coefficient of variation, higher the degree of variability in nature of data. Therefore, we can say that there is significant gap between sales target and achievement trend of each year, which express the weakness of top level management regarding the reading of internal & external variables of organization which affect to the organization performance. Therefore, they need to improve the present serious problem existing in the company. Except these three products (Butter, Punier & Ice

Cream) other dairy products like Milk, Ghee, and Sweets is satisfactory to some extent and Dahi, & Cheese is good because the coefficient of variation of actual sales is less or equal than the coefficient of variation of budgeted sales.

Variance Analysis

Variance analysis in general is comparison process between actual and budgeted result which is the integral part of the control process. Reporting of variance between actual results and targeted or budgeted figures is a basic feature of performance reports. Analysis of variance guides planner to continue favorable results and to take immediate actions for unfavorable situations. A careful management study should be made to determine the underlying causes for significant variance. Following steps are taken while analyzing variances.

-) Standards should be developed for labor, sales, profits etc.
-) Comparison between actual results and standards should be made to find variance.
-) Cause should be analyzed and diagnosed as controllable & uncontrollable.
-) Responsibility & accountability should be assigned to related center and authorized personnel should be made accountable for controllable causes of unfavorable variances.
-) Necessary corrective actions should be taken to improve unfavorable variables.

Nepalese public enterprises have not developed a system of determining standards for overhead, expenses, yields, sales & profit only rough comparison between targets & actual are made.

Although DDP, Hetauda have not developed the standards for various expenses & profit, patterns but the deviation between target sales & actual sales, target production & actual productions are ascertained.

Tactical (Short Term) sales budget

The short- term sales budget in a company is to target sales for twelve months into the future, dealing the target initially by quarters and by months for the first quarters. The Short-term sales budget includes a detailed plan for each major product and for grouping of minor products. Short- term sales plan are casually developed in terms of physical units of jobs and in sales and service rupees. Short- term sales plan may involve the application of technical judgment which plays a large part in their determination.

The amount of detail in tactical sales plan is a function of the company's environment characteristics. A short-term sales plan should include considerable detail. There need to be a co –ordination among the entire department which mainly related to sales plan.

Major Findings

By the analysis there is no systematic and realistic sales plan. The sales plan is rarely satisfactory for some product but not all. Sometimes sales actual is four times below than targeted sales and sometimes targeted sales has not deal with actual sales. It clears that the performance of DDP, Hetauda is poor and it prepares the sales plan on adhoc basis especially targeted sales is the sales plan for DDC management.

1. Past trends of sales plan and achievement are not sufficient in forecasting the sales of dairy products because increase of demand is affected by various causes. This indicates that sales plan is not made by considering all components affecting sales at DDP, Hetauda.
2. It has prepared the long term sales budget. DDP, Hetauda has not been able to achieve its target sales in each year even if it has no problem of sales. There is substantial gap between actual sales and targeted sales. The average achievement of milk is 88.94%, 91.47%, 96.73%, 96%, 83.64%, 102.84% in the FY 062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively, Ghee is 140%, 162%, 69.41%, 106.67%, 87%, 87% in FY 062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively, Butter is 116.25%, 80%, 60%, 150%, 150%, 50% in FY 062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively, Dahi is 108%, 96.97%, 109.09%, 111.20%, 110.33%, 101.99% in FY062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively, Punier is 20%, 60%, 50%, 60%, 70%, 80% in the FY 062/063,

063/064, 064/065, 065/066, 066/067, 067/068 respectively, Ice Cream is 66.67%, 100%, 75%, 75%, 120%, 100% in the FY 062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively, Cheese is 60%, 100%, 75%, 75%, 133.30, 75 in the FY 062/063, 063/064, 064/065, 065/066, 066/067, 067/068 respectively and sweets is 120%, 95%, 95% in the FY 062/063, 063/064, 064/065, respectively

3. There is positive correlation between actual sales and target sales of Dairy Products like Milk, Ghee. Butter, Dahi, Ice cream & Sweets. Among of these 6 items there is high degree of positive correlation between planned sales and actual sales of Milk, Ghee. Butter, Dahi, Ice cream & Sweets. because it is greater than 0.75 or nearer to +1. Other items like Punier & Cheese is bad. Punier Coefficient of Correlation is positive but less than its P.E. and Cheese is negative. Therefore, Punier & Cheese is not at all significant.
4. The planned and actual data can be compared with the help of performance report continuously. By the analysis it is found that the dairy products Punier & Cheese are bad and other products are good. Cheese is not produced by DDC Hetauda itself. So Sales plan should be made properly so that cost of Transportation while purchase from other Branch of DDC can be reduced. Sweets has a good sales trend so, its sales can be increased more through proper promotion.
5. Least square straight line sales trend (Dahi/Curd) of DDP, Hetauda shows that the sales will be high in future if present efforts are frequently being improved.

6. Milk Sales target and achievement

It is clear that the ratio of achievement of the target is not consistent. There is neither continuous increment in the achievement nor decrease. The worst achievement is the year 066/67. The management of DDP needs to try to implement a follow up procedure in planning of sales. May be increase of the private sector and decrease in collection of milk, have caused sales decrease. Also frequent Nepal Banda, conflict in the management, gradual increase in the price etc. may be the cause of decreased sales. However the sales are going upward in the FY 067/68 which can be a positive sign.

7. Ghee Sales Target and Achievement

There is satisfactory achievement in comparison to the budget presented. Though there are some unexpected outcomes of it. In the year 064/065 and 066/67 & 067/068, the achievement is less than the budget and in the year 062/063, 063/064 & 065/66, the sales is more than the Budgeted. Overall, the plan is good, but it is also necessary to bring sincere improvement in the planning because target is not so far-off the actual. Ghee is a common Dairy product, so may be due to the increase of private sectors and lack of proper environmental scanning, actual sale is not according to the targeted.

8. Butter Sales Target and Achievement

The targeted and achievement of sales budget during six- year plan is discontinuous. There is either decrease in the achievement or increment. It means the evaluation of the target is not good and is on the basis of adhoc decision of the plan. In the FY 062/063, 065/066 & 066/067 there was increment of sales than the budgeted. But the sales are not either in increasing trend or in decreasing trend. Target is set according to the previous year sales. May be the lack of advertisement and proper sales technique, fluctuation in sales has occurred. In the year 062/063, DDC butter sales was very high and suddenly the sales decreased by almost 89000 Units. This may be due to the bad quality of the butter in comparison of the Indian butters.

