CHAPTER-I
INTRODUCTION

1.1 Background of the Study

Revenue is the aggregate amount that is obtained from selling different products and from providing services to the people or customers. It is that amount which is collected for day to day operations of business. Without revenue no one can run its business smoothly and systematically. That's why scientific and systematic revenue plan is necessary to attain the organizational objectives. The plan or strategy which is prepared for collecting and utilizing revenue is called revenue planning. Only plan is not sufficient for better results its effective implementation and management is essential to accomplish the organizational goal. Management is a distinct process consisting of "Luther Gullicks" POSDCORB principles, which stand for planning, organizing, staffing/supervising, co-ordinating reporting and budgeting.

Hence, revenue planning and management help a manager for decision making process and SWOT analysis of the competitors as well as employees participation in collecting revenues.

The study is concerned with the revenue planning and management of Dabur Nepal Pvt. Ltd. This is the most famous and largest Ayurvedic organizations that contribute more percentage of revenue to the of government through tax and value added tax. The organization Dabur Nepal Pvt. Ltd. and its product are challenging to the modern medicines and most of the diseases are recovered by means of herbal method. For this reason DNPL is taken for the purpose of study.

The Global economy is passing through severe recession. The market demand worldwide has reduced sharply affecting the world economy negatively, and Nepal is also not an exception to this. Despite of these negative factors DNPL has a very proactive business plan and taken sufficient measures to ensure the healthy sales and profit growth plan along with sound financial health.

1.2 A Brief Introduction to Revenue Planning and Management

Revenue Planning and management are crucial for overall profit planning of business enterprises. Government of the country requires sufficient revenue to carryout development plans to handle day-to-day administration to maintain peace and securities, to launch other welfare activities. In order to carry out such activities government collects revenue. Thus periodical analysis of revenue planning is necessary in order to ensure smooth functioning of enterprises for realization of profit. Revenue is the aggregate amount of the sales of products and rendering services. Planning is deciding in advance with future courses of action from various alternatives. Management is a distinct process consisting of planning organizing, directing, controlling staffing, co-ordinating reporting and budgeting (POS, DCORB) to determine & accomplish the objective of people and enterprises.

The primary purpose of planning of any business is to increase, profit. Managers and subordinates are responsible for the operation with profit plan. Enterprises can not be successful without 6 M+I i.e. (Man, Material, Money, Machine, Mechanism, Method and Information). It helps to achieve better results provides sufficient information for SWOT analysis of the competitors.

Revenue Recognition and planning and management of DNPL

Sales are recognized on dispatch to customers and are recorded net of value added tax. Domestic sales include excise duty of Rs. 167.24 lacs payable to government of Nepal. Export sales do not attract any value added tax.

The company has a very proactive business plane for collecting revenue from Real Fruit Juice and Chyawanprash by installing the project of TBA22 Filling Line for Real Fruit Juice segment and Chyawanprash. It has also an aggressive expansion modernization program for next year. The main proposals under consideration are construction of cold storage and modernization of lab facilities etc.

For the management of revenue HRM of DNPL work together on the principle of mutual trust and transparency in a boundary less organization and continuous innovation in product is the basis of their success. It has followed mercantile system of accounting and recognized income and expenditure on accrual basis except in case of significant uncertainties relating to income. It has followed Labour Act 2048 and

Bonus Act 2030 for distributing amount towards staff housing and bonus. Besides that it has adequate internal control system to ensure safeguard and protection of all assets.

1.3 Overview of Dabur Nepal Private Limited

Dabur Nepal Private Ltd was established in 1992 A.D. joint venture with Dabur India Ltd with an initial investment of Rs. 80 million Joint venture agreement was performed in 1989 A.D. The company was established with a majority share of 80% by Dabur India Ltd. The commercial production was started on November 5, 1992 A.D. The factory and registered office is situated at Rampur, Tokani, Bara District, Nepal and its corporate office is located at TNT building, Koteshwor Tinkune, Nepal. It has successfully implemented its plan in fulfilling the needs in health care, personal care, and food product despite of the difficult business environment in Nepal like continuous bandhas and unstable political situations. This is the first company in the country to manufacture exportable products to the different neighboring countries by means of using ecological resource to be sold at prevalent rates.

It has also adopted modern technologies to develop innovative products in Aayurvedic sector. The turnover of this company in fiscal year 2065-66 was 39476 lakhs and in fiscal year 2064-65 it was 36608 lakhs. That means it was increased by 7.8% as compared to what of previous year 2064-65.

Dabur Nepal Private Ltd. has employed more than 600 local Nepalese for employment in the factory. Apart from that more than 2500 families at various remote place are benefited from collecting taxes, Baccata, Levales, Pipli, Tamar Seed, Sunthi etc.

It has adopted a plan to start the nursery project for sustainable development of resources like medicinal herbs by protecting ecological balance of Himalayas. The application of this project helps to study supply of rare, endangered medicinal herbs, saplings, in the state of the art green house equipped with modern climatic controls. The saplings can be sold at a reasonable cost to farmers in remote areas to grow and harvest with buy back guarantee. Steps have been taken to subsidies the cost of sapling in order to enable broader participation of the local people .In addition to these commercial activities the company has been an active member of the socio-economic development of Nepal.

The company has not only established some benchmark facilities in product or and scientific research but also set in place social programmes that help local communities.

- ❖ Set up social welfare schemes to develop infrastructure facilities in health and education sectors.
- ❖ Promotion cultural events to give a boost to Nepalese art.
- ❖ Sponsor and supporting events to help to build up Nepal presence in the works of sports.

It addition to these activities it has got several awards including higher export award from the ministry of commerce NICCI award for excellent & CIP award for outstanding contribution to the country. In the fiscal year 2000 A.D. DNPL got certificate of Hazards analysis & critical point plan verification for manufacturing of fruit juice and tomato puree. The company produced Real Brand juice in various flavor in mango, orange, apple, pineapple, litchi, Grape & mixed fruit flavours.

The company has shown some, remarkable result in just over a decade.

- ❖ Dabur Nepal Pvt. Ltd established a strong national wide brand, selling through over 20,000 retail outlets throughout Nepal.
- ❖ Dynamic brand and corporate image building exercises though sponsorship of major national sport & cultural event.
- ❖ Capital asset made a jump to 11.72 times in 14 years.
- ❖ Net profit of company-crossed cores of rupees the company has redesigns extent and lunch the product according to necessary and consumer demand.
- ❖ The main objectives of establishment of this company are to set up a modern factory for processing local and imported herbs to produce different varieties of healthful products to sell in local market and export them in foreign countries.

1.3.1 The major product of Dabur Nepal Private ltd.

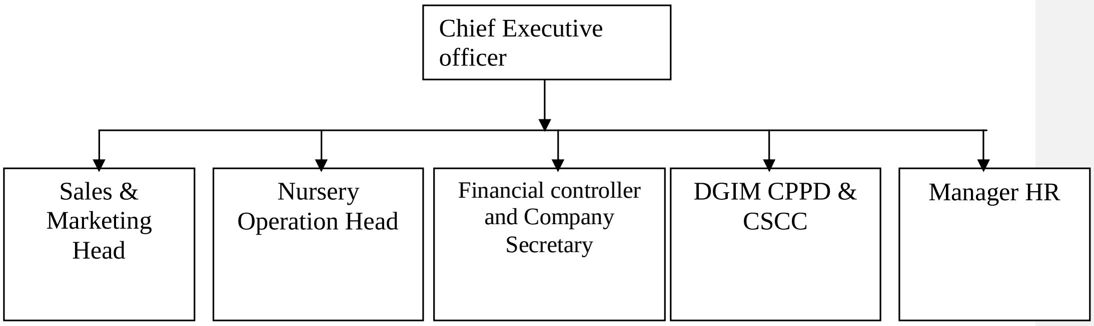
1. Lal Danta Manjan
2. Dabur Lal tooth paste
3. Babool Tooth paste
4. Meswak Tooth paste
5. Vatika hair Oil
6. Valika Shampoo
7. Vatika face pack
8. Vatika Honey saffron soap
9. Amla Hair oil
10. Anmol shampoo
11. Anmol sarson Oil
12. Anmol coconut oil
13. Special Hair oil
14. Baby olive oil
15. Dabur Gulabari
16. Hojmol Tablet
17. Hajmola candy
18. Chywanprush
19. Real fruit juice
20. Glucose D powder
21. Pachan Churan
22. DCp Mish ran
23. Dantmukta
24. Plastic Containers / Bottles /caps / plugs
25. Sanifresh
26. Honey
27. CHIRAYITA –PLANT

1.3.2 Management & Directors of Dabur Nepal Pvt. Ltd.

Management of Dabur Nepal Pvt. Ltd at present is entrusted to board of directors consisting of six members. The members of board of directors are as follows.

S.N.	Post
1	Chairman
2	Managing Director
3	Director
4	Director
5	Whole Time Director
6	Director

The Chief Executive Officer is appointed by the board of Director & CEO is responsible towards the director. Other department heads are appointed by DNPL.



1.3.3 The Bankers Of DNPL

Dabur Nepal Pvt.ltd obtains loans from reputed banks they are

1. Nabil Bank Limited
2. Standard Chartered Bank Nepal Limited
3. Nepal SBI Bank Limited.

Vision of DNPL

Dedicated to the health and well being of every house hold

1.3.4. Core values of DNPL

1. Ownership : This is their company. They accept personal responsibility and accountability to meet business needs.

2. People development : People are their most important asset. They add vailue through result driven training and encourage and reward excellence.
3. Team work: They work together on the principle of mutual trust and transparency in a boundaryless organization. They are intellectually honest in advocating proposals, including recognizing risks.
4. Passion for winning : They are all leaders in areas of responsiblity, with a deep, commitment to deliver results.They are determined to be the best at doing what matters most.
5. Consumer focus : They have superior understanding of consumer needs and develop products to fullfill them better.
6. Innovation: Continuous innovation in products and process is the basis of their success.
7. Integrity : They are committed to the achievement of busniness success with integrity. They are honest with consumers, with business partners and with each other.

1.4 Statement of the Problem

Nepal has adopted mixed economy. Mixed eonomy has directly or indirectly affected the public and private enterprises because of unstable political situation and internal conflict. Most of the public and private enterprises are going to be dissolved dues to the lack of effective economic policies and its implementation.

More legal process and government interference in every sector can not raise the privte enterprises from its present condition. To increase the economic situation of every enterprises the role of government should be subsidized or minimized. Public Private partnership agreement should implement effectively so that economic situation of the country can be improved for the improvement in economic situation. Effective revenue planning and management is necessary because revenue is the amount which is obtained to operate day to day operations and revenue contribute to economic prosperity be cause eonomic prosperity of every country depends upon sustainable economic development. The industrialization is the process of value added that contributes to the creation of new employment opportunities and economic integration.

Public enterprises are established for providing necessary goods and services by controlling price situation to create opportunity for employment to increase government revenues & Contribute significantly in the national economy. Therefore the role of government owned enterprises become very important especially in terms of developing the infrastructure extending social overhead capital which increase the excess capacity of economy that leads to intensify industrial production giving this fact more prominence and greater re-organization was given in the various plan of Nepal government to the role of government corporation. After the restoration of democracy in 1990 A.D. Nepal has adopted mixed economy to attract the "foreign direct investment and techonology transfer act 1992 A.D. was enacted for the purpose which defends technology transfer as any transfer of technology to be made under the agreement between industry and foreign investor. There are various manufactruring industries estblished in Nepal under the foreign investment for e.g. Dabur Nepal Pvt. Ltd. Colgate, Palmolive, Coca-cola Pepsi, Unilever Nepal ltd. etc. Most of them have proved to be the important enterprises for the development of the country. Attainment of huge amount of investment, advanced technology and concept generating employment are the important of those enterpries to Nepal.

The successful operation of any enterprises largely depends upon planning and controlling system of an enterprise. Profit planning & Control is the most important device of management plays key role for effective formulation and implementation of strategic and tactical plans of an organization. Profit planning and control system requires the effective co-ordination between, various financial budgets of an organization. In this contest the study have tried to answer the following research questions.

1. How effective was the sales budget of DNPL?
2. What were the main problems in implementing sales budgeting practice in DNPL?
3. What was the ratio between sales & profit ?
4. What steps whould be taker in the revenue planing & management in the sales revenue of the company ?

1.5 Objectives of the study

The main objectives of the study is to analyze revenue planning & managment to identify problems and recommend possible remedial measures. The major objectives are:

1. To analyze sales revenue of Dabur Nepal Pvt. Ltd.
2. To evaluate the deviation between budgeted sales & actual sales.
3. To make comparision of sales with profit of Dabur Nepal Pvt. Ltd.

1.6 Significance of the study

There are no sufficient studies have been made under this topic, only the rare studies are made but they are insufficient for the present time. In the context of Nepal most of the manufacturing enterprises are suffering from losses due to lack of proper management of revenue planning, That's why proper revenue planning and management plays significant role to save the existence of any enterprises.

Dabur Nepal pvt.ltd has been producing different kinds of products to meet the daily needs of people settled every where. It spends & lot of time and efforts to generate profit & attract customers. Therefore this study is conducted to analyze revenue planning where it has followed systematic longterm strategic plan or not.

1.7 Limitation of the study.

The study is focused on revenue planning and management of Dabur Nepal pvt.ltd but this study may not free from the following constraints or limitation.

1. It is based on secondary data obtained from Dabur Nepal pvt.ltd.
2. The reliability of this study depends upon the information provided by Dabur Nepal Pvt. Ltd. and published data.
3. Statistical tools are applied wherever needed. Drawbacks and weakness of those tools are the limitation of the study.
4. Time period is also the limitation of the study.
5. The study covers the analysis of only eights years data from 2001/02 to 2008/09.

1.8 Oganization / Plan of the Study

The study has been organized in to five chapters each devoted to same aspect of the study on revenue planning and management of Dabur Nepal Pvt. Ltd.

CHAPTER 1 : Introduction

The first chapter present introduction of the study. It includes background of the study, statement of problem, objectives of the study, signficance of the study and limitation of the study.

Chapter 2:Conceptual frame work and Review of literature

The second chapter deals with the review of literature including revenue planning and management of Dabur Nepal pvt ltd in brief

Chapter 3. Research methodology

The third chapter research methodology includes research design, sources of data and data collection techniques.

Chapter 4: Data presentation and analysis

This chapter presents analysis & interpretation of data of related topic based on economic survey, annual reports, different magazines etc. In this chapter collected and processed data are presented, analyzed and interpreted with analytical tool, presenting charts and figures.

Chapter 5 Summary conclusion & recommendation

This chapter is also important part of the study where major finding has been summarized in terms of revenue planning and management .It also gives viable recommendation and draws the conclusion.

Bibliography:

It consist of list of published and unpublished tool, articles, thesis dissertation etc, which have been the sources information and used as references.

Appendix

It consist of relevant materials which are however, not much work mentioning in the main body of the report .It includes balance sheets & income statement and statement of cash flow.

CHAPTER – II
CONCEPTUAL FRAMEWORK AND REVIEW OF LITERATURE

2.1. Conceptual Review

The second stage of research process is review of literature where different books, magazines, papers, records, dictionary are studied after the selection of research subject and approaches and concepts developed in that subject are reviewed. Published and unpublished articles, thesis, reports handouts etc also play vital role in this chapter. It is started from the selection of the topics and it continues until the preparation of report. Exactly the meaning of literature review is the evaluation of research which have been prepared previously.

2.1.1 Origin and development of planning

Planning

The word planing is first developed by Pluto i~~u~~n his book "Republic" but this concept was not utilized .In reference to the modern phase of planning the word planning is used by kristain schonehyender of Norway in 1910 in his essay.

The word planning was started in 1928 in Russia to change the agricultrue based economy into industrial sector .In the year 1930's economic crisis affected almost all the countries negatively but in Russia the impact was very few, that's why it had proved the proper planning con~~m~~tribute for the development of the nation and to face the different challenges .In the decade of 1930's most of the countries followed the concept of planning and implemented it. But the second world war in 1939 had stopped it for few period. ~~-~~After the second world war .the need of planning much realized than before to fullfill the need of people by the utilization of scarce resources to produce maximum products.

In Europe the concept of master plan was fowarded and in America Marshall plan was forwarded to solve the problem of resettlement.

In simple The "5D" respresents planning

D=	Desire	→	Want to express the concept of work done
D=	Design	→	prepartion of layouts, responsibility, search of resources
D=	Deduction	→	To modify from the stakeholders thought
D=	Decision	→	Selecting best alternatives from different alternatives
D=	Deeds	→	to implement

Planning is the foundation of each and every business enterpries. Industry and commerce.~~;~~ F~~f~~ailure and success, profit and loss depends upon the outcome of proper planning. It is an integral part of our lives, without it no action can be completed Many firms and company use planning which determines long run and short run decision for running the busines.

Different writers have different views over planning.

"Planning means setting goals for the firm considering various way of meeting those goals and picking out what appears to be the best way to meet the goal" (Lynch & Williamson, 1493:18).

"To plan is to look ahead and checks out future operation. It is the determination of course of action to achieve a desired result "(Kulakarni, 1985:187)".

The planning process both short term and long term are most crucial component of whole system. It is both the foundation and bond for the other elements because it is through the planning process that an enterprise determines what is going to do, how it can be done and who is going to do it. It operates as the brain centre of an organization and like the brain it both reasons and communicates.

Planning is concerned with taking action immediately to prevent beome obsolete in the future. It is concerned with how an oarganization can change intern~~n~~ally to adopt to variations in external conditions. There are many external factors, which make , the planning proces essential for organization survival .In short , planning refers, to the

the process of answer the questions related with what who, how, where of any organization.

"Planning is directed towards the establishment of desirable future objectives and the formation of organizational structure to be followed in achieving them. Control results from the evaluation of individual and group effort in terms of the prede~~i~~termined goals. The effective discharge of these function is essential to sound business management and successful operation" (Niswongers & Fers 1965:515).

"Planning is first function of management. It is performed continuously because the passage of time demands both re-planning and making new plans. Moreover, current feedback ofter necessities newly plann~~i~~ed actions to (a) correct defeciencies (b) cope with unparticipated event that are in favourable and (c) take new advantage of new developments. Management planning is a process that includes (1) establishing enterprises objectives and goals (2) developing premises about the environment of the entity (3) making decision to activate the plans and evaluating performance f~~r~~eedback for re–planning. Management planning provides the basis for performing the four other functions. Organizing staffing, leading and controlling, (Welsch, Hilton & Gordon, 1998 : 4-5)

"It is some time said that planning is the primary managerial functions which logically precedes all the other functions, since without planning, a manager would not have ativities to organize, would not require a staff, would have no one to direct and would have no need to control. However, the managerial job is actually one, which takes place simultaneously rather than serially. Planning is one of the functions of manager and such involves the selection from among alternative, of entesprises objectives, policies procedures and program. It is thus decision making affecting the fu~~l~~ture course of enterprises (Koontz & Donnel, 1990 : 21).