9. Dahi/Curd Sales Target and Achievement

The achievement of the sales is more than the target in all years except in FY 063/64. The planning for Dahi/ Curd is more or less satisfactory. Planner have kept in mind that the achievement should be reliable with the comparison of the target. The planner did not care about the consumer taste and demand. Proper survey and market research was lacking and forecasting was only on the basis of previous year sales. If Sales had properly forecasted, this product would have contributed more profit.

10. Punier Sales Target and Achievement

There is nearly continuous increment in the target and achievement despite the year 064/065. In comparison with the target the achievement is satisfactory to

some extent in spite of a slight decrease in the year 064/65. Although the sale was in increasing position couldn't achieve the target. This might be due to frequent Nepal Banda and loose distribution.

11. Ice Cream Sales Target and Achievement

There is continuous increment of the Ice Cream sales in the market. Target is also set up in ascending trend except the year 2063/64. The target and achievement for the FY 063/64 & 067/68 is equal. There was decrease in achievement for the FY 062/63, 064/065 & 065/066 than the target and increase for the FY 066/067. Overall achievement is satisfactory and the sales trend is in upward direction. There was increase in the achievement in every year because no private sector had produced this product & quality was also good.

12. Cheese Sales Target and Achievement

It is clear that there is fluctuation in sales. The planner had not planned or had not forecasted the sales at the beginning of every year using various statistical tools. Market study was lacking. Achievement has not met the target in any Year except the year 063/064. Sometimes sales is less than the target and sometime more than the target. The planner has not gained knowledge from the failure in the budget plan of previous years. Cheese is not produce by DDP, Hetauda itself. It is purchased from other Branch of DDP. The reason for decrease in the achievement in the FY 067/068 might be due to the problem of time to time. "Nepal Banda," frequently government change, conflict in the management etc

13. Sweets Sales Target and Achievement

It is clear that the market coverage of sweets is satisfactory. This is the new product of DDC. The taste & quality of these sweets are good in comparison of the sweets from the local sweet Shops. There is also no private company producing this product. Although the sales are in upward direction, sales have not met the target. The sales department should use some advertising medium to increase the number of consumer and sales. This product can contribute in profit maximization.

14. Statistical Summary of Actual & Targeted Sales of Dairy Products in Table no.4.27 shows that sales are more variable than targeted sales incase of Butter, Punier & Ice Cream, targeted sales are less variable, or more consistent or

more uniform, more stable, than actual sales. The coefficient of variation of actual sales is greater than the coefficient of variation of targeted sales for these products. Higher the value of coefficient of variation, higher the degree of variability in nature of data. Therefore, we can say that there is significant gap between sales target and achievement trend of each year, which express the weakness of top level management regarding the reading of internal & external variables of organization which affect to the organization performance. Except these three products (Butter, Punier & Ice Cream) other dairy products like Milk, Ghee, and Sweets is satisfactory to some extent and Dahi, & Cheese is good because the coefficient of variation of actual sales is less or equal than the coefficient of variation of budgeted sales.

CHAPTER – FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

A least developed poor and Mountainous country Nepal is an agricultural country. More than 81% of the Nepalese people rely on agricultural products. Poultry farming, fishery, beekeeping, cattle farming etc are main areas of agriculture. Due to the geographical feature of our country Nepal, Cattle farming can be promoted from plain to high mountainous area. To promote the living standard of the people and fulfill the basic needs, cattle farming are playing an important role in the country. Keeping this fact in mind, the government of Nepal had set up the Dairy Development Corporation DDC, established under the Corporation act 1969 (BS 2026)

The DDC is a public enterprise created with the aim to aim to increase the milk products on the rural areas by collecting available quantity of milk, process and distribute it to the urban population at socially acceptable prices as a commercially viable operation. In the years of its existence DDC was fulfilling it's objectives as an agent of rural development and suppliers of dairy products to the urban population but its operations were commercially not viable and as a result of losses were accumulated.

Comprehensive profit planning and control or continuous budgeting is of prime importance in virtually all organization. Profit Plans can be broadly divided into two groups as functional plan and financial plan. Financial plan includes sales plan, production plan, raw material plan, direct labor plan and expenses plan. Financial plan includes cash flow plan, capital expenditure plan projected, income statement and projected balance sheet. For the smooth operation of the new enterprise comprehensive profit planning and control should be strongly applied, it is one of the most important management tools used to plan and control a business.

Sales plan is the first foundation of the profit plan. It is like the “nerve center” of the human being. All the other budgets are dependent upon the sales budget. The sales plan should be worked out on a sound and reasonably detailed basis. It should reflect

seasonal influences and any anticipated irregularities in sales. It should be broken down not only onto time periods but also into geographical or areas of responsibility by the use of sales quotas. The sales plan should be realistic, prepared by the well skilled planner, who have knowledge about the marketing and can apply the statistical tools properly. A comprehensive sales plan include two separate but related plans i.e. the strategic and tactical sales plan and identified the component of the comprehensive sales plan.

The present study has analyzed and examined the degree of application profit planning (sales Plan) and its effectiveness in Nepalese PEs with the special reference of Dairy Development Project (DDP) Hetauda which was established in 2032 BS under the company act 2021. It began to collect milk and produce dairy products from 2033 B.s

Especially the main objectives of this research paper are:

1. To identify the managerial process of this project
2. To examine the formulation and implementation procedure of sales plan in DDP, Hetauda
3. To suggest and recommend the systematic sales plan for DDP, Hetauda.
4. Recommend valuable suggestion to improve or formulate the systematic sales plan.

For the purpose of analyzing 6 years long – term budget data from FY 062/063 to 067/068 and a short term budget data 064/065 of dairy product has been taken. Data have been collected from sources primary and secondary. Primary data are collected with the help of manager's interview and structured questionnaire. To analyze and examine the collected data several statistical methods or tools have been used such as Percentage method, Arithmetic mean, Standard Deviation. Coefficient of Variation, Co- relation, Regression Analysis, Least square analysis. Similarly, financial tools such as variance analysis have also been used according to the need.

Related literatures have been reviewed which consists of Internet Websites, Books, reports, periodical articles and government official publication and 6 dissertations. A general concept had been given conceptual framework. This research paper consists of five main Chapters:

1. Introduction
2. Review of Literature
 - a. Conceptual Revised
 - b. Review of Previous Research work
3. Research Methodology
4. Data Presentation , analysis, major findings and
5. Summary, conclusion and recommendation

Nepalese public and private enterprises have been suffering from various internal and external problems in formulation and implementation of profit plans. DDP, Hetauda does not set its specific financial goals, which are generally set as per GON plans. However, the lower level management is unaware about such specific goals. DDP, Hetauda has only the practice of setting long and short –term plans sales, production and collection of milk.

Although, PEs have a little more practices of formulating and implementing profit plans, they have to face problems on formulating and implementing profit plans. Allocated budget for Market Research and Advertising is very low in DDC.

At last, since every conclusion has been drawn only on the basis of randomly selected manufacturing enterprise Dairy Development Corporation especially for Dairy Development Project (collecting and distributing milk and milk products especially in central region) Hetauda with 6 years trend which limit the scope of the study.

Conclusion

By the detailed analysis of this project, this study concludes the following conclusive facts.

1. Nepalese Enterprises are myopic. They are pursuing product concept at the cost of Consumer interests. Most of the enterprises have erratic and fluctuating sales and market share trend. Even market leaders have not been able to maintain their position. Many enterprises do not have market oriented pricing Strategies. Cost plus approach is dominant in pricing. The distribution system is traditional. Promotional measures adopted by Nepalese enterprises are scanty. The Promotion budget is merged. Even the limited budget is spent

without any planning or scheduling as DDC, Hetauda does. Most of the companies lack professional sales force, lack of market research, market division and lack of attention towards marketing activities.

2. In Nepalese manufacturing PEs goals and objectives are written but are not adequate and are not properly follow up the development of the enterprise without goals and objectives there is no basic foundation for planning without planning there is no fulfillment of goals and objectives. Their goals are generally set according to GON plan. But most of the managers are unaware of it. So these specific plans are not achieved as desired.
3. In Nepalese manufacturing PEs are not in position to fulfill the national demand because supply side is more important than demand side. The demand of milk and milk product in urban site of Nepal is very high than supply of milk and its product. Milk supply to the major urban areas is often insufficient to satisfy demand especially during the winter season and before the monsoon
4. DDC has not followed participative management, even middle level of management are not participated in policy- making. Only top level of management is directly involved in Policy making.
5. The board of directors is the powerful body of any enterprise which handles the overall activities. In this project, it has less interference in day today activities and high interference in long term policies.
6. Manpower is the most important resource for any enterprises. Without adequate and appropriate human resources, the enterprises cannot achieve its goals and objectives. The duties and responsibilities of employees in DDP, Hetauda are adequately defined but there is lack of self- commitment of employees towards the organization progress.
7. By the analysis there is no systematic and realistic sales plan. The sales plan is rarely satisfactory for some product but not all. Sometimes sales actual is four times below than targeted sales and sometimes targeted sales has not deal with actual sales. It clears that the performance of DDP, Hetauda is poor and it prepares the sales plan on adhoc basis especially targeted sales is the sales plan for DDC management.
8. Past trends of sales plan and achievement are not sufficient in forecasting the sales of dairy products because increase of demand is affected by various

causes. This indicates that sales plan is not made by considering all components affecting sales at DDP, Hetauda

9. To achieve the basic objectives, DDC has not been clearly defining its main objectives in annual goal or target. There is no defined such operational goal as expansion and contraction of product line, geographic areas, share of market growth of trends etc all the departmental goals and target are fixed in paper but not in action.
10. The company prepared the sales budget without studying the environmental factors. There is no Co- ordination between the various departments where sales forecast; marketing plan, advertising plan etc are the main component of sales budget. They have ignored the sales forecast and advertising. The sales manager has no clear knowledge about the sales forecast.
11. DDC does not fix the target for specific goal for the budgeted period. E.g growth objective, capacity utilization, return on capital are not targeted to achieve some specified level. DDC has not adequately considered controllable and non – controllable variables affecting it.
12. The DDP, Hetauda is mainly considerable to “expending and satisfaction of consumers” by its dairy product but not seriously thinking about the research and development and growth of sales due to the lack of budget.
13. The project is distributing its products to the consumers through 186 sales booth, 2- sale shop and 5 Dealers.
14. The project has not prepared any plan to encourage the milk producers. There is conflict between project and milk producing farmers as well as other milk Collecting Co- operative agencies. Farmers are not satisfied with the mark price of milk.

Recommendation

1. On the basis of the study of profit planning in DDP, Hetauda, it is necessary to develop, implement and improve the process of profit planning from beginning to end. It is hoped that these recommendations will prove to be useful to the management of the corporation and other concerned offices, institutions and Individuals.

2. On the basis of full study on the Dairy Development Project of Hetauda, it is recommended that this organization should focus on market study and prepare the proper & clear sales planning through proper forecasting, proper market research, study of market scenario, consumer taste, study on micro and macro environment and its impact on the organization, proper market Information system for proper decision making. Only setting a Sales Target for particular time period is not the Sales Plan.
3. There should be strategic marketing planning which should consist, long term perspective, mission & objectives statement, annual budget, opportunity and Issue Analysis, growth strategies, portfolio analysis, future perspective. Adhocism should not guide marketing efforts.
4. There should be effective planning of substantive plan and financial plan to achieve the goals and objectives of the enterprises. It may be impossible without long term and short term planning. Therefore, the project should develop the profit planning process systematically.
5. Cost- Volume-Profit relationship or BEP analysis should also be taken into consideration while developing sales plans and pricing of products.
6. The project should follow the strategic long range and tactical short range profit plan and to conduct the orientation program for planning objectives and goals for effective utilization's of its resources.
7. The government's interference in every activities of the enterprises should be defined on a clear cut way. It would be better that the right person in proper place can perform the work effectively. Nepal has been suffering from Political uncertainties so a proper Political legal environment should be scanned and studied. Frequently change of Government and Political system may hamper the sales growth.
8. For achievement of the objective, a proper marketing process should be implemented. Marketing Innovation & Research & development are the crucial parts for sales growth. The Organization should also analyze the market opportunities, by assessing buyer behavior & market size, scanning macro and micro environment to measure market potential and forecast future demand, analyze technological changes, identify and analyze competitors, developing market strategies for Product positioning, new product Development & identifying opportunities, planning marketing programmes

by allocating marketing expenditure, dividing marketing budget among market mix variables consisting of product, price place & promotion, determining price, distribution channel designing and designing promotion mix. Also managing all these by appointing effective Human resources, Building relationships with other departments, controlling and taking periodic feedback for corrective actions.