"Fundamentally then managerial decision making entai~~a~~ls the task of manipulting the relevant controllable variables and taking advantage of relevant non controllable variable that may influence long run operational success. The controllable are these that can be actively planned and controlled by management. In direct contrast management can not influene the non controllable variables. Yet this does not mean the effective planning with respect to them is not possible. Significantly the controllable variable must be projected and planned for take full advantage of their anticipated favourable consequences". (Welsch, Hilton & Gorden 1989: 9-10).

Thus it can be concluded that planning is deciding in advance what is to be done in future ? It is a method of thinking out acts and purpose before and planning start with forcast and complete with determination of future events. It is the first essence of management and all other function performed within the framework of planning.

2.1.2. Development of plannning in Nepal

After the fall of Rana regime in 2007 B.S company act was encated .After the democracy, the process of planned industrialization started with the launching of the first five year plan.

1. The first year plan (1956-1961 / 2013-2018 B.S)

The main objective of the plan was to achieve social and economic development of the country. The country adopted mixed economy concept and focused on industrial development with particular emphasis on cottage industries. The plan was stressed on quality life and laid down certain employment and production objectives. Cottage industries and productive enterprises were given priority.

Following achievements were made during the plan period. Industrial Extension Board was set up, Balaju Industrial District was established .NIDC was established in 1959 .The first industrial policy was announced in 1957. Factory and factory workers Act , 1959 was. enacted.

Following industries were established (i) The Timber Corporation of Nepal (ii) An industrial. I~~E~~nquiry commission was set up. In addition a total of 21 cottage industry centres were opened to provide training in various trades. Preliminary work was made for the establishment of cigarette, sugar, cement and paper industries in the public sector. Royal Nepal Airlines Corporation was established in 1958.

The second three year plan (1962 -1965) / 2018-2021 B.S)

The plan emphasized on establishment of industries in public and private sector. The plan focused on foreign aid for setting up industries in the public sector. In addition, it was planned to develop infrastructure to create conditions for dynamic growth by giving prority in agriculture and industries sector .The plan raised its allocation to industry from 7.5% to 17% of the national budget.

During the plan the industrial policy of 1960 was amended. Patan industrial District was established. In addition Birgunj Sugar factory and Janakpur cigarette factory were established in public sector.

The third plan (1965 – 1970/2022-2027 B.S)

The objective of the plan was rapid economic growth of the country .The plan laid down prority in transpor tation and electric power followed by agriculture .During the third plan 1257 industries were in operations of which 60% were rice mills.

Following industries were established in the public sector (i) Agriculture Tools Factory in Birgunj (ii) Brick and Ti~~t~~le Factory in Harisiddhi Lalitpur and (iii) Leather and shoe Factory in Bansb~~sh~~ari, Kathmandu.

The fourth plan (1970- 75/2027-32 B.S)

The plan focused on the establishment of industries mainly in the private sector. Priority was given to labour incentive industries. During the plan period,central Bureau of Statistics (CBS) had made survey of manufacturing establishments. The survey founds 2437 establishment in 1972/73 as compared to 1257 in 1965/66.

During the plan, industrial policy 1974 was introduced.It was considered land mark history in the history of industrial development in Nepal. In addition industrial~~irla~~ district at Pokhara, Nepalgunj and Dharan were established. The Industrial Enterprise Act, 1973 was enacted to attract private sector for industral investment.

The Fifth Plan (1975-1980/2032-37 B.S.):

The plan adopted a regional development approach to industrial development in establishing industries in the public and private sector. The plan further focused on development of cottage, handicrafts and agro based industries for maximum utilization of manpower. Priority was set for infrastruture development like roads, power and telecommuni cation.

During the plan period the number of establishment increased from 2343 in 1972/73 to 3570 in 1977/78 .The institute of standards and Butwal industrial district were established during this plan period

The sixth plan (1985/2037-42 B.S)

The Objective of this plan was to create favourable environment to attract industrial investment and utilize local capital, labour, technology and raw materials., Encourage export promotion and import substituting industries through emphasis on essential consumer and basic goods were the other objectives of the plan, Industrial policy 1981 was introduced. The policy kept open all industries to private sector except defense and tax holidays provisions were also made. The plan further guranteed not to nationalize the private Industry., Bhaktapur and Surkhet Industrial Districts were established during the plan period. The Industrial enterprise act, 1982 and foreign Investment, 1982 were also enacted.

The seventh plan (1985-1990/2042-47)

The industrial sector was given higher priority in resource allocation. A long term industrial Development plan was prepared. The Indusrial Enterprise, Act 1987 was enacted. Nepal Orient and Magnesite, Bhrikuti Paper and Lumbini Sugar Mills were established. A new Industrial policy was announced in 1987. Raj Biraj Industrial District was established and the work continued on the construction of Dhankuta Industrial District.

The year 1991 was considered as plan Holiday. This is attributed to the change in the political system, Multi Party Democracy from Panchayat Democracy.

The Eighth Plan (1992 - 1997 / 2049-2054 B.S.)

The plan wanted to achieve sustainable eonomic growth and gave priority to industry and tourism sectors. Manufacturing and industry sector including cottage industry were given focused attention.

Number of registered Private Limited industries during the plan was 52,002 and 612 public limited company. The plan introduced liberal private sector industrial investment policy. Accordingly, the policy emphasised on the concept of comparative advantage liberalization, privatization of public enterprises, foreign direct investment, technical skills, environment protection modernization, backward and forward linkages, one-window system and regional balance.

The Ninth Plan (1997-2002/ 2054-59 B.S.)

The plan's main focus was on proverty alleviation. The objectives of industrial development were:

(i) Increase contribution of industrial production and diversify markets with the collabration of private sector.

(ii) Increase production of export-oriented and import substituting commoditites.

(iii) Creation of additional employment opportunities through cottage and small industries.

The key policies of the plan were:

- Liberalization
- Privatization of public enterprises
- Encouragement of foreign direct investment
- legal reforms.

In addition, the plan clearly described the role of government in the industrial development.

The Tenth Plan (2002-2007 / 2059-2064 B.S.)

(a) The objectives of industrial development are:

1. To increase the contribution of the industrial sector in GDP by promoting and facilitating the private sector.
2. To contribute to poverty alleviation goal by increasing the income of purchasing power of the rural people through employment generation in the micro, cottage and small scale industries.
3. To increase industrial competitiveness for attracting FDI and adopting appropriate technology.

(b) Sectoral and macro level major quantitative targets:

1. Achievement of 7.8% annual average industrial growth rate.
2. Total industrial investment of Rs. 40 billions in the plan period, including annual domestic investment of Rs. 5 billions and foreign direct investment of Rs. 3 billions.
3. Creation of additional 2,50,000 employement opportunities in the industrial sector.

The three year interim plan (2007 – 2010/ 2065 – 2067)

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With the end of long conflict, Nepal has now started to move slowly towards the sustainable peace. The three year interim plan (2007-2010) is now in the process of finalization on the basis of recommendations of the recently concluded meeting of the National Development Council. The plan will be brought to implementation from the fiscal year 2007-2008. It has been widely realized that the issues relating to economic development have so far been side steped by the political issues. Incidents causing industrial unrest are wide spread. Industrial climate has not improved. Exports have declined because of the loss of competitiveness due to higher cost of production. Problem of unemployment was not been rightly addressed. An inclusive and judiciously balanced economic growth through increased involvement in rural and backward areas has been long overdue. In view of these development related issues, the need has strongly been left to expedite the implementation of various political commitments, policies, programmes and development projects.

Characteristics of Planning

There are certain characteristics in planning. This characteriststic should be helpful in understanding the fundamental nature of planning process.

A. Uncertainty and risk

Planning involves predicting the future. Thus the manager is faced with the situation of acting rationally with the uncertainty about the future. It is therefore useful to classify decision making according to its degree of certainty or uncertainty. The three situations of decisions can be categorized into

i. Decision making under certainty
ii. Decision making under risk

iii. decision making under uncertainty

B. Use of Information

Planning requires forcasting, "Instead of using historical events as the choice, the data must be convereted to make prediction. For example, where an operating plan in the form of a budget is being developed, the past sales would be the starting point for setting the future sales goal. Other considerations would include the volume and sales price expected in the future, the economic environment, population trends, credit availability and so forth. The successful manager, in planning is concerned with information that will help to determine the real difference among the options.

C. Simplifying

Planning provides the possibility Identifying and extermely large number of option for deating with any one issue .In Addition there can be a very large number of goals toward which to aspire. Plans cannot be made with the understanding that may not succeed. Furthermore new insights and information may require a change in the goals. To deal with this problem in planning a series of decision must be made.

On the other hand, the commitment of resources over some reasonable time span serves to simplify the planning job Another simplfying factor is trade customs that develop with in industries. These services as guides to planning as do laws ethic and other codes of conduct.

A final Simplifying process in the planning job has been designated as the principle of bounded rationality.

2.1.3 Concept of Revenue

Any amount received by government in terms of fees, income tax, fine and penalties , custom duty, excise duty, VAT etc. are said to be revenue.

The work performed by state effectively government should collect revenue. Collection of revenue is the main responsibility of government to maintain peace and security, to develop infrastructure and so, many works which are performed by government for the state. That's why revenue is said to be the piller of any nations. It is aggregate amount received by government .It can be received from different sources.

i. Tax revenue
ii. Non tax, revenue

i Tax revenue:

It is the compulsory payment to the government after the consumption of goods and services. It includes income tax, vat, customs, excise duty etc. These taxes are applied according to the principle of tax to the public .It is the main sources of revenue .It can be collected directly or indirectly .It is not a exchange type of tax.

ii Non tax revenue:

It is not in the exactly form of taxes but it is received in terms of fees, fine and penalties to the government. It is received from the consumption of goods and services according to the needs of peope, it is desirable. It is the small part of revenue. It is the revenue which demands the exchange of taxes.

2.1.4 Revenue Planning

Revenue results from the sale of goods and rendering of services. Revenues are measured in terms of charge made to customer, clients or tenants for goods and services provided them. It also includes interest and dividends earned on investments and other increase in the owners equity except those arising from capital cortribution and capital adjustments. Revenue from ordinary sales and from other transactions in the ordinary course of business is sometimes described as operating revenue (Bhattacharya & Dearden, 1980:137)

The revenue planning estimates are only a guide to the level of future revenues, not a guarantee. If the economy remains strong, the planning estimates are likely to the underestimate future revenues. But if the economy fails to perform at the high level anticipated in the control, the planning estimates will overstate future revenues.

Responsibility centers for sales district are often designated as revenue center. The revenue centres for sales budget is normally a sales Zone or sales district i,e the un it under the control of an area sales manager.

A reasonable degree of accuracy is hard to achieve in sales budget but it is imperative owing to the dependency of other budgets on sales. No methods will ensure absoult

accuracy but reasonably correct forcast are much more likely to result from thorough market research and analysis and application of this knowledge to the individual circumstances of particular business (Varma & Agrawal, 1996:3.33)
The factors influencing the level of revenues may be classified as external and internal (Varma & Agrawal, 1996.3.30)

1. Internal factors:
These include promotiomal aids such as advertising incentives to salesman, ability of the organization to satisfy demand, quality of the finished product, changes in price etc.

2. External Factors:
These~~re~~ include the fluctuation in the size of population, the general level of prosperity, the extent and severity of completion in the market, government policy and regulation. Changes in fashions and tastes, degree of competition expected from new product etc. Elasticity of demand for the product is obvious importance if prices are expected to undergo a change. The revenue plan should be designed to coordinate the efforts of the sales department production department and all other department. Many factors must be considered when sales budget is established, including sales trends, limitation on the supply of merchandise or the companys market, competing products, the expected amou~~n~~nt of advertising and general level of the economy. Since most of the unknown companies frequently mantain a specially trained staff to increase them.

The revenue planning process is a necessary part of profit planning and control. It provides for the basic management decision about marketing and based on those decision it is an organized approach for developing in a comprehensive, sales plan. If the revenue plan is not relistic all of the other parts of the overall profit plan also are not realistic. Therefore if the management believes that a realistic revenue plan can not be devloped there is little justification for PPC. Simply if it were really impossible to asses the future revenue potential of a business there would be little incentive for investment in the business initially or for the continuation of it except for purely speculation ventures that most managers and investors preferred to avoid it. (Welsch, Hilton & Gordon, 1999 : 171 – 172)

The logical starting point in developing the revenue plannig is to estimate sales .It does not follow however, that the revenue estimation can be considered in isolation or that once the revenue estimates has been computed , the other element of revenue and expenses will fall into place. These are circular relationship between sales and some expenses. In fact the level or amount of certain expenses may have a considerable influence on the revenue. For example, the relationship between advertising and sales (Finney & Miller, 1963:389)

The company erases profit only when it is able to sell its product and not when it produces them. It is no use producing goods that are not likely to be sold and for which there is a limited demand. In some business, it is necessary to establish that the product will sell even before it is producted. In normal times of keen competition on the sales forecast may be realistic. It is Undoubtedly, true that past can provide experience and information which will be of assistance in estimating present and future revenue, but care must be taken in presenting past facts to management so that incorrect conclusion may not be drawn the from.

2.1.5 Revenue Planning Process

A planner should complete the following process for planning the revenue .They are as follows (welsch,et. al 1999: 176-182)

Step 1. Development Management Guidelines for Revenue Planning

All Management participants in the sales planning process should be provided with specific management guidelines to be followed in sales planning. Fundamentally these guidelines should specify sales planning responsibilities. The purpose of these guidelines to attain is to attain co- ordination and uniformity in the sales planning process. The guidelines should emphasizes enterprise objectives goals, and sales startegies. The guideline also should direct attention to such areas as product emphasizes, general pricing policies, major marketing strutegies and competitive position.

Step -2 prepore sales forcast

One or more sales forecast should be prepared. Such separate forecast should use different assumptions, which should be clearly explained in the forecast. The management guideline should provide the broad assumptions (i) quantitative (ii) technogical and (iii) judge mental. These forecasting methods include time series smoothing, decomposition for time series, advanced time series, simple and multiple regression and mo~~l~~deling. The forecast should include stratigic and tactical forecast that are consistent with the time dimensions.

Step 3 : Assemble other Relevant Data

In addition to steps (1) & (2) all other information relevant to developing realistic sales plan should be collected and evaluated. This information should relate to both constraints and opportunities. The primary constraints that should be evaluated are.

i. Manufacturing capacity
ii. Source of raw materials and supplies or goods for resale.
iii. Availability of key people and labour force
iv. Capacity availability.
v. Availability of alternative distribution channels.

These five factors require evaluation and co- ordination among the heads of the various functional areas in developing a realistic revenue plan.

Step 4: Develop the startegic and tactical sales plan using the information provided in step (1), (2) and (3) the management develops a comprehensive revenue plan. To do this the planning process must be structured to maximize motivation of the sales force and realism in the revenue plan. These processes should recognize the importance of management goals both strategic and tactical. The process of developing a realistic revenue plan shou~~i~~ld be unique to each company because of the company's characterstics its products, its distribution channels, and the competence of its marketing group. Four differnt participative approach widely used are characterised as follows. (i) sales force composite, (ii) sales division manager's composite (iii) executive decision and (iv) statistical approaches.

Steps 5 Securing manaegerial comittment to attain the goals in the comprehensive revenue. Top management must be fully committed for attaining the sales goals that are specified in the approve revenue plan. This commitment requires full communication to the sales manager of the goals : approve marketing plan and strategies by sales responsibilities. The commitment must be strong and ever present day to day operation.

2.1.6 Concept of Management

The concept of management was used by private sector only in the past but nowadays it is a regular exercise of bureaucracy. This is new concept for public administration to achieve the organizational goal .It is the activities of planning, organizing, decision making leadership and control.

In 1830s Charles Babbage approach was forwarded according to the specilization works should be divided and responsibilities are given to the worker's in his book. Father of scientific management is F.W. Taylor. According to him what, people do and if they are doing proper and regular way should be informed. In 1911 this principle was developed after two decades experience of engineering field in Midrale and Betthelehm still com pany.

According to Henry Fayol

There are four scientific Management theory

1. Rule of thumb
2. Selection of group work and training
3. Labour incentive management
4. Similar work division between management and worker.

"Organization and Management is the activities of those group of people of government, public or private firm who are asked to advise adminstrater or the managers are in the efficiency of the work. (Palmer)

2.1.7 Management process

Management is the process of planning, decision making and controlling .An organization is the common place where different physical resources, people and activities get managed by the system force .It is an integrative function directed towards achieving organizational goals. It is the management which plans decides implement and has a control over different activities of the organization.

Every business organization begins with the objective of profit. The owners, directors or trustees of an organization set its goals often with help of management .In pursuing its goal an organization acquires resources, hires people and then engages in organized sets of activities. It is upto the management team to make the best use of organization's resources, activities and people.

In managing the resources, activities and people of the oranization, the management process involves following activities. (Managerial Accounting Nepalese Perspective)

Planning:

Planning is the process of thinking in advance about future activities. It is a forward thinking process that contemplates to manage uncertainties and risks .It is the act of controlling an organization from devating from its goals .A well set plan is the key to success for an organization planning should be such that it reflects the true picture and reality of the organization planning is done at both strategic and operational level strategy itself a plan to lead the oranization with a long termvision. Planning is developing a detailed financial and operational description of anticipated operations.

Controlling :

Controlling is the process which assures the management that the organization is not deviating from its basic philosophy. It is applied basically in the operational level because the actualization of the plans and strategies is done in this level. The component of management which is engaged ensuring that organization operates in the intended manner achieve its goals is termed as controlling.

Responsibility accounting system is a managerial accounting technique that is of key importance to the management control process. Managerial accountants prepare the budget or develop standards and compare it to the actual performance for any deviation that arises, corrective action are taken to improve it.

Decesion Making :

Decision making is the process of selecting of the best perceived alternative from the available different options. It is to be done all levels management. Decision making is all about choosing from among the avaliable alternatives. The management team often comes across situation where decisions need to be taken considering the best interest of the organization.

Organizational success primarily depends upon the decision made by the management. For example given the current political situation in Nepal, if local consultancy firm is asked to implement a project in a conflict area, the management team needs to take a decision on whether or not to accept the consultancy, if yes which site to select so that it will be the most cost effective and safest for the companyand whether the job is worth taking at the situaltion. The best decision taken from among the several choice direct the company in the future.

Make or buy decision, further processing decision, recruitment decision, product mix decision, product line drop or continue decision etc are some common problems in business credit policies.

2.2 Management System

A manager is efficient if he/she utilizes the available resources (such as men, money, materials, time etc.) without any wastage in the working process whereas a manager is effective if he is able to achieve desired end results (such as goods, services, profit, customer satisfaction etc.)

The concept of 'Management' can however, be discussed in different ways. As a discipline, management refers to a specialized branch of knowledge which involves the study of certain principles and practices. Like physics, mathematics, economics, sociology it also has its own set of principles and techniques to facilitate managerial jobs. As a group, management refers to a group or team of managers who make decisions and supervise the work of other. Broad expressions, such as 'management takes a rough stand against workers; management has declared a lockout', often hit newspaper headlines. When such statements are made, reference is actually made to people who look after the different affairs of an organization.