9. The enterprise should define its goal and objectives clearly among the different levels of management. The management should select the goals and objectives on the basis of their needs.
10. The duties and responsibilities of the employees should be defined in a clear cut way. It would be better to participate the employees of different levels in formulation and evaluation of enterprises goals and objective. Lower level personnel also should not be avoided in decision making.
11. Communication system in this project is very weak so I recommend that the effective communication tools as planning premises which can maintain the communication and understand about the profit planning and control.
12. Each and every department is responsible for the growth of the Organization. There should not be interdepartmental conflicts. Difference of opinion about best interests of the organization, myopic views of departmental well being and interests and tendency for empire building and stereotypes and prejudices can create interdepartmental conflicts. Joint Committees, Process teams, Joint seminars, People exchange and training can help in balanced relationships between R &D, Engineering, Production, Finance & Marketing departments. Top level management can play a great role for this.
13. Account and Finance departments should be computerized for proper data saving. In Hetauda Dairy Development Project, people are more focused on manual works rather computerized. By studying Technology changes worldwide, proper technology should be adopted but should be cost effective.
14. Trained and qualified manpower of budgeting and planning should be hired and present manpower should be trained to develop and implement the profit plans effectively. Marketing specialists should be appointed to develop effective marketing policy for sales expansion and for new supply sources of raw materials.

15. By the analysis it is found that planned and actual coefficient of correlation of the dairy product Punier & Cheese is negative or very low than its PE. Therefore, necessary action must be taken by the management to improve the condition of this product. A systematic approach to profit planning is essential to adopt in the project. To adopt this approach, planners should be trained and a seriously think and try to find out the causes.
16. In addition to above mentioned activities, the pocket package strategy should be adopted and use of farmers' group to provide feeding, breeding and health package along with management on training for clean milk production, storage, processing and marketing of milk and milk products.
17. Since 2007, training programmes are brought in action but still not prioritized. Higher level people have attended different seminars held abroad for. Eg. Conference of Indian Dairy Association, India, International Conference on Fermented Foods, India, Technology of Fermented & Probiotic Dairy Products & New Development in Energy Management in Dairy/ Food Processing Operation, Vidhya Dairy, Anand India, RMRD Training at Jaipur, Rajasthan, India, Laboratory production in Dairy & Food Plants, Technology of Mozzarella Cheese. Training regarding Executive Development Program, Income from Remuneration & TDS in July 2008. Executive Development Program, Red Hat Linux in May 28th – 13th August 2008. But sales & marketing Training programme is not considered as very important part.
18. The project should prepare sales and administrative budget separately. These budgets should be formulated after detailed analysis of the sales revenue and also separate fixed and variable components.
19. Each responsible center's manager and departmental manager should be given authority to formulate own departmental objectives policies, goals and target with the limitation of organizational objectives.
20. There should be proper coordination between various directorates of the corporation in regard of sales budget formulation and implementation of the sales budget.
21. The sales plan should be developed by coordinating, advertising and promotional expenses budget. For these activities, the company should not avoid market innovation.

22. Monitoring and evaluating system should be systematic. Those persons who have adequate practical and theoretical knowledge about budgeting profit planning and control should be appointed in planning and budgeting section. Each responsible manager should be given the knowledge about PPC and its Philosophic aspects. The seminar, required trainee programs, workshops and other programs should be offered to various personnel and responsible managers about planning, budgeting and other.
23. The concept of control should be looked upon as a measurement and correction of performance to achieve sales targets. Control should not be centralized to the top management only. Computerization system should be initiated for controlling performance and providing decision support systems for control. Profitability and efficiency controls should also be emphasized along with Sales analysis, financial analysis and market expenses to Sales tools used for annual plan control.
24. The project should prepare the systematic periodic performance reports in detailed by assigned responsibilities for accomplishing the planning objectives. Organization should be aware about the importance of marketing Audit. Though periodic performance report is made, a serious action is not taken to avoid future mistakes.
25. The most important thing is to forecast where customers are moving and be in front of them. Sales forecasting should be made on the realistic ground. Enterprises should have both strategic long term and tactical short term sales plan in scientific way. They should develop their realistic sales plan according to their requirements. Forecasting and setting the goals on the basis of previous year sales is tactlessness. Various statistical tools and models can be used to forecast the future sales and reduce the uncertainty.
26. To develop the annual sales plan, top management must take decisions about product line development and marketing activities, I recommend that the policies must respond to such issues as the following, which products will be dropped and lined?, What quality style changes will be made ? What about “loss leaders”? These policy decisions about both the long term and short term sales plan with usually have a major effect in plans and other areas of the project, such as plant capacity, financing, territorial expansion and research.

27. Market studies on demand supply and pricing of milk and dairy products should be carried out. The cost of milk production should be assessed. Research and Development unit of this Project should be strengthened and enabled to carry out such studies. By running the plant in the full capacity, cost of production can be reduced.
28. Attempts need to be made for the product processing and diversification through value added long self-life milk products production like baby food, milk whitener, condensed milk, powder milk, chocolate or flavored milk drinks, cheese and ghee etc. Similarly adequate technical and other support should be provided especially for the product processing, packaging and storing, especially to the rural areas where the farmer does not have access to private dairy or DDC.
29. Sales promotion tools i.e. Advertisement and publicity should be effective to the project. Separate budget should be allocated for these promotion activities. Promotion is persuasive communication which tells the customers about product, price & place. With the help of advertisement, increasing population of Hetauda could be able to know about the dairy product. Adequate promotion budget and clear promotion strategy should be well thought-out.
30. Promotional activities should be carried out to increase the per-capita consumption of milk and milk products highlighting the nutritional benefits so that local level consumption could be raised.
31. Sales targets mean is high than achievements mean in the dairy products Milk, Ghee, Punier, Ice cream & Cheese so planner should forecast the sales when fixes the sales targets.
32. The interest rates of the loans for purchase of Cows & buffaloes should be minimized with cooperation with the Bankers. Farmers should also be provided loan for Chilling VAT at low Interest. The Scheme of Proper insurance for Animals and farmers to be executed.
33. During some of the years, the collection of Dairy (Milk) in the project has not improved so much. To supply milk and other dairy products especially Cheese, is bought from other projects. Therefore, I suggest that it is very necessary to run farmers oriented program and continue such programmes.

34. Hetauda being centre for the travelers, there is a good possibility to make good income by manufacturing various types of Dairy products and it is also necessary to transfer the authority to the project to determine the prices of local products. Sweets have a good demand so its sales should be increased through proper advertisement.
35. The decision regarding the privatization of the Corporation should be made as soon as possible because of which there is a frustration or disappointment among the staff and the long term policy for the dairy Industry should be formulated.
36. It is clear that Hetauda is one of the major Industrial area. The market here is growing rapidly and the demand for Dairy milk and other Dairy products are also increasing. Therefore, there is a possibility to improve the economic standard/ status of the project by growing effective sales/ distribution system.
37. To meet the desired sales target. DDP Hetauda should try to increase collection centers, sales centers and media support for publicizing its products.