Likewise, Management as a process refers to a series of interrelated functions, such as planning, organizing leading and controlling. This concept suggests that all managers perform certain functions in order to realize certain goods . The other notion regards management as an activity which states that, management is the art of getting things done through the efforts of other people. It is an activity in which i) right decisions are taken at the right time, ii)managerial activities are performed to attain predetermined goals, and iii) effective control over the actions of human being is ensured.

According to Mary Parker Follet, "Management is the art of getting things done with and through people."

According to Chester I. Barnard, "Management is getting things done through people by making the efficient use of resources."

According to George R. Terry, "Management is a distinct process consisting of planning, organizing, actuating (leading) and controlling to determine and accomplish the objectives by the use of people and other resources."

According to Ricky W. Griffin, "Management is a set of activities (including planning, organizing, leading and controlling) directed at an organization's resources (human, physical, financial and information) with the aim of achieving organizational goals in an efficiently in a changing environment."

To sum up, management is concerned with tasks, resources and goals. It is the process of planning, organizing, leading and controlling (tasks) an organization's human, financial material and other resources (resources) in the best possible way to increase organizational effectiveness (goals).

A . Main/ Basic Functions

If you imagine a drama or any other stage performance, you can see all basic functions of management - drafting a framework for performance (planning), preparing the stage (organizing), bringing people into the stage (staffing), mobilizing them (leading), and finally learning and changing things as and when required (controlling).

1. Planning : drafting a framework

Planning is concerned with developing a framework for future actions. It is a systematic process of thinking and deciding before doing something. It involves the determination of goals as well as the activities required to be undertaken to achieve those goals. Planning process generally involves the following steps:

Setting of goals or objectives

Establishing planning premises (i.e., assumptions about future environmental conditions)

Identification of alternatives

Evaluating alternatives and making a best choice

Detailing the best choice (what? where? how? by whom? etc.

Allocating financial resources

Revisiting/modifying the plans as and when required

According to H.E. Hurray, "Planning is deciding in advance what is to be done . It involves the selection of objectives, policies, procedures and programs from among alternatives."

According to Bateman and Snell, "Planning is the conscious, systematic process of making decisions about goals and activities that an individual, group, work unit, or organization will pursue in the future."

To conclude, planning is the systematic process of making decisions about goals and the means and ways to achieve those goals. Planning lays down the base for other managerial functions and thus helps to fulfill the gap between where we are and where we want to go.

2. **Organizing: preparing the stage**

Organizing prepares the stage to perform organization jobs in the best possible way. It is the orderly arrangement of resources and activities to accomplish something. Planning develops a framework for future, and organizing does further preparation for the effective execution of jobs. For this, manager are required to:

- Identify the details of jobs/ activities to be performed (job design)
- Classify the jobs/ activities (departmentation)
- Create positions and determine 'span of control' and 'chain of command' (differentiation)
- Delegate authority to different positions and define their responsibilities
- Ensure appropriate coordination among people and units (integration)

According to Louis A. Allen, "Organizing is the process of identifying and grouping the work to be performed, defining and delegating responsibility and authority, and establishing relationship for the purpose of enabling people to work most effectively together in accomplishing objectives."

In short, organizing may be defined as a process of bringing different resources together and establishing a productive relationship among the various positions and units in order to facilitate efficient functioning of an enterprise. Organization structure is probably the most tangible outcome of the organizing process. It is the backbone of management functions.

3. Staffing : bringing people into the stage

Staffing is closely related to organizing. Organizing develops the organization structure where as staffing hires and fits the people into that structure. Staffing involves fitting people into the structure and keeping it filled. In a broad sense, it can also be regarded as a human resource management function in the organization, which involves acquisition, development, utilization and maintenance of people in the organization.

4. Leading, Mobilizing the people

Leader is a person in a group who is capable of influencing others. Leader provides both purpose and direction to the people in a group and motivates them to put efforts best of their capabilities. If we talk about leadership it refers to the ability of a person to influence others in order to follow the desired direction. Therefore, it is obvious that leading is the process of influencing the attitude and shaping the behavior of other people in a group. It is the heart of management functions as it puts human resources into action.

Hodge and Johnson have rightly remarked that, "Leadership is the ability to shape the attitude and behavior of other whether in formal or informal situations.

According to Hill and McShane, "Leading is the process of motivating, influencing, and directing others in the organization to work productively in pursuit of organizational goals."

To sum up, leading is the process of influencing the attitude & behavior of people and putting them into action to accomplish certain goals or objectives. This function of management mobilizes people dimension and people dimension mobilizes all other resources in the organization. Therefore it is regarded the heart of management functions.

5. Controlling: learning and changing

Controlling is the end function of management. It is the process of regulating the organizational activities by finding or anticipating the deviations between actual performance and the targeted performance. If there is any undesirable deviation or the deviation is likely to occur, corrective actions are taken. It may be taken before they occur (pre-control) or as soon as they are reported (concurrent-control) or at least in the next cycle (post-control). Controlling process generally involves the following steps:

- Establishments of targets or control standards
- Measurement of performance
- Comparing performance with standards
- Finding the extent of deviation and the causes of deviation
- Taking corrective action

In the words of George R. Terry, "Controlling is determining what is being accomplished, that is, evaluating performance and, if necessary, applying corrective measures so that performance takes places according to plans."

To sum up, controlling is the process of comparing actual results with some predetermined standards, finding deviations and their reasons, and applying corrective measures in planning and/ or implementation stage. It keeps the subordinates under check and bring discipline among them. This function puts organization into the direction of continuous improvement. Thus, without controlling management process becomes useless and incomplete.

B. Subsidiary Functions

Besides the above discussed main functions, there are some other functions of management which are known as subsidiary functions of management. Though they are separate function of management; often they help some other functions to better exercise. They are:

1. Decision Making

Decision making is the act of making a choice from among two or more alternatives. It is an integral aspect of every management function particularly the planning . A rational decision making process involves a number of steps like identification of problem, identification of alternatives based on some criteria, evaluation of alternatives, making a best choice and, finally, evaluating the decision effectiveness.

2. **Motivation**

   Motivation is concerned with creating willingness in individuals to do something in the best possible way. People can be motivated through some sorts of rewards, incentives or recognition. This function is generally regarded as an essential element of leading function. Without motivation, a leader cannot influence and mobilize the people under his/her charge.

3. **Communication**

   Communication is the process of transmitting ideas, information and understanding from one person to another. It may be in oral form or in writing or through gestures. It is an important aspect of leading function as a managerial leader has to communicate plans, polices and other guidelines to subordinates and receive feedback from them. Herbert Simon has rightly remarked that, "Without communication there can be no organization…….. and no question of influencing the behavior of groups and individuals."

4. **Coordination**

   Coordination is the process of integrating and harmonizing the activities of all individuals and departments to bring unity of action for the purpose of achieving common objectives or goals. It is required for all functions of management. Still it is more concerned with organizing function. In organizing function, departmentation differentiates the total activities whereas coordination integrates these differentiated activities. Without coordination organizations lack focus and synergy cannot be achieved.

5. **Supervision**

   Supervision is the managerial task of observing the subordinates at work to ensure that the work is being performed according to plans, procedures and time schedule. It is the essence of both leading and controlling functions.

2.2.1. Interrelationships of Management Functions

For theoretical purposes, it may be convenient to separate the management functions and study them independently but practically speaking, they challenge such categorization. They are highly inseparable. Each function blends into the other and there is sometimes no clear-cut demarcation between management functions. For instance, planning prepares framework of course of actions and organizing again revisits those actions and does further preparation by designing the appropriate structure. Likewise, leading function puts people into action and controlling ensures whether these actions are in track.

Besides, at any given point of time managers are likely to engage in different functions simultaneously. For some activities managers are planning while for other they are implementing, evaluating and controlling. However, for a particular activity, these functions tend to be performed in some order or sequence, viz…. planning, organizing & staffing, leading and controlling.

2.2.2 Managerial Roles and Skills

Managerial Roles

We generally suppose that managers have to plan, organize, lead and control to achieve desired end results in organizations. But, managers have to do lot more than what they are generally supposed to do. Though there is no universal list of what managers actually do or the managerial roles, one of the most frequently cited studies of managerial roles was conducted by Henry Mintzberg. He observed and interviewed five chief executives from different industries for a two-week period in the USA. He identified that managers serve in 10 different but closely related roles. These ten roles fall into three categories as: 1) Interpersonal roles 2) Informational roles, and 3) Decisional roles

1. Interpersonal Roles

   Interpersonal roles are roles that involve interacting with other people inside and outside the organization. These roles directly from the manager's position and the formal authority provided to him or her. studies show that managers spend significant amount of time to perform these roles. These roles include:

   i. Figurehead role: Managers play the figurehead role when they perform duties that are ceremonial and symbolic in nature. These roles include greeting visitors, attending ribbon cutting ceremonies, signing legal documents, attending a subordinate's wedding or speaking at functions in school or club.

ii. Leader role: Managers have to lead their subordinates. They should know how to influence and shape the behavior of subordinates. It consist directing, coordinating, motivating, staffing and controlling activities.

iii. Liaison role: It involves maintaining relations internally with different units and externally with the different segments of society like buyers, suppliers and strategic partners for building the image, and gathering information and other resources.

2. Informational Roles

By virtue of his/her interpersonal contacts, a manager emerges as a source of information about a variety of issues concerning the organization. Managers collect information from various sources both inside and outside the organization, process that information, and distribute it to others who need it. Mintzberg found that managers spend 40 percent of their time in these tasks. These roles include:

i) Monitor role: As monitors mangers scan the environment both inside and outside the organization. This can be done by reading reports and periodicals, by asking their liaison contacts and through gossip, and by using their own information system or databases

ii) Disseminator role: In the dissemination role managers regularly transmit information regarding changes in policies and sometimes about specific technical issues to their subordinates, their peers and to other members if the organization. This can be done through memorandums, phone calls and staff meetings.

iii) Spokesperson role: In their spokesperson role, managers deliver specific information to individuals and groups located outside their department or organization. They do it in different ways, e.g., through a simple presentation session in a board meeting or through a press conference about the company's actions.

3. Decisional Roles

Management guru Peter Drucker once wrote that whatever managers do, they do through making decisions. Whereas interpersonal roles deal with people and informational roles deal with knowledge, decisional roles deal with action. The information collected through monitoring is directed toward discussions, and ensuring that those decisions are put into action. Mintzberg identified following four decisional roles:

i. Entrepreneur role: In the entrepreneur role, managers initiate and oversee new projects that will improve the organization's performance.

ii. Disturbance handler role: As disturbance handlers, managers take corrective action(s) in response to previously unforeseen problems that arise. Labors may go on strike: production processes may break down: valuable employees might leave for jobs elsewhere: and so on. Managers must decide what to do about these unanticipated problems-often quickly.

iii. Resource allocator role: As resource allocators, managers are responsible for allocating the physical and monetary resources of the organization to different people or places.

iv. Negotiator role: Lastly, managers perform the negotiator's role in which they discuss and bargain with other individuals or groups to gain advantage for their own unit or organization. They negotiate with suppliers for better delivery lower prices and higher quality inputs. Likewise, they negotiate with customers, trade unions and even with peer for different purposes.

To sum up, all managerial roles should be performed by the managers at all levels, but the nature and degree of role performance may vary. For instance, top-level managers spend much more time the figurehead role than do first-line managers Likewise, the liaisoin role of top and middle managers will involve individuals and groups outside the organization, while at the first-line level, theliaison will be outside the unit but inside the organization.

Managerial Skills

A Skill is an ability or proficiency in performing a particular task or the given responsibility. Regardless th level of management, managers must possess andseek to futher develop many critical skills. Different authors have given different typologies for explaining managerial skills. Robert L. Kathas suggested three managerial skills as conceptual, human and technical. Koontz and Weihrich have added one more skill on this- the diagnostic skil. Likewise, invancevich, Donnelly and Gibson have suggested seven different managerial skills. Considering all these and other, we can propose the following typology of managerial skills.

1.Technical skills

Technical skill is the ability to use specific knowledge and expertise in order to deal with day-to-day problems or activities. For example, engineering supervisors, accountants and computer programmers all require highdegree of technical skills to perform their respective jobs. This skill is highly necessary for lower level managers as they are closest to day-to-day activities or problems. The need and importance of technical skill usually diminishes with successive higher levels.

2. Conceptual skills

Conceptual skills consist of the ability to visualize or conceptualize the whole organization by understanding internal as well as external realities. These skills are more important to top level managers as they are required to fully understand the organizational system, various subsystems & their interrelationships, and the external environmental factors that influence the organization. Conceptual skill is especially helpful in setting long-rang plans of the organization. The relevance of conceptual skill for lower level managers is substantially low as they are mainly concerned with their own unit's functions only.

3. Human skills

Human skill is the ability to work with other people in a cooperative manner. It involves understanding, patience, trust and genuine involvement in interpersonal relationships. The human relations skill is essential at every level of management as it is the reflection of a manager's leadership abilities. Since the lower level managers are required to handle relatively larger number of people at the workplace, this skill is more important to them. With globalization and the work forced diversity, this skill is gaining more importance these days. Managers are required to learn new ways of dealing with people from different countries with different cultures and value systems.

4. Diagnostic or Analytical Skills

This skill refers to a manager's analytical ability where a manager can logically and objectively investigate and analyze a problem or an opportunity. In essence, it is the ability to identify key factors of a particular situation, and evaluate them by using scientific approaches. It is needed to understand a situation in a particular context and make appropriate decisions. This skill is extremely significant to the performace of top level managers.

5. Communication skills

Communication skill is the ability to property transmit the ideas, information and understanding from one person to another. It is almost equally important for managers at all levels. A manager's best ideas will have little impact if they cannot be communicated effectively. Proper communication eliminates delays, misunderstanding, confusion, distortions and conflicts and improves coordination and control. All four communication skills, namely, writing, reading, listening and non-verbal gestures are important ingredients of successful leadership.

6. Political Skill

The word "politics" has a bad reputation in the workplace, with connotations of manipulation and dark dealing. But, it actually means the ability to read the situation well, understand others and develop and use networks effectively to enhance one's personal and organizational agendas. It is helpful for enhancing work effectiveness and career success. Higher level managers are generally required to be more political to exert influence on their subordinates in order to get things done. Political skill actually is both inborn and acquired.

7. Computer Skills

Computer skills involve the conceptual understanding of computers and, in particular, the ability to use the computer software to perform many aspects of one's job. Computers can perform in minutes tasks in financial analysis, human resource planning, and other areas that otherwise take hours, even days to complete. Therefore it is helpful in increasing efficiency and productuvity of managers. Regardless the level of management and the type of organization, it is quite important these days. This skill can also be discussed as the most important aspect of technical skill.

To sum up, management is a challenging and complex task, and performing it effectively requires a variety of skills. Through the above skills are all-important, the relative importance of each will vary according to the level of management in the organization.

2.2.3 Emerging Concepts in Management

Management is a vast discipline which includes various concepts from different disciplines like economics, industrial engineering, psychology, sociology, political science etc. Newer concepts are emerging day after day. Some of the main emerging concepts include:

1. Total Quality Management (TQM)

Quality for productivity and profitability is the belief of QM. Quality exists not only in the end product or service; it is the part of the process used to create goods and services. An effective TQM approach helps managers to produce greater quantity at lower costs by reducing rework rates and cycle times. It is a continuous and comprehensive approach to improve product quality and there by customer satisfaction.

Initially TQM was a management philosophy devised by an American (W. Edwards Deming) but first adopted by the Japanese. It focuses on the needs of customer, both internal and external, realigning organizations form detection to prevention aiming to improve quality gradually and solve problems systematically.

2. Benchmarking

It is the process of comparing own products and processes against the very best in the market or industry. By observing the efficient processes and products of competitors, organization can take necessary steps to improve its own quality.

3. Outsourcing

It is the process of subcontracting services and operations to other firms that can do them cheaper or better or both. If those areas are clearly identified and outsourced. Organizations can have high quality operations at reasonable costs. It can also save time and management can pay more attention on crucial strategic issues.

4. Business process Reengineering (BPR)

Business process reengineering is the radical redesign of all aspects of a business to achieve major gains in cost, quality, service levels and speed. It involves massive and comprehensive change programs in all aspects of organization like organization desigh, technology, people and process.

It is generally regarded as a revolution rather than an evolution and therefore, it is aimed at achieving dramatic improvements. Installing the new programs/software in computer after formatting the hard disk is similar to the concept of BPR.

5. Ethics and social responsibility

Ethics refer to principles of behavior that distinguish between good, bad, right and wrong. Thus, business ethics comprises the moral principles and standards that guide behavior in the world of business. Traditionally, business organizations were regarded as economic institutions with the main or sole objective of making profits. But, nowadays they are regarded as social entities too. Therefore, the management, these days is expected to have a great awareness of the ethical dimension of business. Furthermore, they are also expected to fulfill the various expectations of different segments of society.

6. Employee empowerment

It is another emerging concept and issue in global management arena these days. It refers to the act or process of making employees capable of doing their jobs better by providing adequate authority, information, resources and training etc. One of the main reasons of putting emphasis on employee empowerment is that skilled and empowered people is regarded as only a true competitive advantage as other advantages like location, technology etc. can be easily copied or imitated by competitors.

7. Knowledge management

Knowledge management refers to the effort by which organizations acquire and utilize both explicit and tacit knowledge. Explicit knowledge is more obvious and can be articulate easily while tacit knowledge is difficult to articulate and transfer to other people.

8. Virtual Organizations

Virtual organization or the network organization is one of the emerging concepts in management, particularly in the organization design. These organizations create a network with outsiders and whenever necessary, contract out the managerial functions like promotion, distribution, acount keeping, HRM etc. If management feels that outsiders can undertake these functions in a better and/or cheaper ways, such functions are outsourced. What is then left with the organization? Very little. That's why they are called virtual organizations. These days more and more US and Japanese organizations are relying on such structure to get the advantages of speed, efficiency, cost effectiveness, flexibility etc.

9. Team Structure

In recent years, to overcome the drawbacks of individual decisions and job performance, the concept of team structure and team work has been developed. The team concept breaks down the departmental barriers and decentralizes the authority to teams which are closest to actions. Small organizations like clubs, cooperatives themselves are the teams. In bigger organization, teams can be formed at functional and cross functional levels. The main advantages of team structure are the promotion of climate of creativity and innovation in the organization and chances of making better decisions. However, there are certain drawbacks associated with this issue like no clear chain of command and problem of individual accountability.

2.2.4 Emerging challenges for Management

The managers today face an increasingly complex and dynamic environment. The forces of change, both within and outside the organization, are constantly providing new challenges for management. Some of the major issues or challenges that confront all managers today are as follows:

1. Globalization of Business

Globalilzation of business refers to the free flow of goods, services, information and resources across the world. BMW, German-owned firm, builds cars in South Carolina, USA. Toyota makes cars in Kentucky, USA. General Motors of USA makes cars in Brazil. They all sell their cars in different international markets. These examples illustrate that the world has become a global village. Even though the national boundaries remain, the economic boundaries are fast disappearing. This phenomenon has posed many challenges for today's managers. It exerts continuous pressure on competing organizations to upgrade quality, reduce costs and develop new and/or superior products in terms of customers taste and preferences. Besides, managers may find difficulty in working with people from different nationalities and cultures. Thus today's managers are compelled to think globally and act locally to convert these challenges into opportunities.

2. Quality and Productivity

High competition has forced today's managers to achieve quality and productivity simultaneously. With increased awareness among customers dimensions of quality are widening from primary performance characteristics to reliability, durability, serviceability, aesthetics and perceived quality conveyed via brand name, reputation etc. Managers are being asked to get more results by the use of limited human, physical, financial and informational resources available in their organizations,. To achieve these ends, managers are required to implement quality management and process reengineering programs that require extensive employee involvement and huge investments. In process reengineering programs, which are concerned with demolishing existing inefficient systems and starting from the scratch, there may be resistance from employees to change initiatives, Thus, it is another critical challenge that today's managers are confronting.

3. Managing Workforce Diversity

Workforce diversity is the organizational reality today. Organizations are becoming more heterogeneous in terms of gender, race, religion, nationality, age group, economic class, educational level, political sentiment and other backgrounds. In one hand, managers are required to recognize their individual differences and motivate them by using diverse tools and techniques. On the other hand, managers are facing the challenge of bringing the people of different backgrounds into conserve work teams. If not managed it properly, it leads to problem in communication, more interpersonal conflicts and there is a potential for higher employee turnover. However, if properly managed, if can promote creativity and innovation in organizations.

4. Business Ethics and Corporate Social Responsibility

Ethics is a conception of right and wrong conduct. It tells us whether our behavior is moral or immoral. Business ethics is the application of general ethical ideas to business behavior. If dishonesty is considered to be unethical or immoral, then anyone in business who is dishonest with its stakeholders - employes, customers, shareholders or competitors - is acting unethically or immorally. If protecting others from harm is considered to be ethical, then a company that recalls a dangerously defective product is acting in an ethical way. Although ethical scandals in business are not really new, media and public attention on them in recent years has increased significantly. Violation of ethical codes, knowingly or unknowingly, by business and its managers may result in penalties and even social boycott. However, if it is managed properly by developing and adhering to ethical codes, it results in better stakeholder relations and enhanced reputation of the organization.

Besides business ethics, corporate social responsibility (CSR) is another issue that today's managers are confronting. It goes beyond ethical issues. CSR refers to the business management's obligation to set policies, make decisions and follow courses of action to protect and promote the interest of different stakeholders going beyond the requirement of law. It oversees different areas as workplace (employees): marketplace (customers, suppliers): shareholders; movement; community; environment; ethics; and human rights. Since managers are required focused on dual objectives, namely, making profits and promote the interests of different stakeholders, they may find it very difficult to balance. There is always a chance of contributing more on one aspect in the expense of others. But when managers are able to identify the appropriate approach of CSR then it becomes an opportunity. Organizations may reap long term benefits of improved relationships with the local communities, customer loyalty, increased worker motivation and retention, enhanced reputation, and ultimately higher profitability by committing themselves to CSR practices.

5. Technological Changes

From videoconferencing to computer-aided manufacturing and robotics, technological changes have made our world smaller, faster and easier. Information can be accessed through digital highways (i.e., internet & websites) and jobs can be performed from non-office locations too. But, these technological developments have brought a number of challenges for today's and tomorrow's managers. Rapid technological changes very quickly render the existing technologies may require large sum of money & updated skills on the other. Likewise, super-fast change in information technology has put middle level managers job into stake. It is because direct link of lower level people, by use of information technology, with top management has substantially reduced the relevance of middle level management.

6. Employee Empowerment

Employee empowerment refers to the act of providing adequate authority to people, enhancing their skills and giving people access to information and resources so that they can do a better job of what they are doing. It is an emerging issue in global management arena these days. One of the main reasons of putting emphasis on employee empowerment is that empowered people is regarded as only a true competitive advantage for modern organizations unlike location, raw materials and even technology. But there are certain challenges associated with this phenomenon. First, It may lead to misuse of authority and resources, second, it may lead to high employee turnover (i.e., career mobility) after having access to key information, knowing business secrets and upgrading skills. And, finally, managers may fear of losing business secrets and control over their subordinates.

7. Stimulating Innovation and Change

Innovation refers to the act of putting newideas into action. If new ideas are put into action to develop a different technology or product attributes or way of doing things, it is regarded as innovation. Innovation and change is essential for modern organization in order to stay ahead of competitors. It is probably the most effective way of expanding markets, customers, and the revenue. But it is not that simple: it requires certain cultures like risk taking as opposed to status quo, encouraging creative ideas and celebrating success. Likewise, it requires certain mechanisms like the use of autonomous or semi-autonomous teams, different types of information systems (e.g., MIS and DSS) and appropriate reward systems. At Google, for example, employees are asked to spend 20% of their time working on something that interests them away from their main jobs. Companywide, a full 10 percent of employee time at Google is spent dreaming up new projects. They also get opportunity to work in different teams. Although most of these projects never become products, some do- such as Google maps, Google mail, Google earth, and Google books. These innovation helped Google to stay ahead of its competitors. Thus, stimulating innovation and change is inevitable to survive and excel in the marketplace but it's a very challenging job.

8. Responding to Outsourcing

Outsourcing is a fully-fledged business megatrend around the particularly in North America, Europe and Japan. It is the process of contracting out the business functions like production, marketing, human resource etc. to outside parties, within or outside the country. If management feels that outsiders can undertake these functions in a better, cheaper or faster ways. Organizations can also focus on strategic concerns if routine functions are outsourced. Nike, Inc. of USA is the best example of it. The annual average revenue of Nike in recent years is more than $19.2 billion but it outsources almost all functions like manufacturing and distribution to outside parties in other parts of the world including Indonesia, China, Taiwan, India, Thailand, Vietnam, Pakistan, Philippines, and Malaysia. Despite several benefits there are a number of challenges associated with outsourcing. First, it may be difficult to monitor the quality control systems of outsourced parties. Second, outsourced parties may establish their own business and break the relationship over time. Third, coordination becomes much difficult with high degree of spatial or geographical differentiation of outsourced parties. Finally, it may be criticized in the ground of social responsibility as it provides the employment opportunities to the other communities and countries, not the local.

9. Knowledge Management

Knowledge Management is concerned with finding, unlocking, sharing, and altogether capitalizing people's knowledge and skills. Today, managers must create a work environment that attracts good people, makes them want to stay, and inspires creative ideas from everyone. The ultimate goal is to turn the brainpower of their people into profitable products. One of the top living management thinkers Gary Hamel puts it, "we have moved from an economy of hands to an economy of heads." In modern era, thus, managers are required to make necessary efforts to attract talented people, further develop their talents, utilize their knowledge & skills and retain them. This involves management's commitment in one hand and adequate resources on the other. Furthermore, retaining talented people has become very difficult job these days due to high demand of knowledgeable or skilled people everywhere in the world. Therefore knowledge management is also an emerging challenge for today's managers.

10. Balancing Work/Life Conflicts

Work/Life conflict is concerned with the dilemma of managing work obligations and personal/family responsibilities. Studies show that it is increasing particularly in developed world. A number of forces have contributed to this. First, creation of global organizations means their world never sleeps. Employees should always be ready to fulfill the demands of customers, colleagues and other stakeholders. Second, communication technology allows employees to do their work at home, in their car or other non-office locations. In this case, they cannot separate their home or personal life from the work life. Third, organizations are asking employees to put in longer hours. For instance, we see Nepalese banks these days are asking their employees to work till at least 6 pm.

Employees are increasingly recognizing that work is squeezing out personal lives, and they are not happy about it. However this problem can be addressed through different programs like shift working, job sharing and family-friendly working. Studies show that application of such programs creates a win-win situation for employers and employees.

2.2.5 Existing Management Practices in Nepal

Management practices in Nepal are largely traditional. However, some industries like banking, hotel, communication etc are following modern management practices also. For the sake of simplicity, existing management practices in Nepal can be discussed under the following heads.

i. Planning Practices

Planning practices in Nepalese organizations are very traditional. Most of the plans are based on guesswork or hunch rather than on rational analysis. Planning practices in Nepal can be attributed to the following points.

- Short-term horizon
- Lack of SWOT analysis
- Inaccurate planning premises
- Monitoring the environmental factors and adjusting plans accordingly is vary rare.

ii. Decision Making Practices

It is widely believed that the managerial effectiveness largely depends on the quality of decisions they make. But, in our context, decision making practice is neither participative nor rational. Following points reveal the decision making practices in Nepal.

- Highly centralized
- The approach is reactive instead of proactive in most cases
- Nepotism and favoritism particularly in selection decisions
- Poor implementation, monitoring and feedback mechanism
- Lack of rationality
- Lack of professionalism but it is on the rise in middle level managers

iii. Organizing Practices

- Unnecessarily tall and rigid structures
- No clear definition of duties, authorities and responsibilities
- No parity between authority and responsibility. Accountability his almost missing.
- Business organizations mostly adopt finctional structure, bureaucracy adopts line or line & staff, and donor assisted

development projects mostly use matrix organization structure. However, the use of self-managed work teams is very rare. Different types of committees exist, but they are not effective.

- Quality circles rarely exist
- Informal organizations exist but they are not productive
- Basically there is downward communication. Upward communication is very limited.
- Dismissal and lay-offs are difficult

iv. Leadership Practices

- Leadership style in most organizations is either autocratic or paternalistic
- Leadership in public sector is politically influenced and in private sector is family owned. Some specific industry sectors such as banking, MNCs are, however, having professional managers and leaders.
- Managers lack adequate leadership training and skills
- Lack of faith in the capacity of subordinates
- Easy going culture as opposed to risk taking
- Poor team culture
- Conflict is very common. Conflict is mainly based on ego and personality.
- Low morale, motivation and QWL particularly in lower level employees

v. Control Practices

- control is generally regarded as intervention rather than as correction
- Mostly used technique of control is budgeting. But, financial analysis such as ratio analysis, break-even analysis etc. are very rare in practice
- Auditing is widely used but it is not effective
- Pre-control are rarely emphasized

- No due emphasis on TQM. short-term profitability is more emphasized

2.2.6 Ethics and Social Responsibility

Concept of Social Responsibility of Business

Business operates and grows in society. It receives different inputs from society and sells output to society. Thus business should also fulfill the needs and expectations of society. Business must be conducted according to what people consider desirable. In this context, social responsibility of business refers to the obligation of business management to take actions which protect and improve the welfare of society as a whole along with their own interest.

Approaches to Social Responsibility

Firms have different approaches towards social responsibility. If can be show by using continuum, and the approach of an organization might fall evening beween two approaches. It might also happen that, in some cases a firm could adopt social obstruction approach and in some other cases the response approach.

1. Social Obstruction

Under this approach, a firm performs as little as possible towards society and environment. Sometimes it may even violet ethical lines for the sake of profits. Adulteration, ignoring employees' safety standards etc. are some of the instances of this approach.

2. Social Obligation

Social obligation refers to the approach in which a firm does everything which is legally binding but nothing more than that. If a tobacco company complies merely a statutory obligation stating - 'smoking is injurious to health', it can be regarded as an example of social obstruction approach.

3. Social Response

Under this, a firm goes beyond the legal requirements. Managers try to fulfill and balance the expectations of different stakeholders or segments of society.

4. Social Contribution

Under social contribution approach a firm takes part to contribute its best to the society. Firms proactively seek opportunity to help society. Business firms often involved in philanthropic activities such as higher education, health projects, steps to improve environment etc. fall under this approach.

2.2.7 Areas of Social Responsibility

Business and society are meant and exist for each other. Therefore, a business firm should satisfy the expectations of different segments of society. These different segments society, which can also be described as the areas of social responsibility, include;

A. Responsibility towards owners or shareholders
B. Responsibility towards customers
C. Responsibility towards employees
D- Responsibility towards community
E. Responsibility towards government
F. Responsibility towards other stakeholders

A. Responsibility towards owners or shareholders

In company form or business organization there is separation between management and owners. Owners or shareholders invest capital in business but day-to-day management affairs are taken care of by the professional managers. Therefore, in such case, business management should be responsible towards their shareholders. However, in case of sole tradership and partnership firms, the owners themselves can look after their interests themselves. Some of the main responsibilities of business management towards shareholders include:

To provide adequate rate of return or dividend in their investment.
To keep shareholders well informed about the progress and financial position of the company.
To ensure the protection of business assets.

B. Responsibility towards customers

Customer is the pivot around which business activities must revolve. Some of the main responsibilities of business towards customers include;

• To produce goods which are satisfying to customers.

• To make goods of right quality available to the right people at the right time & place, and at reasonable prices.

• To provide prompt, adequate and courteous services to customers and to handle their grievances carefully.

• To ensure that advertisements and other statements issued by the business are truthful.

• To follow fair trade practices.

C. Responsibility towards employees

'Employees' or the 'people' is only one active factor of production. It is the people who make everything happen in organizations. Therefore, business organization should be responsible towards them. The main responsibilities are:

• To provide fair salary and wages to employees.

• To offer training and development programs from time to time.

• To provide better working conditions and meet safety standards.

• To ensure employees' participation in decision making.

• To give preferences to women and minorities in applications.

D. Responsibility towards community

Community is an important stakeholder of business. Business survives and grows in a particular community by getting resources and support from them. Therefore, it also expects something from business. The major responsibilities of business towards community are:

• To create and provide employment opportunities to the people of community.

• To make necessary efforts for the improvement of community environment.

• To ensure efficient and optimum utilization of community resources.

• To contribute some portion of its profit in community development and welfare activities.

E. Responsibility towards government

Every business enterprise is governed by various laws and government regulations. Government promotes, regulates and controls the business to protect the interests of various stakeholders. In this context, the main responsibilities of business towards government are as follows:

- To abide by the laws of the nation.
- To pay government taxes honestly, fully, and promptly.
- To avoid corrupting government employees.
- To follow the policies & directives issued by the government.

F. Responsibility towards other stakeholders

Business has other stakeholders too. Suppliers, financiers, competitors are other important stakeholders of business. Therefore, it is the duty of business to fulfill certain expectations these stakeholders. Some of the main responsibilities towards them include:

- To ensure courtesy in dealings with suppliers, financiers and competitors.
- To exercise necessary control over the labor and environmental standards of suppliers for compliance with legal requirements.
- To ensure timely order, payment, repayment of loans, compliance with the agreement etc.
- To respect for the intellectual property of competitors.

However, the interests of these stakeholders or segments of society are not identical. For instance, owners of business want maximum return on their investment, workers want better wages and working conditions, customers want quality goods at lowest possible prices and the government wants maximum revenue. So the task of business management is to reconcile and balance the conflicting interests of different segments of society in the best possible way.

2.2.8 Concept of Managerial/Business Ethics

Ethics refer to principles of behavior that distinguish between good, bad, right and wrong. Thus, business ethics comprises the moral principles and standards that guide behavior in the world of business. Ethical issues in business are frequently raised in newspapers. Stories about illegal donations, commissions, bribery and many other types of scandals and corporate misconducts are some examples of violation of business ethics. Whenever managers commit fraud and negligence for their personal or even own group ends, violation of business ethics appear.

Nowadays, business ethics is being increasingly as important issue as it influences the customers, community, other stakeholders and even a nation. Therefore, the management, these days is expected to have a great awareness of the ethical dimension of business.

2.2.9 Significance of Managerial/Business Ethics

Being an integral part of society, any unethical behavior of a business organization may affect it in many different ways. Violation of ethical codes by a business organization may lead to lose the confidence of customers, shareholders and other stakeholders in business. Ultimately, the business organization will lose its business. The significance/importance of business ethics can be highlighted from the following points.

- Ethical behavior enhances the reputation and goodwill of business.
- An organization violating ethical standards faces criticisms from different stakeholders and it may also result in penalty or social boycott of its products [e.g., Carpet Industry of Nepal].
- A business organization can protect the interests of different segment of society by acting ethically and, thereby, can get continuous support from them.
- Employees feel the sense of pride of being a part of environmentally responsive organization.
- A climate of justice, freedom, equality is created in an organization through ethical practices.

Therefore, it can be suggested for modern organizations to monitor, control and evaluate the implementation of ethical codes. This can be done by holding regular meetings, ensuring effective communication, checking for violation of the codes, rewarding compliance, punishing violations, and reviewing and updating the codes.

2.3 Credit Policies:

The term receivable is debt owned to the firm by customers arising from sales of goods or services on credit in the ordinary course of business. When a firm makes an ordinary sales of goods or services without receiving payment mean the firm has sold on credit and creates account receivable, which would be collected in the future.Thus accounts receivable represent an externsion of credit to customers allowing them a reasonable period of time in which to pay for the goods on credit is an essential part of the modern competitive economic system .In fact, credit sales and therefore, receivable are treated as marketing tool to aid the sales of goods .The credit policy of a firm provides the framework to determine (a) whether or not to extend credit to customer and (b) how much credit to extend.

Credit and collection policies are interrelated with the pricing of a product or service and must be viewed as a part of the overall competitive process. Economic conditions and the firms credit policies are the chicf influence on the level of a firm's accounts receivable. Economic conditions of course are largely beyond the control of the financial manager. As with the other current assets, however , the manager can vary the level of receivable in keeping with the trade off between profitability & risk. (Van Horne, 1996: 403)

The volume of credit sales and the average period between sales and collections determine the level of the account receivable. The average collection period is dependent partly on economic condition (during recession, for example may be, compelled to delay payment) and partly on a set of controllable factors credit policy variables. The major policy variables includes (1) credit perod. The length of time for which credit is generated (2) credit standard. The maximum riskness of acceptable credit amou~~n~~nt (3) discount given for early payment and (4) the firms Collection policy (Weston & Brigham 1981: 314)

Credit policy can have a significant influence on sales. In theory, the firm should lowers its quality standard for account accepts as long as the profitability of sales generated exceeds the added costs of the receivable. What are the costs of reflexing credit standards? Some arise from an enlarged credit department, the clerical work of checking additional accounts and servicing the added volume receivable (Van Horne 1996: 403).

Another factor, which is expected to be affected by change in credit standard is bad debt expenses (default expenes). They can be expected to increase with relaxation in credit standards and decreases as credit standard become more restrictive .

There is opportunity cost of the additional receivable, resulting from increases sales and a slower average collection period. If new customers are attracted by the reflaxed credit standards, collecting from these customers is likely to be slower than collecting from exciting customers. In addition a more liberal extension of credit may cause certain existing customer to be less conscious in paying their bills in time. To assess the profitability of a more liberal extension of credit, we must know the profiability of additional sales , the added demand for products arising from relaxed credit standards, the increased slowness of average collection period, and the required return on investment (Van Horne, 1996: 403)

The seccond decision area in accounts receivable management is the credit terms. After the credit stardard have been established and credit worthiness of the customers has been assessed, the management of a firm must determine the terms and conditions on which trade credit will be made available.