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www.dairydev.com.np &
www.b2b.com.np,
www.agripricenepal.com

Appendix -1

Questionnaire

Dear Sir,

I am conducting a study titled “A study on sales Planning & Implementation of Dairy Development Project, Hetauda Milk Supply Scheme” a partial fulfillment of the requirement for the degree of Master in Business Studies. I need some reliable information from your project. I hope you would kindly help me filling up a list of questionnaire while answering the following question, please choose and tick () or any number which you think the most appropriate.

Thank You.

Shiva Prasad Pandey

Researcher

Makawanpur Multiple Campus

Hetauda

Questionnaire

1. Personal Details:

Name of respondent:

Length of service:

Academic qualification:

Post:

Training(1) Technical(2) Financial(3) Marketing(4), Management(5) If any Please specify.....

1.1 How many employees are there in your organization?

1.2 Are there definite goal/objectives?

Yes [] No []

If Yes

1.2.1 The goals / objectives are

Clearly written []
 Adequate but not clear []
 Inadequate but clear []
 Neither adequate nor clear []

1.2.2 The goal/ objectives are committed to:

Top level management []
 Middle Level Management []
 Lower Level Management []
 All of them []

1.2.3 To what extent do you adopt the following objectives while formulating plans in your organization?(5 for Top priority and one 4 lowest priority)

Objectives	Min 1	2	3	4	Max 5
Broad and long range goals					
Specification of enterprise goals					
Long range profit plan developed					
Short range profit plan developed(in detail)					
System of periodic performance Report (in detail)					
Follow up procedure					

1.2.4 To what extent does the board of Directors, interfere in the following policies?

Day to Day Operation []
 Weakly []
 Monthly []
 Quarterly []
 Long term Policies []

1.2.5 To what extent do you satisfy the following objectives are achievers(5 for top priority and 1 for lowest priority)

Objectives	Min 1	2	3	4	Max 5
Broad and long range goals					
Specification of enterprise goals					
Long range profit plan developed					
Short range profit plan developed(in detail)					
System of periodic performance Report (in detail)					
Follow up procedure					

1.2.6 Duties and Responsibilities of Employees are:

Clearly and adequately defined []
 Ambiguously defined []
 Inadequately defined []
 Not defined at all []
 Unknown []

1.2.7 Please rate the following operational activities of sales plan in your Enterprises.(5 for top priority and 1 for lowest priority)

Objectives	Min 1	2	3	4	Max 5
Information system					
Technology used in sales					
Training in sales force					
Knowledge on market study					
Managerial knowledge of market					
Effective sales strategy					
Responsibility marketing					
Study of environment					
Quality of product					
Location of company					
Employee motivation					
Political system					
Frequently changes of Govt.					

1.3 What are the main products of your organization?

a. Cheese b. Milk c. Ghee

1.3 Does your factory apply sales plan to sell them?

a. Yes b. c. If Yes

1.4.1 What strategy has been following?

- a. Long term sales plan b. Short term Sales Plan
- c. Both of them

1.4.2 Who are responsible in preparing sales budget?

- a. Marketing Manager
- b. Other departmental Manager
- c. Chief Executive
- d. All of them

1.4.3 Who monitors/ evaluates the sales budget?

- a. Marketing Manager
- b. Chief Executive
- c. Both of them

1.4.4 Does your factory prepare sales forecasting?

- a. Yes b. No c. If Yes

1.4.4 .1 What approaches are used in sales forecasting?

Objectives	Min 1	2	3	4	Max 5
Statistical					
Time series smoothing					
Advance time series					
Simple regression					
Multiple regression					
Modeling					

1.4.4.2 What are the reasons behind selecting those above particular approaches?

- a. Most reliable
- c. Reliable
- d. Simple
- d. Less time consuming

1.4 .4.3 Please rate the following component in preparing sales budget. (5 for top priority and 1 for lowest priority)

Objectives	Min 1	2	3	4	Max 5
Sale forecast					
The advertising Plan					

The marketing Plan					
The selling expense budget					

1.5 How many sales booths are established under this company?

3 5 10 above 20

1.6 What is the distribution strategy of your product?

Booth Retailer Wholesale
 Agent

1.7 How many sales territories the company has segmented?

1.8 What promotional media does your organize mainly use?

Radio TV Bill Board
 News Paper All of them

1.9 What distribution channel is used?

Producer Consumer
 Producer Retailer Customer
 Producer Wholesaler Retailer Customer
 Producer Agent Retailer Customer

Please specify if any comment or suggestions here:

.....

Appendix No. 2**Milk Sales Target and Achievement Variance (in Ltr)**

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	3500000	3113000	-387000	-11.06	Unfavorable
2063/64	3000000	2744000	-256000	-8.53	Unfavorable
2064/65	2750000	2660000	-90000	-3.27	Unfavorable
2065/66	2750000	2640000	-110000	-4.00	Unfavorable
2066/67	2750000	2300000	-450000	-16.36	Unfavorable
2067/68	2500000	2571000	71000	2.84	Favorable

Appendix No. 3**Ghee Sales Target and Achievement Variance (in kgs)**

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	5000	7000	2000	40.00	Favorable
2063/64	50000	81000	31000	62.00	Favorable
2064/65	85000	59000	-26000	-30.59	Unfavorable
2065/66	60000	64000	4000	6.67	Favorable

2066/67	100000	87000	-13000	-13.00	Unfavorable
2067/68	100000	87000	-13000	-13.00	Unfavorable

Appendix No.4

Butter Sales Target and Achievement Variance (in kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	80000	93000	13000	16.25	Favorable
2063/64	5000	4000	-1000	-20.00	Unfavorable
2064/65	5000	3000	-2000	-40.00	Unfavorable
2065/66	4000	6000	2000	50.00	Favorable
2066/67	6000	9000	3000	50.00	Favorable
2067/68	10000	5000	-5000	-50.00	Unfavorable

Appendix No.5

Dahi Sales Target and Achievement Variance (in Kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	150000	162000	12000	8.00	Favorable
2063/64	165000	160000	-5000	-3.03	Unfavorable
2064/65	165000	180000	15000	9.09	Favorable
2065/66	250000	278000	28000	11.20	Favorable
2066/67	300000	331000	31000	10.33	Favorable
2067/68	335000	340000	5000	1.49	Favorable