The stipulations under which goods are sold on credit are referred to as credit terms. These relate to the repayment of the amount under credit sale. Thus credit terms specify the repayment terms of receivables. Credit terms have three components (a) credit period, in terms of the duration of time for which trade credit is extended during this period, the overdue amount must be paid by the customer. (b) cash discount, if any, which the customer, can take advantage of i.e the overdue amount will reduced by this amount and (c) cash discount period, which refers to the duration during which the discount can be availed of.

2.3 Collection Policies

Collection policy refers to the procedures a firm follows to obtain payment of past due accounts. For example it may send a letter such of account when they are ten days past due date, it may use a more threatening letter, followed by a telephone call, and it may turn the amount over to a collection agency. The collection process can be expensive in terms of both out of pocket expenditure and lost goodwill, but at least some firmness is needed to prevent an undue lengthening in thecollection period and to minimize outright lossess. Again, a balance must be struck between the cost and benefits of different collection policies. (Weston & Brigham, 1981: 318)

2.4 Review of Book

Puspa Raj Kandel in his book Tax laws and Tax planning pointed out the revenue of government comes basically from two sources non tax and tax. Non tax revenue includes different source like grants gifts, administrative incomes, business income. Grants and gifts amount given by people of the country itself voluntarily or one country to other country. The examples of grant and gift revenue are grants of foreign government or agencies. The adminstrative income denotes the amount charged by the government for providing adminstrative services. The example of such revenues are registration fees, fines and penalties. Business income means the return received by the government for providing various goods and services to the people. The example of business income are charges for postage, electricity, water etc. The basic objectives of non tax – revenue is not to collect reveue but to provide service to the people. The revenue from non- tax source comes automatically while performing other works.In Nepal, around 20% of the revenue comes from these sources.

Another source of government revenue is the taxation, customs, excise, VAT, corporate personal income taxes are the examples of these sources of taxrevenues. The main objective of taxation is to collect revenue .The government passes the acts for getting tax revenue and collects the taxes as per the act. The tax cannot be imposed without the act of the parliament of Nepal too, sec 73 of the constitution of the of Nepal, 2047 prohibits to impose tax without law. Nepal gets around 80% of the revenue from this source.

The government collects the revenue from different sources such as tax, remittance from public enterprises fees, fines, grants and deficit financing. However, across all these sources of collecting the public revenues taxation is the main source since it occupies the most important place in the govenment treasury. Because of the importance of this source in revenue mobilization of a country, some persons like to say tax as the sinews of the state.

Joginder Goet, Ishwor Bhattarai & Akshay Gautam Book "Budgeting" profit planning and control deals with profit is the ultimate goal of every business house. They involve in business for making profit. Profit connot be easily achieved. It should be managed well with better managerial skill. So profit is planned and controlled output of management. By element profit is the difference between revenue and cost. Profit plan, thus refer to the planning of revenue (i.e. increase the revenue) and planning of cost (i.e. increase the efficiency of cost).

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

Some definition gives that by various scholars are comperhensive profit planning and control is a systematic and formalized approach for accomplishing the planning co-ordination and control responibilities of management. (Glenn, Awelsch)

The concept of a comprehensive budget covers its use in planning organizing and controlling all the financial and operating activities of the firm is the forth coming period. (R.M lynch &.R.W. Willamson)

A profit plan or budget is the formal expression of the enterprises plans and objectives stated in financial terms for a specificed future period of time (I.M. Pandey)

Hence, profit planning and control represent an overall plan of operations, providing guidelines to management and acting as single light for the management.

2.5 Review of Articles

Annual Report of Dabur Nepal private limited 2008 – 2009 O~~o~~perations and Business P~~p~~erforrmance.

The turnover (excluding other income) of the company in fiscal year 2065-66 was increased by 7.8% as compared to that of fiscal year 2064-65. This growth is achieved despite of the diffcult business environment in Nepal during the past year due to continuous bardhs and unstable political situation, and against total estimated GDP growth of 0.18%. (industry sector)

During the year, the recession has started showing presence in the global economy. As a result of this the commodity prices touched the sky high with the price of crude oil crossing USD 100 per barrel. Simlarly, the cost of other inputs has also increased. Further, during the year, there was huge appreciation in the value of USD, resulting in huge exchange loss to the company. Despite of all these factors company's profit after has increased significantly. So, considering these difficult national and international economic situations, the performance of company is well and it has performed against the odds (Directors Report)

Auditor's report (2007- 2008)

The observation of Auditors in their report read with the relevant notes to accounts in schedule 14 are self explanatory and do not require further explanation.

http:// www.dabur.com/nepal "Building on success 2003 Manafacturing facilities and system of Dabur Nepal pvt. ltd get certified in January 2003 for having met the requirement of Codex Alimentarius Commission Guidelines, Recommended International code of practices, General principles of Food Hygiene.

2000: Won Overall Excellence Award of Nepal – India Chamber of commerce and Industries in 2000.

2002 : Dabur Nepal Pvt. Ltd gets certificate of Hazards Analysis and critical control point (HACCP) plan verification of manufacturing fruit juices & tomato puree.

2002 : Increase in turnover by 19%. 2000 won best exporter Award of expert promotion Board, Ministry of commerce, HMG of Nepal in

~~2000: won Overall Excellence Award of Nepal – India Chamber of commerce and Industries in 2000.~~

2.6 Review of Previous Thesis

Goet (1999) studied on revenue planning and management of "Nepal Electricity Authority(NEA)" had the major findings and recommendation.

Findings

Nepal Electricity Authority had not considered major demand determination of electricity such as family income, price of electricity, connection charges, cost of alternative, cost of auto generation and reliability of its services. Plans and programme had not been made about possible consumption of electricity in agriculture sector. It had failed to convert sales unit in to sales revenue and not adopted the practice of monthly budget. The revenue plans have been perpared by the branches and sub branches had not been used to prepare central revenue plan. There

was consistency between planned sales and actual sales the correlation was positive and high. The analysis of category wise revenue plan showed the fluctuation figure.
It hadnot been able to transmission loss down in respect with target. Moreover meter reading system was not properly managed and no reconciliation between units read and units billed. Revenue were not recognized on accrual basis. Collection period and debtor turnover showed improved trend. Operating cost consisted huge amount of fixed costs.

Recommendations:
Planner of NEA should be properly trained about budgeting and revenue planning. Plans and programme should be prepared for agriculture sector which is the capable of massive consumption of elecricity. It should make realistic forecast to achieve target growth rate in sales revenue. It should start the practice of preparing monthly budget for sales revenue and it should take into account all the suggestions made by branches and sub branches. It should introduce programmes and action plans for the reduction of transmission loss. It should put more effort to manage the supply to the profitable sectors such as domestic, industrial, non-commercial, commerical and temporary supply. Tarrif rate for water supply, and irrigation, temple, transport services, street light and bulk supply to India should be revised in such a way that they could cover operating cost at least. There should be greater consideration to cost while making power purchase agreement between Nepal & India. Revenues should be recognized on accrual basis to comply with present accounting manual. It should try to reduce over due amount of receivable and effective cost control program is necessary. It should have proper co-ordination regarding budget formulation implemantation and evaluation of achievement.

Acharya's (2004) made studied of "Revenue planning and management of manufacturing companies in Nepal.A case study of National Biscuit and Confectionary Pvt. Ltd. (NEBICO)" had the following major findngs and recommendations.

Major Findings:

i. It had not achieved its target sales, but its achievement was not less than 80% in the entire fiscal year (2003/2004)

ii. It had not considered major demand of rural areas of people. It was shown from the investigation that its major market was in urban areas, which was not fare.

iii. It had not adopted practice of preparing monthly budget.

iv. Major contrbution of NEBIO, profit was made by Biscuits sales, it had more than 98% in entire five fiscal year (i,e from 2055/56 to 2059/60) and only 1 to 2% sales contribution was made by confectionary.

v. The pricing policy needed revision and pricing adjustment policy of the company was also not fair.

vi. The pricing adjustment policy was also not mentioned.

vii. It had capacity to fulifull the demand of its customer but company was neglecting its broad market. So we could say that in most of the shop of the cities sufficient supplying of their production for their customer were not made.

viii. It's most favourable side was its credit policy and having no bad debts and minimum loss on production process.

ix. It's fixed cost was high the excess amount of fixed cost had lowered its profit potential.

x. It had no clear cut boundaries to separate cost into fixed and variable. The classfication of cost was not, systematic and scientific. Therefore NEBICO had not been able to make realistic budget.

xi. It had not adequately considered controllable and non-controllable variables affecting the organization.

Recommen~~can~~dations

1. NEBICO planner should be properly trained for budgeting revenue planning.
2. It should consider demand determination, at the time of preparing budget it should survey markets allover the country.
3. To achieve targeted sales revenue , NEBICO should make realistic fo~~es~~recasts.
4. It should start the practice of monthly budget for sales revenue.
5. While setting the target for the next year. NEBICO should consider other facters such as increasing or decreasing of customer of every product.
6. Company should try to achieve its targeted sales in those products which cover large percentage on the whole, such as Glucose 75 gms. Thin Arrowroot 75 gms, coconut crutches 100 gms, Malt Glucose 65 gms etc. It has capacity to

fulfill the demand of its customer so company should not neglect its broad market, and it should supply to all the shops and cities of their products.

7. Company should mange their changing policy of selling price of each product.
8. Company should manage or decrease its fixed cost which hampers in profit directly or it should use properly by increasing production quantity.
9. It should separate Variable and fixed cost so that realistic budget can be made.
10. It should have proper co- ordination of budget formulation, implementation and evaluation of achievement.

Amatya (2004) conducted a study on "Budgeting in manufacturing concerned "A case study of Dabur Nepal private Limited" had the following major findings and recommendation.

Findings

Amatya pointed that DNPL had been suffering from under utilization of its capacity and it had not adequate knowledge about nature and content of profit plan.

It assumed budgeted sales itself as the budgeted production. It has adopted cost plus pricing strategy, price was found to be cheaper than Nepal Lever's product. It's sales revenue was found to be very high than BEP which was good for the company. There was lack of co-ordination system and realization of objective between different level managers. Budgeted cost was higher than the average actual cost. Fluctuation of the cost was budgetary and was actual almost same since C.V. of actual was marginally higher than budgeted cost. Operating expenses were in increasing then which affected the profit margin. The operating expenses occupied more than 50% of gross profit.

Amatya's Recommendations

DNPL should utilize its idle capacity by expanding its current products. It should define the clear long range and short range profit plan detailed by relevant respon~~er~~sibilities as a systematic and formalized approach for accomplishing the planning, co-ordination & control responsibilities of management. A systematic approach should be made on implemention of profit plan. The company should develop the systemati~~it~~c pe~~e~~riodic performance reports detailed by assigned responsbilities for accomplishing the planning objectives. Varia~~e~~nce analysis should be effectively done. The company should prepare separate production budget and direct labour plan.

A separate costing section should be established and separate costing system should be developed. Pricing policy should be revised. Planning experts should be developed. Company should adopt the effective cost control techniques. There should be continuous flow of information among various level of management and various groups of employees. The goals objectives and strategies should be communicated from top to lower level. All person should be participated on decision making and planning process.

Poudel (2003) conducted a study on "Relationship between sales, budget and profit planning and control" of DNPL had the following major findings and recommendations.

Findings

Although the Company had set the sales target, it had no practice of preparing production budget. Sales budget was treated as production budget. The company was following just in-time production policy. The ompany didn't have practice of preparing direct labour cost budget though most of labours are engaged in producing and progressing. Expenses trend of DNPL was increasing year by year. The cost of materials was higher than other expenses in a year. The cost of material was more than 70% of total cost. The cost was classified into fixed and variable bu there is not pratice of semi-variable cost. It is operating below its capacity is only about 40.15%. Total assets turnover ratio of the firm is satisfactory and it is in increasing order. The ratio concludes over all performance of the firm. Optimal utiliization of the assets (fixed assets, total assets, current assets) automatically increase the profitability of the firm.

Poudel's study recommendation

The company management should look carefully in to the basis of setting target for sales and acheiving those targets meaningfully. Thus realistic, long range, medium range and short range forecast should made. It should prepare production budget. The production plan depends on avail~~l~~ability of raw materials. S~~s~~o~~.~~ DNPL should consider about the raw ma~~e~~terials also. It should prepare materials purchase budget considering the final inventory of raw materials and parts and initial inventory of raw materials and parts. Alternatives supply source of raw materials must be developed. It should focus on relationship between expenditure and benefit. Expenses, planning and controlling is necessary to obtain company's goal. Production is based on sales demand forecasting in the market so, the firm should not need to keep excess idle inventory. It should make proper manpower planning. Capital expenditure should be planned in detail for evaluation purpose. Classification of an expense item as controllable and non controllable must be made with specific frame work responsibility and time. To get the idea of further costs requirement and application of the firm, it should make cash budget (projected cashflow statement) the statement could be made only after the preparation of sales budget, production budget, labour budget raw material, purchase budget manufacturing overhead budget etc. DNPL prepared sales budget only. Therefore, to know the actual cost application, the other remaining budgets should also be prepared. A systematic approach should be made towards comprehensive profit planning. This can contribute to increase the profitability of the company. Profit planning manuals should be communicated from top level to lower levels. Firms present output is not the optimal level, it could increase this level but main problems of the marginal product is availiability of markets~~ted~~.

Panta's (2006) made study on"A study on revenue planning in manufacturing enterprises. A case study of "Royal Drugs Limited" had the following major findings and recommendation.

Findings: Organizational goals and policies are set up by the top executive level management board in accordance with plan and policies of the RDL. It had not practice of preparing long range sales budget. Its annual sales target and achievement was very poor. It had not achieved it's target sales more than 73.41% and it had minimum achievement of 42.51%. Its yearly sales trend was in decreasing trend and it had high degree of deviation in terms of budget and achievement. It means that it was failing of focus on its factors affecting sales production budget of RDL was satisfactory in terms of budget and achievement but its production plan was not satisfactory because it had planned in production below breakeven point level. Its achievementnt rate ranges from 39 to 43, and in seond quarter achievement is approximately 60%, short range production achievement was poor and it ranged from 21.49% to 80.62% which had high difference or gap. In average it had achievement of 42.2% which was not satisfactory for RDL. The tactical production has unfavourable variance in the fiscal year 2059/60. It had planned its production below break even point. Its capacity utilization was very poor. In each period RDL was planning production below its capacity. It had not used its capacity above 47.75% and its capacity utilization was in decreasing trend which falled to 16.87% in the fiscal year 2059/60. It also indicated that RDL was not managing its all fixed manufacturing cost properly which had been under absorbed due to production falling below capacity which caused negative impact on profitability. It had fluctuating inventory in respect to its sales. Its inventory turnover ratio was also in decreasing trend. It showed no specific inventory planning. It had large amount of investment in current assets than fixed assets. Fixed assets have small fluctuation compared to other assets. Any depreciation there of had been supplemented by small capital addition. It seems RDL was unable to meet its all shorterm obligations because its current liabilities were increasing gradually all over the past years. In fiscal year 2059/60 in which it had very high amount of loss and very high amount of current liability compared to last years. It had started to plan for capital expenditure. It was good sign for managing fixed assets and controlling investments in fixed assets. It had no fund for investing in fixed assets due to heavy losses since last several years. It was being unable to utilize all its assets optimally because although sales and productions decreased over the years, its current assets had not decreased. It had not classfied all the costs into variable & fixed cost. Due to this it is impossible to moniter the cost incurred in RDL All the cost had been classified on the basis of personal decision as manufacturing costs are the variable cost and administrating cost are fixed costs CVP analysis showed that at 30.57% of its capacity company will be at break even point at current fixed costs and average 90% of variable expenses. Manpower planning of Royal Drugs Limited was weak because its ratio of actual sales per employee was decreasing over last five year: It was not using all of its assets optimally. It had investment in non-productive assets beccause capacity utilization was very low. It was not monitoring all of its costs sales and production was decreasing whereas expenses were increasing compared to change in sales and production. Poor achievement of sales budget over past years had indicated that its planned sales budget is lacking coentinuous evaluation and monitoring.

Panta's Study Recommendations.

Royal Drugs limited should clearly define its objectives polices and strategies for achievement of its long term plan and policies. Royal Drugs Limited should follow a comprehensive budgeting taking all the functional budgets in accordance with plan and policies. Since the sales budget is the corner stone of the functional budget should be prepared in realistic way and it should include both strategic and long term sales budgeting. All the other factors affecting sales budget should be traced out so that a relalistic budget can be prepared. Production planning should be made on the basis of appropriate sales planning and reasonable amount of inventory of finished goods so that loss due to expiry of goods can be reduced. An effective cost control system should be developed by preparing all, the cost related budgets like manufacturing overhead budgets, selling and distribution expenses budgets, adminstrative expenses budget etc. Separately with clear definition of cost variability and controllability cost. Also a cost monitoring mechanism should be developed so that all controllable costs be controlled and uncontrollable cost can be optimally utilized. It will also help in planning future cost i.e revise budget and use it for managerial decision making .A cost volume relationship should be established because it is most effecitive tool for profit planning or budgeting and controlling operations e.g sales revenue, variable expenes and fixed costs. Based on cost volume relationship sales and production should be planned. Variance analysis should be conducted for betterment of its planning practice which helps in control over implementation and modification to the future planning. Variance analysis should be classifed as controllable and uncontrollable variance.

It should also backed by the practice of determining tolerance limit and also analysis of cause and~~of~~ effect. For the objectively use of variance analysis it should be communicated with the help of feedback and feedfoward procedure for gradual improvement. It has a planning division but it is not functioning well. Employees of planning division are lacking of knowledge of budgeting and profit planning. They are being unable to co-ordinate its all the department in proper way RDL should follow a comprehensive profit planning system taking participation of all the responsible which will look for over all activities and its budgeting. Cash flow analysis should be made so that contribution of different operating financing and investing activity can be analyzed and evaluated current assets and current liability should be managed well to improve in poor liquidity condition. It should arrange for training and development of its staff to increase their quality and efficiency. It should analyze the over staffing condition and certain programme and policies should be take to attract voluntary retirement of employee. Research and development program should be adopted to analyze the market condition, product innovation and invention. Government intervention should be controlled for the smooth and continuous operation of Royal Drugs Limited. It should look for another option utilizing avaliable large idle space as alternative sources of revenue. It should modernize its existing production facility by necessary repair or maintenance and additions.

Pokhrel's (2008) made study on Revenue Planning and management of Dabur Nepal Pvt. Ltd. had , the major findings and recommendation.

Major Findings of the research work.

DNPL used to prepare short term budget only. The revenue trend showed that actual sales were in fluctuation but the budgeted sales were in increased in each fiscal year. Its sales forecast depends on export demand and sales trend. It could achieve its target sales, the sales achievement ranges from 74.73% to 89.15% during FY 2001 to FY 2006 /07 Mean standard deviation of sales achievement was lower then budgeted sales and but there was positive correlation between budgeted and actual sales .The actual sales of the company decreased with decrease in export sales .The sales of Real fruit Juice were increasing trend. It contributed 17.94% at beginning period of study and 49.34% in final year. It did not prepare production budget at present. It assumed budgeted sales itself is the production budget. Domestic sales of company were in increasing trend. Domestic sales contribute only 6.24% in 2002/03 and it increase to 19.72 in 2007/08. The sales of DNPL contribute more than 80.5% by export sales. The operating expenses increased with increase in sales% of operating~~on~~ expenses. Operating expenses occupied, more than 80% of sales. DNPL adopted cost plus pricing strategy so the price of DNPL production was cheaper than Nepal Levers production. DNPL lost its net profit year by year it was 6.27% in f/y 2002/03 but it was only 0.38% in f/y 2007/08 which indicates~~d~~ that the company would suffer from loss very soon. The DNPL had good collection policy, the average collection period was nearly one month which gives less chance of being baddebt .The main sources of cash generation was from operating activities. C~~c~~ompany invested to purchase raw automatic plant. It didn't issue its share to raise capital. It takes bank loan to fulfill to its cash requirement. I~~i~~ts sales revenue did not depends upon the number of employee. It depends on market strategy and export sales. Manpower planning was not good. The company did not create new opportunity for new and fresh manpower. The structure of man~~a~~power remained constraint during the study period. The fixed cost was increasing trend which was the main cause of decreasing in net profit. The portion of variable cost was very high in DNPL. Variable cost per rupees of sales was less than 67.88 % in F/Y 2002/03 & it increased to 73.10%. Its breaks even sales was very high because it was increasing tool however BEP sales was lower than actual sales so company could make profit.

Pokhrel's study Recommendations

DNPL sales forecast should be made on realistic ground. Forecast should includes strategic & tactical forecast that are consistent with the time. The process of developing a realistic sales plan should unique according to the requirements of the company. It should develop specific goals for the coming budget. Such goals may be return on capital employed, net profit on sales, increase in cost effectiveness. Without such goals DNPL would not be effective.It should develop the effective pricing polices according to the competitive market situation. P~~p~~rofit cost volume relationship should be taken into consideration while developing sales planning and pricing policies.

It should focus promotional tools. such as advertisement and publishing should be improved .It should consider certain management technical and financial issues, organization, participation of employees, co–ordination with in organization. They can be accountable for their authorities and reponsibilities rather than blame to each other.

The budgeted sales should be prepared by analyzing the past achievement & considering demand determinants such as size of customers, market requ~~g~~irements etc. B~~b~~udget must be prepared by product time and in total. The companyshould prepare separate production budget. Production plan depends on sales so market strategy should be improved .It should be increasing its nursery in different part of the country which can fulfill its raw materials requirement and helpful to reduce its variable cost. The cost classification system is not reliable. Costs are classified into fixed and variable and no practice of identifying semi variable cost. It should perpare its perodic performance report for evaluating its performance and goal achivement. It should try to scheme borrowing which helps to scheme the cost of interest and financial recharge. In order to increase the per employee sales ratio DNPL should adopt the method of performance evaluation and developed. The motivation techniques, favorable and unfavuorable variance should be analyzed to fulfill deficien~~r~~cies and correct~~t~~ the corresponding action. There should be continuous flow of information among various level of management and group of employees. The goal objectives and strategy should be communicated from top to lower levels. All employees should be participated on decision making and planning process. Finally systematic approach should be made towards effective implementation of planning can be considerably contribute to increase profit.

2.7 Research Gap

Most of the candidates had conducted their thesis work on comprehensive profit planning and control of various public and private organization. Some study related to DNPL was concerned with relationship between sales, budget and profit planning and control. Even revenue planning and management of DNPL had already conducted upto the fiscal year 2005/2006 .The refore it is not new area of research in the context of Nepalese manufacturing company. But eventually there is research gap in fiscal year 2007/08 and 2008/09 on revenue planning and management. So the reseacher has tried to study in this field.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Introduction

"Research may be defined as the systematic method of discorcing new facts or verifying old facts, their sequences, interrelationships casual explanation and the natural laws which governs them". (P.V. Yo~~u~~ng)

"Any attempt to study a problem systematically or to add to man's knowledge of a problem may be regarded as research" (Theodernson)

"Research is an honest, exhaustive intelligent, searching for facts and their meanings or implications with reference to a given problem. The product and findings of a given piece of research should be an authentic verfiable contribution to knowledge in the field of study" (P.M Cook)

"Research is an on going and evergrowing activity .It is done not only to solve a problem existing in the work setting but also to add or contribute to the general body of knowledge in a particular area of interest. Research may be defined as the objective and systematic method of finding solution to a problem i.e systematic collection recording analyzing interpreting and reporting of information about various facts of phenomenon under study". (Kathari, 2000: 18)

Research may be defined as a method of studying problems whose solution are to be derived partly or wholly from facts. The facts dealt within research may be statement of opinions, historical facts records and reports, the result of test answer to questionnaire experimental data of any sorts and so ferth.

Research Methodology:

Research Methodology refers to the various sequential steps to be adopted by the researcher in studying the problems. This research is conducted with a view to examine analyze and interpret the budgeting technique. It is used in process of revenue planning and its effectiveness in the firm with the help of various financial statements, statistical tools and non financial subject matters keeping in harmony with the basic objectives other sub-objectives are also formulated and the research methodology is followed to obtain the basic objective and goal of research work.

Methodology is the analysis and systematic application of procedures used in scientific investigation or in a particular research project.

3.2 Research Design

"Research design is the plan srtructure and startegy of the investigation conceived so as to obtain answer to research questions and to control variable". (F.N kerlinger)

"Research design is the logical planning and directing a piece of research" (P.V Yong)

Research design define what is research, where, when why, and how the research is conducted in details. It is a layout before conducting research including plan, structure and research strategy.

The plan is the overall scheme on program of research. It includes the outline of what the investigators will do from writing the hypothesis and their operational implication to the final analysis of data. The structure of the research is more specific .It is the out line the scheme and the paradigm of the operation of the variables. When we draw diagram that the variables and their relation and position develop a structural schemes for acomplishing the operational purpose strategy of specific plan.

Importance/ purpose of research design

1. To provide answer to research questions
2. To control variance
3. To reserach hypothesis
4. Maximization of expcrimental variable
5. Minimization of the error variance

3.3 Management Research

"Research in management largely depends on personal judgement of the manager who is controller and decision maker. Decision making often calls for course of action and generalizing new ideas which assist in ferming new policy for implementation (Desai).

The benefit of research knowledge to managers may help for indentification, formulation of problem about risk in decision making.

3.4 Case Study Research

"The basic opproach of the case study is to deal~~s~~ with all pertinent aspect of one thing or situation with the unit for the study of an individual and social institution of agency such as a school or a community or cultural group as a steal town" (Carter Good)

This study is an examination and evaluation of budgeting procedures in the process of revenue planning of Dabur Nepal private limited. That's why it is closely related with sales budget and other accounting statement. Analytical method is used to present information and data. Apart from these quantitative data presentation the research also possesses qualitative aspects and these aspects are described in word detail where, it necessary. Quality aspect of this study include views of top level management as well as employees of DNPL in formulation and inplementation of revenue plan and the reasons behind lower achievement are also the course of this research work.

3.5 Sources of Data

Information or datas are the life blood of research of any field. For this work or the research of revenue planning and management of DNPL datas are taken from its origin and previous study. This study is mainly based on secondary datas and interactions with responsible persons .Required datas and descriptive information are collected from the annual report of 2065/2066/ 2008-2009 of DNPL.

3.6 Data collection Techniques:

For this study some techiques and procedure were adopted to collect necessary data and information: since, this studyis related to revenue planning and management of DNPL the relevant datas are collected from secondary source, covering financial budget, booklets, magazines, journals and similar previous study. The primary datas are collected from annual reports of DNPL and other related sources telephone and mail system for necessary information.

3.7 Period Coverage

The study has covered the time period of eight fiscal years from 2001/02 to 2008/09

The explanation of these eight years revenue analysis is the purpose of short term profit plan.

3.8 Data Analysis Tools

Data collected fromvarious sources are managed presented and analyzed in systematic way. For research all the data are input and systematic processing are done by using appropriate analytical tools. Financial and statistical tools are used to analyze the collected data.

Techniques/tools of analysis.

3.8.1 Financial tools

- Ratio analysis
- Comparative statement.
- Cash flow analysis

Commonly we use four important categories of financial ratios

a. Liquidity ratios : It measures the firms ability to meet current obligations.

b. Leverage ratios: It exhibits the proportion of Debt and Eequity in financing the firms assets.

c. Profitability ratios : It measures the overall perfermance and effectiveness of the firm.

d. Activity ratios: It reflects the firms efficiency in utilizing its assets.

Examples of some ratios

1. Liquidity ratios
- current ratio = current assets / current liabilities
- Quick ratio = Quick assets / quick liabilities

2. Levarage ratios
- Debt equity ratio= Debt / Equity
- Capital gearing ratio = (preference share capital + Debt)/ Share holder's Fund except preference shares.

3. Activity ratios :
- Assets turnover ratios = sales / total assets
- fixed assets turnover = sales / fixed assets

Working capital turnover = sales / working capital

Inventory turnover = Cost of goods sold / average inventory

Debtor turnover = Credit sales / average debtors

Average collection period= 365 days / debtors turnover

4. Profitability ratios:

- Net profit ratio = (Net profit / sales) * 100
- operating profit ratio = (operating profit / sales)*100
- Return on capital employeed = (Return / capital employed *100
- Earning per share = Total earning avilable to share holders/number of shares outstanding.
- Dividend per share = Total amount of dividend declared / no. of shares outstanding.
- Dividend payout ratio = Amount of dividend declared / Divisible profit.
- Price earning Ratio = Market price of share / Earning per share.

Comparative Statements Analysis

Common size Statements

When financial statements are prepared on some common base (e.g. items of income statement may be prepared on common base of sales figure, balance sheet items may be shown on common base of total assets or a total liabilities) they are called common size statements, similarly to compare performance of the entity of different years items of financial statements are converted taking base year figure as 100 and figures for other years are converted accordingly.

Horizontal Analysis:

- It is the process of making comparison of performance of the firms operating under same industries.
- It is inter firm comparison
- All firm being compared should adopt uniform accounting policies to arrive at meaningful result.

Cash flow Analysis

- Cash flow statement presents the net effect or cash flows on the companys cash and cash equivalents.

- This statement includes a reconciliation of beginning and ending cash and cash equivalent classified under cash flows from operating, investing and financing activities.

Cash and cash Equivalent

Cash means cash on hand and demand deposists cash equivalent means short term highly liquid investments with following characteristics (i) held for the purpose of meeting short term cash commitments rather than for investment or other purposes. (ii) readily covertible in a known amount of cash. (iii) subject to insignificant risk of changes in value for eg. Bank over draft, treasury bills, money at call, call deposit accounts etc.

Benefits of cash flows statement

- It provides the users with the basis to assess the ability of the enterpries to generate cash and cash equivalent.
- It furnishes the reconcilation between net income & cash flow operations.
- It provides important informations about the enterprises cash receipt payment for the period
- It evaluates company's ability to pay debt when due.
- It shows the company's ability to pay dividend
- It provides reason for change in company's cash positions.

3.8.2.5 statistical Tools

Trend Analysis :

- It studies the past historical ups and downs of the items of the financial statement and tries to project the value for future.

Correlation analysis:

- It studies the relationship between the variables and identify the direction of relationship (i.e positive or inverse).

Regression analysis

- It is based on the value of the independent variable, the value of dependent variable is ascertained : Equation is $y = a + bx$

Measures of central Tendency :

There are different types of measures of centra~~o~~l tendency

1. Arithmetic mean .It is the very simple and most popular mean compared to other means. In this mean the difference between all the series are same. It can be divided into two types.

   a. Simple arithmetic mean

   b. Weighted anithmetic mean

a) Simple Artithmetic mean

It is obtained by dividing the sum value of observation by the number of observation. We can use following formula for simple arithmetic mean.

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Individual series	(a)	$\overline{X} = \frac{\phi x}{N}$ (Direct Method)
	(b)	$\overline{X} = A + \frac{\phi d}{N}$ (Short cut method)
Discrete series	(a)	$\overline{X} = \frac{\phi fx}{N}$ (Direct Method)
	(b)	$\overline{X} = A + \frac{\phi fx}{N}$ (Short cut method)
Continuous series	(a)	$\overline{X} = \frac{\phi fx}{N}$ (Direct Method)
	(b)	$\overline{X} = A + \frac{\phi fd}{N}$ (Short cut method)

(c) Step deviation method $\overline{X} = A + \frac{\phi fd'}{N} \times C.$

(b) Weighted Arithmetic Mean

The formula we use for weighted arithmetic mean

$$\overline{X}\ w = \frac{\phi Wx}{\phi W}$$

Where, $\overline{X}$ w = Weighted arithmatic mean.

ϕwx = product of the series and weighted frequency.

ϕw = sum of weighted frequency.

Median

The value of series which divides the given series into two equal parts which are properly arranged in ascending and decending orders is said to be median. The formula used in calculating medians are :

(a) Individual series

$$Md = \frac{N+1}{2} \text{ th item}$$

Where,

Md = Median

N = No. of series

(b) Discrete series

$$Md = \frac{N+1}{2} \text{ th item}$$

Where,

Md = Median

N = ϕF

(c) Continuous series

$$Md = \frac{L + \frac{N}{2} - c\,f \times i}{f}$$

Where,

L = lower limit

cf. = C~~a~~umulative frequency

f = frequency

i = class interval

Mode :

The variable which are frequently comes in a series is said to be mode. But the mode which are calculated by this method will not be right always.

The formula use for calcultng the mode

Individual series

a) for eg = 3,4,5,6,8,,7,3,5,3,2,3

the mode =3

b) Discrete series

$$\text{Mode} = L + \frac{\zeta 1}{\zeta 1 + \zeta 2} \times i$$

Where, L = Lower limit $\zeta_1 = f_1 - f_0$, $\zeta_2 = f_1 - f_2$ (F = frequency)

f_1 = Maximum frequency

f_0 = preceding frequency

f_2 = Succeding frequency

I = class interval

Geometric Mean (G.M.)

It is a most important measures of central tendency. Geometric mean is square root for the two values and cube root for the three values

For eg . Two values or series are 3,27

$$\text{G. M.} = \sqrt{3 \times 27} = \sqrt{81} = 9$$

For three values or series, 2, 20, 25

$$\text{G.M.} = \sqrt[3]{2 \times 20 \times 25} = \sqrt[3]{1000} = 10$$

Geometric mean for nth root (GM) = $\sqrt[n]{x_1\, x_2 x \text{ - - } x_n}$ |

We can use following formula when the critical situation is showed to calculate square root or when the series are more than two:

a) Individual series G.M = (antilog) $\frac{\phi \log x}{n}$

b) Discrete series G.M = (antilog) $\frac{\phi \log x}{n}$

c) Continuous series G.M = (antilog) + $\frac{\phi f \log x}{n}$

5. Harmonic Mean

The total number of items of variable in a series divided by the total of the reciprocals of the items gives harmonic mean.

We can use following formula for harmonic mean.

(a) Individual series H.M. = $\frac{N}{\phi 1/X}$

(b) Discrete series H.M. = $\frac{N}{\phi f/X}$

(c) Continuous series H.M. = $\frac{N}{\phi f/X}$

Measures of Dispersion:

Measures of central tendency shows the central value or average value but there are many items which are scattered in right & left places of averages cannot study. That's why the measures of dispersion is necessary to study the size, distance limit, difference etc of the items. The main objectives of dispersion is to find out average reliability.

Methods of measures of dispersion

1. Range
2. Mean deviation
3. Stardard deviation.

1. Range :

It is used to find out the expansion of the items in a series.

R = L - S

Where,

L = Largest value

S = Smallest value

When we can't compare the two items among the different items we can use coefficient of range = $\frac{L - S}{L + S}$

(2) Mean deviation

The deviation of values which are calculated by mean, median and mode as in central trendecy is said to be mean deviation.

1. Individual series

Mean deviation from mean = $\frac{\phi\ |x - \overline{X}\,|}{n}$

Where, (X- $\overline{X}$) == modulus values of (X - $\overline{X}$)

n = no. of items

Mean deviation from median = $\frac{\phi(x - Md)}{n}$

Mean deviation from mode = $\frac{\phi\ (X - Mo)}{n}$

b. Discrete series

M.D. from mean = $\frac{\phi f\ (X - \overline{X}\,)}{N}$, when N = ϕf

M.D. from median = $\frac{\phi f(x - Md)}{N}$

M.D. from mode = $\phi f\ \frac{(X - Mo)}{N}$

c) Continuous Series

M.D. from mean = $\frac{\phi f\ |m - \overline{X}\,|}{N}$ where,

N = ϕf, m = mid value of class interval.

M.D. from median = $\frac{\phi f\ |m - Md|}{N}$

M.D. from Mode = $\frac{\phi f\ (m - M0)}{N}$

Coefficient of mean deviation

(1) $\frac{\text{Mean Deviation from mean}}{\text{mean}}$

(2) $\frac{\text{Mean Deviation from Median}}{\text{Median}}$

(3) $\frac{\text{Mean deviation from Mode}}{\text{Mode}}$

3. Standard deviation

It is used to find out the distance of the data with the central value. Mean is calculated to find out the standard deviation. The square root of mean is said to be standard deviation and is de~~no~~note~~re~~d by '6'.

a. Individual series

Direct method

$$\exists = \sqrt{\frac{\phi x^2}{n} - \frac{\phi x}{n}^{2}}$$

Actual mean method

$$\exists = \sqrt{\frac{1}{n} \phi (x - \overline{x})^2}$$

Short cut or assumed mean method

$$\exists = \sqrt{\frac{\phi d^2}{N} - \frac{\phi d}{N}^{2}}$$

(b) For Discrete and continuous series.

Direct method

$$\exists = \sqrt{\frac{\phi fx^2}{n} - \frac{\phi fx}{n}^{2}} \quad , N = \phi f$$

Actual mean method

$$\exists = \sqrt{\frac{1}{N} \phi f (X - \overline{X})^2}$$

Shortcut or assumed mean method

$$\exists = \sqrt{\frac{\phi fd^2}{N} - \frac{\phi fd}{N}^{2}} \quad \text{Where, } d = x - a,$$

a = assumed mean

Step deviation method

$$\exists = \sqrt{\frac{\phi fd'^2}{N} - \frac{\phi fd'}{N}^{2}} \times i \quad \text{where } d' = \frac{x - a}{i}$$

I = class size or common factor.

Note x is the midvalue of corresponding classes, for continuous series. For discrete series i is talken as common factor from each given item, if possible

Variance

The square root of standard deviation is known as variance .It is denoted by '$\exists^{2}$'

Coefficient of Variation

Standard Deviation is the absolute measure of dispersion. The relevant measures of dispersion based on the standard deviation is known as the cofficient of variation.