Appendix No.6

Punier Sales Target and Achievement Variance (in Kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	10000	2000	-8000	-80.00	Unfavorable
2063/64	5000	3000	-2000	-40.00	Unfavorable

2064/65	4000	2000	-2000	-50.00	Unfavorable
2065/66	5000	3000	-2000	-40.00	Unfavorable
2066/67	10000	7000	-3000	-30.00	Unfavorable
2067/68	10000	8000	-2000	-20.00	Unfavorable

Appendix No.7

Ice Cream Sales Target and Achievement Variance (in Kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	3000	2000	-1000	-33.33	Unfavorable
2063/64	2000	2000	0	0.00	Favorable
2064/65	4000	3000	-1000	-25.00	Unfavorable
2065/66	4000	3000	-1000	-25.00	Unfavorable
2066/67	5000	6000	1000	20.00	Favorable
2067/68	6000	6000	0	0.00	Favorable

Appendix No.8

Cheese Sales Target and Achievement Variance (in Kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	5000	3000	-2000	-40.00	Unfavorable
2063/64	4000	4000	0	0.00	Favorable
2064/65	4000	3000	-1000	-25.00	Unfavorable
2065/66	4000	3000	-1000	-25.00	Unfavorable
2066/67	3000	4000	1000	33.33	Favorable
2067/68	4000	3000	-1000	-25.00	Unfavorable

Appendix No.9

Sweets Sales Target and Achievement Variance (in Kgs)

Fiscal Year	Target	Achievement	Variance	% of Variance	Remarks
2062/63	0	0	0	0	
2063/64	0	0	0	0	
2064/65	0	0	0	0	
2065/66	10000	12000	2000	20.00	Favorable
2066/67	20000	19000	-1000	-5.00	Unfavorable
2067/68	20000	19000	-1000	-5.00	Unfavorable

Appendix No. 10

Milk Price Variance(in Rs) 063/064& 067/068

FY	Rate	Target Sales (in Lakh)	Actual Sales (in Lakh)	Variance In Lakh	% of Variance	Remarks
063/064	Rs-26/- Ltr	780.00	712.40	-67.60	-0.09	Unfavorable
067/068	Rs-36/- Ltr	900.00	925.56	25.56	0.03	Favorable

Sources: DDP, Hetauda

Appendix No. 11

Price Variance of Dairy Products

FY	Rate	Product	Target Sales (in Lakh)	Actual Sales (in Lakh)	Variance In Lakh	% of Variance	Remarks
067/068	390	Ghee	390.00	339.30	-50.70	-0.13	Unfavorable
	200	Butter	20.00	10.00	-10.00	-0.50	Unfavorable
	60	Dahi	201.00	204.00	3.00	0.01	Favorable
	200	Punier	20.00	16.00	-4.00	-0.20	Unfavorable
	250	Ice Cream	15.00	15.00	0.00	0.00	Favorable
	380	Cheese	15.20	11.40	-3.80	-0.25	Unfavorable
	400	Sweets	80.00	76.00	-4.00	-0.05	Unfavorable

Sources: DDP, Hetauda

Appendix No. 12

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Milk Sales (in "0000")

Fiscal Year	Target (X)	Achievement (Y)	$X = X - \bar{X}$	$Y = Y - \bar{Y}$	X^2	Y^2	XY
2062/63	350.00	311.30	62.50	44.17	3906.25	1950.69	2760.4
2063/64	300.00	274.40	12.50	7.27	156.25	52.80	90.8
2064/65	275.00	266.00	-12.50	-1.13	156.25	1.28	14.1
2065/66	275.00	264.00	-12.50	-3.13	156.25	9.82	39.1
2066/67	275.00	230.00	-12.50	-37.13	156.25	1378.88	464.1
2067/68	250.00	257.10	-37.50	-10.03	1406.25	100.67	376.2
	x=1725.00	y=1602.80			$X^2=5937.50$	$Y^2=3494.15$	$XY=3745.0$

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{1725.00}{6} \\ &= 287.50 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{1602.80}{6} \\ &= 267.13 \end{aligned}$$

$$\begin{aligned} \text{S.D. } (\dagger x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{5937.50}{6}} \\ &= \sqrt{989.58} \\ &= 31.46 \end{aligned}$$

$$\begin{aligned} \text{S.D. } (\dagger y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{3494.15}{6}} \\ &= \sqrt{582.36} \\ &= 24.13 \end{aligned}$$

$$\begin{aligned} \text{C.V. } &= \frac{\dagger x}{\bar{X}} \times 100\% \\ &= \frac{31.46}{287.50} \times 100\% \\ &= 0.11\% \end{aligned}$$

$$\begin{aligned} \text{C.V. } &= \frac{\dagger y}{\bar{Y}} \times 100\% \\ &= \frac{24.13}{267.13} \times 100\% \\ &= 0.09\% \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual milk sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1 Z r^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left[1 Z (0.82)^2 \right]}{\sqrt{6}} \\
 \times & \frac{0.6745 \left[1 Z 0.67 \right]}{2.449} \\
 \times & \frac{0.22}{2.449} \\
 \times & 0.0898
 \end{aligned}$$

Appendix No.13

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Ghee Sales (in '0000')

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	0.50	0.70	-6.17	-5.72	38.03	32.68	35.25
2063/64	5.00	8.10	-1.67	1.68	2.78	2.83	-2.81
2064/65	8.50	5.90	1.83	-0.52	3.36	0.27	-0.95
2065/66	6.00	6.40	-0.67	-0.02	0.44	0.00	0.01
2066/67	10.00	8.70	3.33	2.28	11.11	5.21	7.61
2067/68	10.00	8.70	3.33	2.28	11.11	5.21	7.61
	x=40.00	y=38.5			X²=66.83	Y²=46.21	XY=46.73