Standard deviation:

$$\text{Coefficient of S.D.} = \frac{\text{S.D.}}{\text{Mean}}$$

The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation(c.V) .If the arithmetic mean & ∃, the standard deviation of the distribution, then c.v. is d~~i~~efined by

$$\text{C.V.} = \frac{\text{S.D.}}{X} \times 100\ \%$$

It is independent of unit so two distribution can bitterly be compared with the help of C.V for their variability less th~~a~~an C.V. the more will be the uniformity , consistency etc. & more the C.V less will be uniformity, consistency etc.

Correlation

Every human activities are directly or indirectly influenced by various facotors. If there is change in price of product oviously there will be change in that product's deemand and supply. If one variable is changed the other dependent variable will change. The analysis of changing other factors because of change in one factor is called correlation when two or more variables are changed what type of changes are appeared in other factors is called correlation analysis. Mainly there are three types of correlation.

i. Positive and negative correlation.
ii. Simple, partial and multiple correlation.
iii. Linear and nonlinear correlation.

Probable Error :

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Probable error of the correlation coefficient by P.E. is the measure of testing the relability of the calculated value of 'r' be the calculated value from a random sample of n pair of observations, the P.E. is devoted by

$$\text{P.E.} = 0.6745\ \frac{1-r^2}{\sqrt{n}}$$

It is ~~is~~used in interpretation whether calculated values of r is significant or not.

i. If r <6 P.E. it is insignificant so perhaps there is no evidence of correlation.
ii. If r > 6 P.E. it is significant, in other cases nothing can be concluded.

Regression:

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Regression analysis helps to find out the value of one variable if there is another variable's values are known. The word regression is used by Sir Fransis Galton in 1877. Among the correlated variables if there is the value of one variable is known the other variable's value can be known easily. Mainly there are two types of regression.

i. Simple regression
ii. Multiple regression

CHAPTER IV
DATA PRESENTATION AND ANALYSIS

4.1 Sales Budget/Plan in DNPL

The starting point in profit plan is the sales plan which displays, the projected sales in units and rupees. The sales planning process is an essential part of profit plan and control because it provides for the basic management decision about marketing and based on these decisions, it is an organized approach for developing a comprehensive sales plan. If sales plan is not realistic and relevant, most of the other parts of overall profit plan are also not realistic. Therefore , if the management believe that a realistic sales plan cannot be developed, there is a little justification for PPC. Similary, if it is really impossible to assess the future revenue potential of a business there would be little or no incentives to investors and prospective investors. Hence, the sales plan is both ends and means of PPC.

Sales budget is an estimation of sales in future. It is concerned with cash generation and basis for development of other functional budgets. Mainly there are two types of sales budget i.e longterm and short term.

Longterm budget is prepared for more than one year and short term budget is prepared for one accounting year.

Dabur Nepal private limited (DNPL) is one of the most popular manufacturing company situated in Nepal. It launches its promotional compaign through media such as newspaper, magazine, pamphlet, audio & visual media etc. Analysis of past sales has been made to know about the past sales trend and to forecast the future sales trend of DNPL.

The following table represents the budgeted sales and actual sales achievement of DNPL during eight year.

4.2 Sales Budget & Achievement

Table No. 4.1

fiscal year	Budgeted sales	Actual sales	Achievement	Variance	
				in Rs.	unfavorable
2001/02	26511.21	22249.16	83.92%	4262.05	16.08
2002/03	31013.36	27649.62	89.15%	3363.74	10.85
2003/04	33286.01	26995.05	81.10%	6290.96	18.9
2004/05	34795.50	30177.02	86.73%	4618.48	13.27
2005/06	36517.32	27287.90	74.73%	9229.42	25.27
2006/07	36732.51	32270.23	87.85%	4462.28	12.15
2007/08	41979.55	36608.41	87.20%	5371.14	12.8
2008/09	44847.39	39476.24	88.02%	5371.15	11.98
Average	35710.36	30339.20	84.84	`5371.55	15.16

Sources: Annual Report 2006/07, 2007/08, 2008/09 of DNPL

The above table shows that budgeted or projected sales are gradually increasing where as actual sales are in fluctuation upto the fiscal year 2005/06 and are in increasing trend from the year 2006/07 up to the year 2008/09. The highest target sales achievement was in the year 2002/03 which was 89.15% where as the lowest achievement was in the year 2005/06 i.e 74.73% and the actual sales achievement in average is 84.84% which indicates the company could not able to meet its targeted sales.

The above table also shows that highest unfavourable variance was in the fiscal year 2005/06 by 25.27% and lowest variance was in year 2002/03 by 10.85%.

The average budgeted sales are 35710.36 and the actual average sales are 30339.20. Similarly average achievement is 84.84% and unfavourable percentage in average is 15.16%, Management of DNPL should try effective, sales promotion to reduce the variance between target sales and actual sales. It shows that there is not any systematic and scientific sales plan. The budgeted sales are on the basis of previous years sales performance.

4.3 Ratio Analysis of the Year 2008/09

1. Liquidity ratio

I~~f~~t measures the short - run solvency of the firm. It is a test of liquidity. It measures the availability of current assets for meeting current liabilities. It has mainly two ratios current ratio and quick ratio, current ratio~~n~~ should equal to 2:1, i.e. current assets double the current liabilities is considered to be satisfactory one. But in case of DNPL current ratio was 1.20 which is not satisfactory so it indicates that it is unable to pay its current obligations in time. Similarly in case of quick ratio or acid test ratio 1 : 1 is regarded as standard but the quick ratio of DNPL was 1.02. It indicates that the DNPL should rely on sales and collection of inventories to pay off it's current obligations.

2. Leverage

a. Debt equity ratio

It is a test of long term solvency of the firm. The ratio indicates the relationship between debt and equity i.e. outsiders funds and shareholder's fund which are sometime called as external and internal equities. It relates to the shareholder's fund and indicating the degree of protection enjoyed by long term creditors. The debt - equity ratio indicates the proportionate claims of owners and outsiders against the assets of the firm. The debt/equity ratio of DNPL, was 81.67% in fiscal year 2008/09. It is regarded as ratio of 2:1 as standard but DNPL debt/equity ratio was below the standard.

b. Capital gearing ratio:

It indicates the relationship between preference share capital debt and share holders fund. Preference share capital is deducted from shareholder's fund while calculating the capital gearing ratio. The capital gearing ratio of DNPL was 1.01.

3. Activity ratio

a) Asset turnover ratio:

Total assets include current assets, long term or fixed assets and intangible assets. The assets of the firm whether fixed or current should be managed efficiently to generate maximum sales through their proper utilization. Higher total assets turnover ratio indicates the proper utilization of assets of the firm and vice-versa. It helps to show the firm's ability of generating sales from the total financial resources available to the firm. DNPL's assets turnover ratio was 2:61.

b) Fixed assets turnover ratio:

The fixed assets turnover ratio indicate the extent to which the investment in fixed assets contribute towards sales. This ratio measures the efficiency with which the firm is utilizing its investment in fixed assets. Higher fixed assets turnover ratio indicates better business performance and lower ratio indicates inefficient utilization of available fixed assets. DNPL's fixed assets turnover ratio indicates better business performance and lower ratio indicates inefficient utilization of available fixed assets. DNPL's fixed assets turnover ratio was 3.22.

c) Working capital turnover ratio

Working capital turnover ratio indicates the firm's efficiency to meet the current obligations. Higher working capital ratio indicates the firm's ability to give better performance. DNPL's working capital ratio was 6.48 during the study period.

Inventory turnover ratio:

~~Every~~ Inventory turnover ratio indicates whether the investment in inventory is efficiently used or not. It indicates the marketability of inventory and reasonableness of quantity on hand. It also measures the velocity of conversion of stock into sales. There is no standard for inventory turnover ratio. The inventory ratio of DNPL was 3.48 times.

4) Profitability ratio

This ratio is calculated in relation to sales and investment. This ratio is related to the profit of the business.

a) Operating profit ratio :

Operating profit ratio tr~~y~~ies to establish relation between operating cost and net sales. Operating profit ratio indicates an average operating cost incurred on a sales of goods worth Rs. 100. Lower the ratio, higher is the operating profit available to cover the non-operating expenses to pay dividend and to create reserve and vice-versa. The operating profit ratio of DNPL was 3.24%.

b) Return on Capital Employed (ROCE) :

This ratio measures the relationship between capital employed and net profit after tax. The ratio indicates how well the management has used the fund supplied by creditors and owners. Higher ratio indicates the efficient use of fund entrusted to the firm by creditors and owners. This ratio shows how efficiently the management has used the available resources supplied by owners and creditors. Higher ratio or percentage indicates efficient utilization of fund or vice-versa.

c) Earning Per Share :

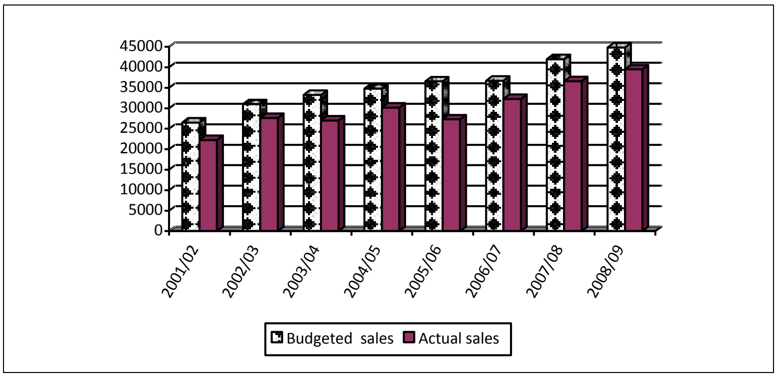
Apart from the rate of return, the profitability of a firm from the point of view of the ordinary shareholders is the earning per share. It measures the profit available to the equity shareholder's on per share basis i.e. the amount that they can get on each share held. The objective of computing this ratio is to measure the profitability of the firm per equity share basis.

In general, higher the figure, better it is and (lower the figure there is poor performance, while calculating EPS retained earning should not be considered i.e. only the earning of the year should be considered. According to this statement the EPS of DNPL was 72.91 during the fiscal year 2008/09.

4.4 Comparison Between Budgeted Sales and Actual Sales by Using Different Statistical Tools.

Diagram 4.1

Budgeted Sales and Target Sales



The above diagram indicates that actual sales try to meet the budgeted sales but not able to meet exactly. In the year 2001/02 the difference between budgeted sales and actual sales was high.

In order to find out the nature of variability of the budgeted sales and actual sales of different fiscal years the statistical tools such as arithmetice mean, standard deviation, cofficient of variation and probable error are used.

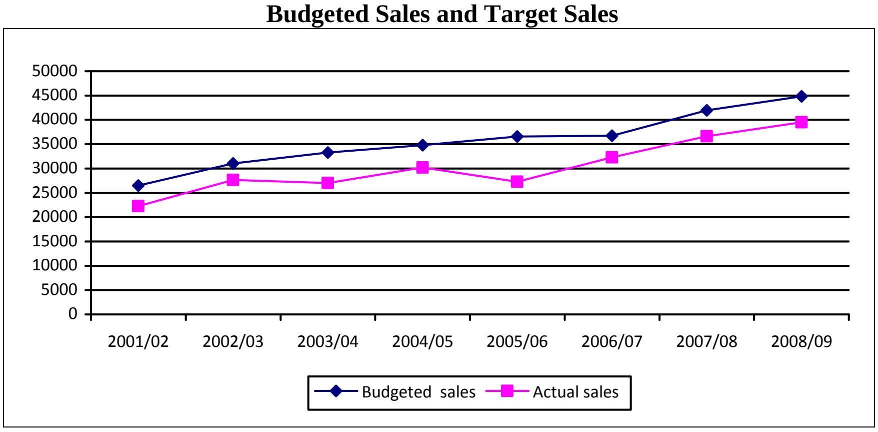
The detail calculation of these statistical tools are presented in Appendix. The summary of result is presented below:

Table 4.2
Calculation of mean, standard deviation and coefficient of variation

S.N.	Statistical Tools	Budget Sales	Actual Sales	Achievements
1	Arithmetic Mean	35710.36	30339.24	
2	Weighted Arithmetic mean	172899.44	147671.41	
3	Median	35656.41	28913.32	
4	Mode	35548.51	26061.48	
5	Geometric Mean	35548.72	29893.82	
6	Harmonic Mean	34862.42	29457.68	
7	Measures of Dispersion			
	(a) Range	18336.18	17227.08	
	(i) Coefficient of Range	0.2569	0.2799	
	(b) Mean deviation			
	(i) Mean deviation from mean	31246.56	26547.18	
	(ii) Mean deviation from median	31253.305	26725.038	
	(iii) Mean deviation from mode	31226.79	27081.52	
	(c) Coefficient of mean deviation			
	(i) mean deviation from mean	0.87499	0.8750	
	(ii) mean deviation from median	0.8765	0.9243	
	(iii) Mean deviation from mode	0.8795	1.0391	
	(d) Standard deviation	5453.03	5240.71	
	(i) Variance	29735536.18	27465041.3	
	(ii) C.V.	15.27%	17.27%	
	8. (i) Correlation			0.9733

	(ii) Probable error			0.014

Graph No. 4.2
Budgeted Sales and Target Sales



Source : Annual Report 2006/07 to 2008/09

The above graph or trend analysis shows that trend of targeted sales and actual sales achievements. It indicates the gap between target sales and actual sales are not wide. DNPL was not able to meet its target sales during the study period. In every statistical tools actual sales ould not meet the budgeted sales but was trying to meet but unsuccessful because of various reasons. Arithmetic mean of budgeted sales are greater than actual average sales. Similarly, weighted arithmetic mean, median, mode, geometric mean, h~~H~~armonic mean, range, coefficient of range mean deviation, coefficient of mean deviation all these tools are greater in figure in compare to actual sales. Measures of disperson indicates the reliability and accuracy of variable and it is very perfect measure to control variability and compare two or more variables in study and research. In denotes the expansion of series. Standard deviation is the most important measures of dispersion. It is used to measure the homogenity and heteroginity and comparision between two or more variables. In case of DNPL standard deviation of budgeted sales was 5453.03 and standard deviation of actual sales was 5240.71. It indicates that DNPL's budgeted sales and actual sales have uniformity not exactly but approximately. Although there is different in actual sales and budgeted sales are 15.27 and 17.27 respectively indicates less variability more homogenous. The most famous Karl Pearsons coefficient of correlation is used to determine the coefficient of correlation between budgeted sales and actual sales. The calculated value 'r' is 0.97, so there is a high degree of positive correlation. The probable error can be used to measure the reliability of calculated value of correlation coefficient. If r<PE it is insignificant so perhaps there is no evidene of correlation. If r is greater than 6 P.E. It is significant. The calculated value of probable error is 0.014.

It is found that the value of correlation (r is more than P.E. (i.e. 0.97 > 0.014) so it can be concluded that calculated value of r is significant which indicates that the actual sales will go in the same direction of budgeted sales. From the regression analysis the possible actual sales for next year will be 393829.02. (See Appendix)

4.5 Revenue Trend of DNPL

Revenue is the key factor of profit planning and control. We can't sure about the accuracy of other plan unless there is a realistc and practical revenue plan.

The starting point for the evaluation of the existing revenue planning practices is to analysis past trend of planned sales revenue and its achievement. The following table shows the DNPL 's sales revenue trend for the F/Y 2002/03 to 2008/09.

Table No. 4.3

Comtribution of each product in Revenue trend of DNPL

S.N	Produts	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
1	Lal Donta Manjan	3940.46	3578.95	3553.99	4074.16	5604.32	5601.83	3677.28
2	Babool Tooth paste	-	-	-	-	50.24	47.04	31.48
3	Dabur lal Tooth paste	-	-	-	149.92	457.97	529.28	689.97
4	Meswak Tooth paste					29.32	7.91	22.31
5	Vatika Hair oil	204.09	1395.50	3680.42	1934.82	950.46	711.19	187.06
6	Vatika Shampoo	2352.06	2795.99	1916.31	685.03	490.09	820.40	620.45
7	Sales (30%)	-	-	-	28.19	8.44	-	-
8	Vatika face Pack				7.45	2.45	1.07	1.30
9	Vatika Honey saffron soap	-	2684.07	-	-	46.30	181.11	172.05
10	Amla Hair Oil	2272.12	-	1882.58	659.08	398.07	440.06	569.62
11	Anmol cocount oil	-	-	12.88	11.54	49.71	33.17	39.97
12	Anmol Shampoo	-	-	7.56	158.06	72.17	50.94	35.36
13	Anmol sarson oil	-	116.43	32.55	12.24	42.60	(0.89)	0.57
14	Special Hair oil	81.84	40.40	111.17	132.95	158.47	205.04	311.47
15	Baby olive oil	188.66	-	56.54	24.55	35.76	14.56	29.35
16	Dabur Gulabari	-	2658.12	-	11.47	56.04	54.14	63.23
17	Hajmola tablet	3395.34	31.01	3221.56	2086.69	2480.10	2689.25	1973.86

18	Hajmola candy	254.06	-	121.83	128.16	108.41	134.27	198.26
19	Chywan prash	-	6685.56	-	194.69	559.72	165.42	121.43
20	Real fruit juice	4968.62	637.94	8905.98	12505.12	15921.46	19229.24	23514.57
21	Glucose D. powder	606.31	639.26	510.09	465.98	492.86	862.52	756.54
22	Pachan Churan	866.36	1567.08	440.00	659.53	730.50	706.10	1238.36
23	DCP Mishran	2546.31	334.89	1522.31	787.32	1217.50	1133.17	1457.40
24	Dantamukta	375556	-	347.15	1917.14	2054.40	2665.99	3356.66
25	plasticcontainers Bottles / caps / plugs	29.68	1.80	211.18	-	14.22	5.49	13.80
26	Beeframes / hives / thermocot sheet/ wax sheet	3.30	-	-	3.71	3.43	-	-
27	Sanifresh	-	-	-	-	72.76	92.59	99.89
28	Chirayita plant	-	-	10.35	-	3.33	3.20	44.21
29	Papermint Oil	-	-13.59	-	-	0.99	-	-
30	Stevia Powder / Sappling	3.92	660.67	-	39.37	12.68	3.01	-
31	Honey	1104.78	-	285.14	145.70	145.49	221.3.0	249.79
32	Binaca Tooth Powder	16.95	-	124.89	-	-	-	-
33	Tooth Brush/ glass/ candy fun	-	63.52	-	22.16	-	-	-
34	Toxin Rosin/MCS	1059.56	-	143.05	443.30	-	-	-
35	Aplicuture	-	4.08	6.49	0.50	-	-	-
36	Canvas Bag/ Dangless plants.	-	36.16	-	-	-	-	-
37	Hypericicum/ levels/silybuinsed	-	-	-	-	-	-	-
	Total	27649.62	26995.05	30177.02	27287.90	32270.23	36608.41	39476.26

source : Annual Report 2006/07, 2007/08, 2008/09

It is clear from the above table that the product Lal Danta Manjan are in increasing trend upto 2006/07 and are in decreasing trend. Similarly Dabur Lal Tooth Paste are in increasing trend where as Meswak Tooth paste are in decreasing. Some other products are in Fluctuating. It is obvious from the table that main contribution in sales revenue of DNPL is of Real fruit Juice which was decreased in year 2003/04 but are in increasing trend upto 2008/09. Some products like Binaca Tooth powder, Toxin Rosin /Mcs, Apliculture, canvas bag, Dang less plant. Hypercium levels silybun sed were closed because of losses or less contribution to revenue of DNPL.