Targeted Data

Actual Data

$$\text{Mean } (\bar{X}) = \frac{\sum x}{N}$$

$$= \frac{40}{6}$$

$$= 6.67$$

$$\text{Mean } (\bar{Y}) = \frac{\sum y}{N}$$

$$= \frac{38.5}{6}$$

$$= 6.42$$

$$\text{S.D.} (\sigma_x) = \sqrt{\frac{\sum x^2}{N}}$$

$$= \sqrt{\frac{66.83}{6}}$$

$$= \sqrt{11.14}$$

$$= 3.34$$

$$\text{S.D.} (\sigma_y) = \sqrt{\frac{\sum Y^2}{N}}$$

$$= \sqrt{\frac{46.21}{6}}$$

$$= \sqrt{7.70}$$

$$= 2.77$$

$$\text{C.V.} = \frac{\sigma_x}{\bar{X}} \times 100\%$$

$$= \frac{3.34}{6.67} \times 100\%$$

$$= 0.50\%$$

$$\text{C.V.} = \frac{\sigma_y}{\bar{Y}} \times 100\%$$

$$= \frac{2.77}{6.42} \times 100\%$$

$$= 0.43\%$$

$$\text{Coefficient of Correlation } (r_{xy}) = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}}$$

$$= \frac{46.73}{\sqrt{66.83} \sqrt{46.21}}$$

$$= \frac{46.73}{8.17 \times 6.80}$$

$$= 0.8411$$

The above result shows that there is positive correlation between targeted and actual Ghee sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1Zr^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1Z(0.84)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1Z0.71] \right.}{2.449} \\
 \times & \frac{0.200}{2.449} \\
 \times & 0.0817
 \end{aligned}$$

Appendix No.14

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Butter Sales (in "0000")

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	8.00	9.30	6.17	7.30	38.03	53.29	45.02
2063/64	0.50	0.40	-1.33	-1.60	1.78	2.56	2.13
2064/65	0.50	0.30	-1.33	-1.70	1.78	2.89	2.27
2065/66	0.40	0.60	-1.43	-1.40	2.05	1.96	2.01
2066/67	0.60	0.90	-1.23	-1.10	1.52	1.21	1.36
2067/68	1.00	0.50	-0.83	-1.50	0.69	2.25	1.25
	x=11.00	y=12.00			X²=45.85	Y²=64.16	XY=54.03

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{11}{6} \\ &= 1.83 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{12}{6} \\ &= 2.00 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{45.85}{6}} \\ &= \sqrt{7.64} \\ &= 2.76 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{64.16}{6}} \\ &= \sqrt{10.69} \\ &= 3.27 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger x}{\bar{X}} \times 100\% \\ &= \frac{2.76}{1.83} \times 100\% \\ &= 1.51\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger y}{\bar{Y}} \times 100\% \\ &= \frac{3.27}{2.00} \times 100\% \\ &= 1.64\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= \frac{\sum XY}{\sqrt{\sum X^2} \times \sqrt{\sum Y^2}} \\ &= \frac{54.03}{\sqrt{45.85} \times \sqrt{64.16}} \\ &= \frac{54.03}{6.77 \times 8} \\ &= 0.9975 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Butter sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \sqrt{\frac{1 - r^2}{N}} \\
 \times & \frac{0.6745 \sqrt{[1 - Z(0.9975)^2]}}{\sqrt{6}} \\
 \times & \frac{0.6745 \sqrt{[1 - Z(0.9952)]}}{2.449} \\
 \times & \frac{0.0033}{2.449} \\
 \times & 0.0013
 \end{aligned}$$

Appendix No.15

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Dahi Sales (in "0000")

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	15.00	16.20	-7.75	-7.98	60.06	63.73	61.9
2063/64	16.50	16.00	-6.25	-8.18	39.06	66.97	51.7
2064/65	16.50	18.00	-6.25	-6.18	39.06	38.23	38.6
2065/66	25.00	27.80	2.25	3.62	5.06	13.08	8.3
2066/67	30.00	33.10	7.25	8.92	52.56	79.51	64.6
2067/68	33.50	34.00	10.75	9.82	115.56	96.37	105.5
	x=136.50	y=145.10			X²=311.38	Y²=357.89	XY=329.98

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= X \frac{x}{N} \\ &= X \frac{136.50}{6} \\ &= X 22.75 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= X \frac{y}{N} \\ &= X \frac{145.10}{6} \\ &= X 24.18 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger x) &= X \sqrt{\frac{x^2}{N}} \\ &= X \sqrt{\frac{311.38}{6}} \\ &= X \sqrt{51.90} \\ &= X 7.2 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger y) &= X \sqrt{\frac{Y^2}{N}} \\ &= X \sqrt{\frac{357.89}{6}} \\ &= X \sqrt{59.65} \\ &= X 7.72 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= X \frac{\dagger x}{\bar{X}} | 100\% \\ &= X \frac{7.2}{22.75} | 100\% \\ &= X 0.32\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= X \frac{\dagger y}{\bar{Y}} | 100\% \\ &= X \frac{7.72}{24.18} | 100\% \\ &= X 0.32\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= X \frac{XY}{\sqrt{X^2} | \sqrt{Y^2}} \\ &= X \frac{329.98}{\sqrt{311.38} | \sqrt{357.89}} \\ &= X \frac{329.98}{17.65 | 18.92} \\ &= X 0.9881 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Dahi/Curd sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1 Z r^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1 Z (0.988)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1 Z 0.98] \right.}{2.449} \\
 \times & \frac{0.013}{2.449} \\
 \times & 0.0053
 \end{aligned}$$

Appendix No.16

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Punier Sales (in "0000")

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	1.0	0.2	0.27	-0.22	1	0.04	-0.06
2063/64	0.5	0.3	-0.23	-0.12	0.25	0.09	0.03
2064/65	0.4	0.2	-0.33	-0.22	0.16	0.04	0.07
2065/66	0.5	0.3	-0.23	-0.12	0.25	0.09	0.03
2066/67	1.0	0.7	0.27	0.28	1	0.49	0.08
2067/68	1.0	0.8	0.27	0.38	1	0.64	0.10
	x=4.40	y=2.50			X²=3.66	Y²=1.39	XY=0.25

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{4.4}{6} \\ &= 0.73 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{2.5}{6} \\ &= 0.42 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{3.66}{6}} \\ &= \sqrt{0.61} \\ &= 0.78 \end{aligned}$$

$$\begin{aligned} \text{S.D.}(\dagger y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{1.39}{6}} \\ &= \sqrt{0.23} \\ &= 0.48 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger x}{\bar{X}} \times 100\% \\ &= \frac{0.78}{0.73} \times 100\% \\ &= 1.06\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger y}{\bar{Y}} \times 100\% \\ &= \frac{0.48}{0.42} \times 100\% \\ &= 1.15\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= \frac{\sum XY}{\sqrt{\sum X^2} \times \sqrt{\sum Y^2}} \\ &= \frac{0.25}{\sqrt{3.66} \times \sqrt{1.39}} \\ &= \frac{0.25}{1.91 \times 1.18} \\ &= 0.11 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Punier sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1Zr^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1Z(0.11)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1Z0.012] \right.}{2.449} \\
 \times & \frac{0.666}{2.449} \\
 \times & 0.27
 \end{aligned}$$

Appendix No.17

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Ice Cream Sales (in '0000')

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	0.3	0.2	-0.10	-0.17	0.01	0.03	0
2063/64	0.2	0.2	-0.20	-0.17	0.04	0.03	0
2064/65	0.4	0.3	0.00	-0.07	0.00	0.00	0
2065/66	0.4	0.3	0.00	-0.07	0.00	0.00	0
2066/67	0.5	0.6	0.10	0.23	0.01	0.05	0
2067/68	0.6	0.6	0.20	0.23	0.04	0.05	0
	x=2.40	y=2.20			X²=0.10	Y²=0.17	XY=0

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{2.4}{6} \\ &= 0.40 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{2.2}{6} \\ &= 0.37 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\dagger x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{0.10}{6}} \\ &= \sqrt{0.02} \\ &= 0.14 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\dagger y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{0.17}{6}} \\ &= \sqrt{0.03} \\ &= 0.17 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger x}{\bar{X}} \times 100\% \\ &= \frac{0.14}{0.40} \times 100\% \\ &= 0.35\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger y}{\bar{Y}} \times 100\% \\ &= \frac{0.17}{0.37} \times 100\% \\ &= 0.46\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= \frac{\sum XY}{\sqrt{\sum X^2} \times \sqrt{\sum Y^2}} \\ &= \frac{0.12}{\sqrt{0.10} \times \sqrt{0.17}} \\ &= \frac{0.12}{0.32 \times 0.41} \quad 121 \\ &= 0.9231 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Ice-cream sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1 Z r^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1 Z (0.92)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1 Z 0.85] \right.}{2.449} \\
 \times & \frac{0.1}{2.449} \\
 \times & 0.041
 \end{aligned}$$

Appendix No.18

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Cheese Sales (in "0000")

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	0.5	0.3	0.10	-0.03	0.0100	0.0011	-0.0030
2063/64	0.4	0.4	0.00	0.07	0.0000	0.0044	0.0028
2064/65	0.4	0.3	0.00	-0.03	0.0000	0.0011	-0.0030
2065/66	0.4	0.3	0.00	-0.03	0.0000	0.0011	-0.0030
2066/67	0.3	0.4	-0.10	0.07	0.0100	0.0044	-0.0070
2067/68	0.4	0.3	0.00	-0.03	0.0000	0.0011	-0.0030
	x=2.40	y=2.00			X²=0.020	Y²=0.013	XY=-0.013

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{2.4}{6} \\ &= 0.40 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{2}{6} \\ &= 0.33 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\sigma_x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{0.0200}{6}} \\ &= \sqrt{0.0033} \\ &= 0.06 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\sigma_y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{0.0133}{6}} \\ &= \sqrt{0.0022} \\ &= 0.05 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\sigma_x}{\bar{X}} \times 100\% \\ &= \frac{0.06}{0.40} \times 100\% \\ &= 0.15\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\sigma_y}{\bar{Y}} \times 100\% \\ &= \frac{0.05}{0.33} \times 100\% \\ &= 0.15\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}} \\ &= \frac{0.0100}{\sqrt{0.020} \sqrt{0.013}} \\ &= \frac{0.0100}{0.14 \times 0.12} \\ &= 0.60 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Cheese sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1 Z r^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1 Z (Z0.60)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1 Z 0.36] \right.}{2.449} \\
 \times & \frac{0.43}{2.449} \\
 \times & 0.18
 \end{aligned}$$

Appendix No.19

Calculation of mean, S.D., Coefficient of Variation and correlation of DDP Hetauda, Targeted & actual Sweets Sales (in '0000')

Fiscal Year	Target (X)	Achievement (Y)	X=X- \bar{X}	Y=Y- \bar{Y}	X ²	Y ²	XY
2062/63	0.00	0.00	-0.83	-0.83	0.6944	0.6944	0.69
2063/64	0.00	0.00	-0.83	-0.83	0.6944	0.6944	0.69
2064/65	0.00	0.00	-0.83	-0.83	0.6944	0.6944	0.69
2065/66	1.00	1.20	0.17	0.37	0.0278	0.1344	0.06
2066/67	2.00	1.90	1.17	1.07	1.3611	1.1378	1.24
2067/68	2.00	1.90	1.17	1.07	1.3611	1.1378	1.24
	x=5.00	y=5.00			X²=4.833	Y²=4.4933	XY=4.6333

Targeted Data

Actual Data

$$\begin{aligned} \text{Mean } (\bar{X}) &= \frac{\sum x}{N} \\ &= \frac{5}{6} \\ &= 0.83 \end{aligned}$$

$$\begin{aligned} \text{Mean } (\bar{Y}) &= \frac{\sum y}{N} \\ &= \frac{5}{6} \\ &= 0.83 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\dagger x) &= \sqrt{\frac{\sum x^2}{N}} \\ &= \sqrt{\frac{4.83}{6}} \\ &= \sqrt{0.8056} \\ &= 0.90 \end{aligned}$$

$$\begin{aligned} \text{S.D.} (\dagger y) &= \sqrt{\frac{\sum Y^2}{N}} \\ &= \sqrt{\frac{4.49}{6}} \\ &= \sqrt{0.7489} \\ &= 0.87 \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger x}{\bar{X}} \times 100\% \\ &= \frac{0.90}{0.83} \times 100\% \\ &= 1.08\% \end{aligned}$$

$$\begin{aligned} \text{C.V.} &= \frac{\dagger y}{\bar{Y}} \times 100\% \\ &= \frac{0.87}{0.83} \times 100\% \\ &= 1.04\% \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Correlation } (r_{xy}) &= \frac{\sum XY}{\sqrt{\sum X^2} \times \sqrt{\sum Y^2}} \\ &= \frac{4.6333}{\sqrt{4.83} \times \sqrt{4.49}} \\ &= \frac{4.6333}{2.2 \times 2.12} \\ &= 0.99 \end{aligned}$$

The above result shows that there is positive correlation between targeted and actual Sweets sales data. Calculation of Probable error (P.E.) of Karl Pearson's Coefficient of Correlation.

$$\begin{aligned}
 & 0.6745 \left| \frac{1 Z r^2}{\sqrt{N}} \right. \\
 \times & \frac{0.6745 \left| [1 Z (0.99)^2] \right.}{\sqrt{6}} \\
 \times & \frac{0.6745 \left| [1 Z 0.98] \right.}{2.449} \\
 \times & \frac{0.013}{2.449} \\
 \times & 0.01
 \end{aligned}$$