Table no. 4.4

Contribution of Each Product in Revenue Trend of DNPL (in %)

S.N	Name of product	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
1	Lal Danta Manjan	14.25	13.26	11.78	14.93	17.37	15.30	9.31
2	Babool Tooth paste	-	-	-	-	0.16	0.13	0.08
3	Dabur lal Tooth paste	-	-	-	0.55	1.42	1.45	1.75
4	Meswak Tooth paste	-	-	-	-	0.09	0.023	0.056
5	Vatika Hair oil	0.74	5.17	12.20	7.09	2.81	1.94	0.47
6	Vatika Shampoo	-	-	-	2.51	1.52	2.24	1.57
7	Sales (30%)	8.51	10.36	6.35	0.10	0.03	-	-
8	Vatika face Pack	-	-	-	0.03	0.01	0.003	0.003
9	Vatika Honey saffron soap	-	-	-	-	0.14	0.5	0.43
10	Amla Hari oil	8.22	9.94	6.24	2.42	0.30	1.20	1.44
11	Anmol cocount oil	-	-	0.04	0.04	0.15	0.091	0.10
12	Anmol Shampoo	-	-	0.23	0.58	0.22	0.14	0.089
13	Anmol sarson oil	-	-	0.11	0.04	0.13	-	-
14	Special Hair oil	0.29	0.43	0.37	0.49	0.49	0.56	0.79
15	Baby olive oil	0.68	0.15	0.19	0.09	0.11	0.039	0.074
16	Dabur Gulabari	-	-	-	0.04	0.17	0.15	0.16
17	Hajmola tablet	12.28	9.85	10.68	7.65	7.69	7.35	5.00
18	Hajmola candy	0.92	0.11	0.40	0.47	0.34	0.37	0.50
19	Chywan prash	-	-	-	0.71	1.73	0.45	0.30
20	Real frut tuice	17.97	24.77	29.51	45.83	49.34	52.53	59.57
21	Glouse D. powder	2.19	25	1.69	1.73	1.53	2.36	1.92
22	Pachan Churan	3.13	2.37	1.46	2.42	2.26	1.93	3.14
23	DCP Mishran	9.21	5.81	5.04	2.89	3.77	3.09	3.69
24	Dantamukta	13.58	12.41	11.46	7.03	6.37	7.28	8.50
25	plastic container Bottles / caps / plugs	0.11	-	0.70	-	0.04	0.015	0.035
26	Beeframes / hives / thermocot sheet	0.01	0.01	-	0.01	0.01	-	-
27	Wax sheet sanifresh	-	-	-	-	-	0.25	0.25
28	Chirayita plant	-	-	0.03	-	-	0.008	0.11
29	Paperment Oil	-	-	-	-	-	-	-

30	Stevia Powder Sappling	0.01	0.05	0	0.14	0.04	0.008	-
31	Honey	3.83	0.24	0.47	0.62	-	-	-
32	Binaca Tooth Powder	0.06	-	0.08	-	-	-	
33	Tooth Brush/ glass/ candy fun	0.01	0.05	-	0.08	0.23	-	-
34	Toxin Rosin/MCS	3.83	0.24	0.47	0.62	-	-	-
35	Aplicuture	-	-	0.02	-	-	-	-
36	Canvas Bag/ Dangless plants	-	0.02	-	-	-	-	
37	Hypericum/ levels/silybuinsed	0.13	-	-	-	-	-	-
	Total	100	100	100	100	100	100	100

Source: Annual Report 2006/07, 2007/08, 2008/09

From the above table it is clear that the product Real Fruit Juice contributes more in comparison to other similar products in sales revenue. The contribution of Real Fruit Juice from the fiscal year 2002/03 to 2008/09 are 17.97 % 24.77% 29.51% 45.83%, 49.34% 52.53% & 59.57%. Thus the sales of real fruit juice are in increasing trend where as other products are in fluctuation, simlarly the product Lal Danta Manjan are in decreasing trend up to the fiscal year 2005/06 but it was increased in the year 2006/07 but in the year 2008/09 it ~~is~~was in decreasing trend.

The Real Fruit juice, Lal Danta Manjan, Amla Hair Oil, Hajmola Tablets, Pachan Churan, DCP Mishran, Glucose 'D' Power, Danta Mukta and Vatika Shampoo are the main products of the company. These products contributed more than 1% and in overall they contributed 59.57%, 9.31, 1.44%, 5%, 3.14%, 3.69%, 1.92%, 8.50%, 1.57%, in generating sales revenue in the year 2008/09. The sales revenue of other products contributed less than 1%.

From the above table it can be concluded that Real fruit juice is the only product that made remark contribution in the company's sales revenue generation.

4.6 Revenue of each Territory

Table No. 4.5

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F/Y	Total sales	Growth	Domestic		foreign		% contribution	
			sales	Growth in	sales	Growth in	Domestic	foreign
2001/02	22249.16	–	1427.56	-	20821.60	-	6.24	93.58
2002/03	27649.62	24.27	1880.89	31.74	25768.73	23.67	6.80	93.20
2003/04	26995.05	(2.37)	2165.98	15.15	24829.07	3.64%	8.02	91.98
2004/05	30177.02	11.797	2542.41	17.37	27634.60	11.29%	8.42	91.58
2005/06	27287.90	(9.57)	4146.87	63.11	23141.03	(16.26%)	15.20	84.80
2006/07	32270.33	18.25	6364.58	53.48	2590565	11.95%	19.72	80.28
2007/08	36608.41	13.4%	7422.01	16.61%	29186.40	12.67%	20.27	79.73
2008/09	39476.24	7.83%	10,085.07	35.88%	29391.17	0.7%	25.55	74.45

Source Annual Report 2006/07, 2007/08, 2008/09.

From the above table, it shows that contribution in foreign sales is more than domestic sales, but the contribution in foreign sales is in decreasing trend whereas the contribution in domestic sales are increasing from beginning to the year 2008/09 but slightly From the year, 2001/02 to 2008/09 the total sales are in fluctuation from 2001/02 to 2002/03 it was increased by 24.27% and it was ~~decreased~~decreased in the year 2003/04 by 2.37%.

Similarly total sales was increased in the year 2004/05 by 11.79% and it was decreased in the year 2005/06 by 9.57% and now it was increasing from the year 2006/07 to 2008/09 but increased percentage are not satisfactory it is in decreasing trend.

In case of Domestic sales, It is increasing from the year 2002/03 to 2008/09 but increased percentage are in fluctuation in the year 2005/06 there was high percentages, increased i.e. by 63.11 but this percentage was decreased in the year 2006/07 and obtained only 53.48% again it was decreased in the year 2007/08 obtained only 16.61% and it is increased in the year 2008/09 and obtained 35.88% which is more than previous years.

In case of foreign sales, it was also in fluctuating situation, the sales was decreased in the year 2003/04 By 3.64% and It was also decreased in the year 2005/06 by 16.26% and it was increased in the year 2006/07 by 11.95% and 2007/08 by 12.67% but in the year 2008/09 it was increased only by 0.7% which indicates the negative impact in sales revenue.

The turnover (excluding other income) of the company in the fiscal year 2008/09 was increased by 7.83% as compared to that fiscal year 2007/08. This growth was achieved despite of difficult business environment in Nepal during past year due to continuous bandhs and unstable political situations and against total estimated GDP growth of 0.18% in industry sector.

~~4.6.1~~ During the year, the recession has started showing presence in the global economy, as a result of it the commodity price touched Sky high with the price of crude oil crossing USD 100 per barrel. Similarly the cost of other inputs had increased.

	2007/08	**2008/09**
Turnover (sales)	39476	36608
Other income	2020	207
Total turnover (including other income)	41496	36815
Profit after depreciation and before provision	913	260
Less: provision for housing facility	45	13
Less: provision for bonus	79	25
Less provision for income tax	209	48
Net profit after tax	580	174
Add: Balance in profit and loss account brought forward from previous year	5555	549
Less: prior period Adjustment profit available for appropriation	5951	5555
Interim dividend	-	-
Transfer to general Reserve	-	-
Balanced carried to Balance sheet	5951	5555
Total	5951	5555

Further during the year, there was huge appreciation in the value of USD, resulting in huge exchange less to the company. Despite of all these factors company's profit after tax had increased significantly.

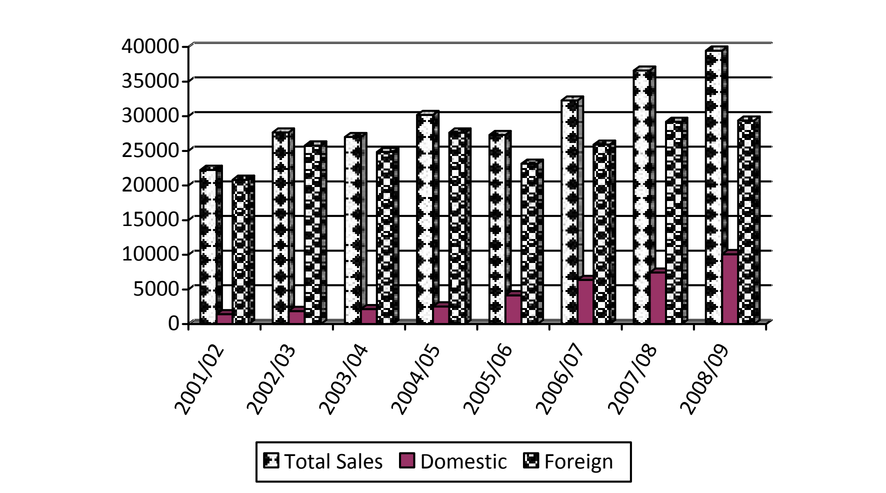
So considering these difficult national and international economic situations the performance of the company is well, and it has performed against all the odds.

The actual sales by territories are shown on the following graphical presentation.

4.7 Presentation of Budgeted sales, domestic sales and foreign sales

Diagram 4.~~7~~3

Budgeted Sales and Target Sales



Actual Sales by territories

4.8 Budgeted Domestic sales and Actual Domestic sales.

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Budgeted Domestic Sales and actual Domestic sales

Fiscal Year	Budgeted sales	Actual Domestic sales	% of Achievement
200/01	1764.44	1427.56	80.90
2002/03	2059.91	1880.89	91.31
2003/04	2727.70	2165.98	79.41
2004/05	2815.60	2542.41	90.30
2005/06	4960.75	4146.87	83.59
2006/07	7613.73	6364.58	89.59
2007/08	7990.98	7422.01	92.88
2008/09	10654.04	10085.07	94.66

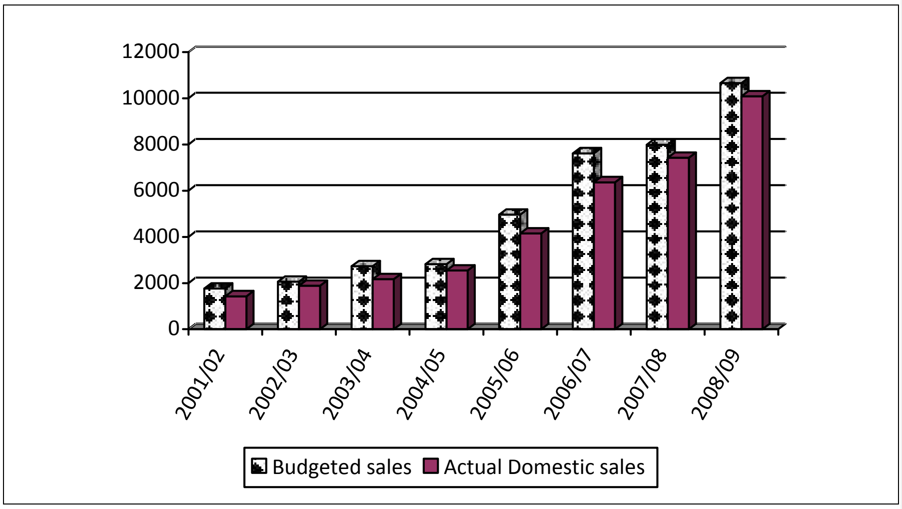
Source: Annual Report 2006/07, 2007/08, 2008/09

The Percentage of achievement ranges from 79.41% to 94.66% Achievement percentage are in fluctuating situation. In the year 2003/04 there was very low achievement in comparison to other years. There is a high degree of achievement in the year 2008/09 by 94.66% .

The budgeted and actual domestic sales can be shown below by graphic presentation.

Diagram 4.4~~8~~

Budget Domestic Sales and Actual Domestic Sales



4.9 Budgeted Domestic sales & Actual Domestic sales

The following table shows arithmetic mean standard deviation and coefficient of variation and correlation of budgeted domestic sales .The detail calculation is presented in Appendix here the summary of the result is presented.

Table 4.7

Calculation of different statistical tools of budgeted domestic sales and actual domestic sales.

S.N.	Statistical Tools / Particulars	Budget domestic Sales	Actual Sales	Achievements
1	Arithematic Mean	5073.39	4504.42	
2	Weighted Arithmetic mean	29623.13	26676.67	
3	Median	3888.175	3344.64	
4	Mode	1517.745	1025.08	
5	Geometric Mean	4160.31	3615.62	
6	Harmonic Mean	3439.67	2942.04	
7	Measures of Dispersion			
	(a) Range	6226.54	5994.45	
	(i) Coefficient of Range	0.6383	0.6774	
	(b) Mean deviation			
	(i) Mean deviation from mean	4439.22	3941.36	
	(ii) Mean deviation from median	5487.37	4086.34	
	(iii) Mean deviation from mode	4883.67	4376.28	
	~~(c)~~I Coefficient of mean deviation			
	(i) mean deviation from mean	0.8750	0.8749	
	(ii) mean deviation from median	1.1798	1.2218	
	(iii) Mean deviation from mode	3.2178	4.2692	
	(d) Standard deviation	3097.42	2934.96	
	(i) Variance	95494010.66	8613990.20	
	(ii) C.V.	61.05%	65.15%	
	8. (i) Correlation			0.9958
	(ii) Probable error			0.002003

The table – shows that the mean, weighted arithmetic mean, median, mode, geometric mean, harmonic mean, range, mean deviation, coefficient of mean deviation, variance, standard deviation, coefficient of variation, correlation coefficient of determination and their relationship shows that how much they are closed and far from each other.

Arithmetic mean of budgeted sales is 5073.39 and arithmetic mean of actual sales is 4504 .42 which indicates that there is a vast difference between actual domestic sales and budgeted domestic sales. The company should try to meet budgeted domestic sales. Similarly other statistical tools such as median, mode, G.M,H.M., range, mean deviation, coefficient of mean deviation, variance shows vast differen<u>ce</u>~~t~~.

Smallest standard deviation means high degree of uniformity of the observations as well as homogeneity of sales and largest standard deviation means just the opposite of the coefficient variation here the actual domestic sales are more variable than budgeted, domestic sales. The coefficient and correlation between budgeted domestic sales and actual domestic sales are 0.995. It shows that there is a high degree of positive correlation between actual sales and budgeted domestic sales.

The value of probable error is 0.002003 considering 6 P.E. error it is found that the value of 'r' is more than 6 P.E. i.e. 0.9958 (6 × 0.002003) 'r' i.e. 0.9958 > 0.0120 which indicates the value of r is significant and actual sales will go in the same direction of budgeted sales. In the next year 2009/2010 the actual domestic sales will 10614.45. (See Appendix)

4.9 Budgeted foreign sales and Actual foreign sales

Table No. 4.8

Fiscal year	Budgeted foreign sales	Actual foreign	Percentage of Achievement
2001/02	24764.77	20821.60	84.07%
2002/03	28953.45	25768.73	89.00%
2003/04	30558.31	24829.07	81.25%
2004/05	32159.90	27634.60	85.93%
2005/06	31556.57	23141.03	73.33%
2006/07	29218.78	25905.65	88.66%
2007/08	34038.25	29186.40	85.74%
2008/09	34243.02	29391.17	85.83%

Annual Report 2006/07, 2007/08, 2008/09

The percentage of achievement ranges from 73.33% to 89.00%. The highest percentage of achievement was in the year 2002/03 and the lowest achievement was in the year 2005/06. From the above table budgeted foreign sales is highest than actual foreign sales.

The budgeted foreign sales and actual foreign sales can be shown by the following bar diagram.

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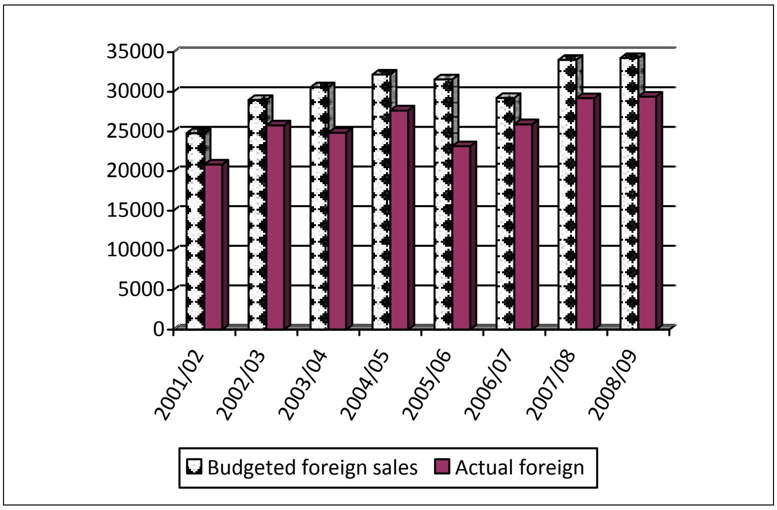
Diagram 4.~~6~~5

Budgeted Foreign sales and Actual Foreign Sales



The arithmetic mean, standard deviation, coefficient of variation, correlation and probable error of budgeted foreign sales and actual sales detailed calculation are presented in appendix .here , the summary of the results are presented.

Table 4.9

Calculation of different statistical tools of budgeted domestic sales and actual domestic sales.

S.N.	Statistical Tools / Particulars	Budget Foreign Sales	Actual Foreign Sales	Achievements
1	Arithematic Mean	30686.63	25834.78	
2	Weighted Arithmetic mean	143536.70	120994.73	
3	Median	31057.44	25837.18	
4	Mode	33149.06	25841.98	
5	Geometric Mean	22903.96	25672.911	
6	Harmonic Mean	30392.83	25527.29	
7	Measures of Dispersion			
	(a) Range	9478.25	8569.57	

	(i) Coefficient of Range	0.1606	0.1707	
	(b) Mean deviation			
	(i) Mean deviation from mean	26850.80	22605.43	
	(ii) Mean deviation from median	26804.45	22605.13	
	(iii) Mean deviation from mode	26542.99	22605.13	
	(c) Coefficient of mean deviation			
	(i) mean deviation from mean	0.8749	0.8749	
	(ii) mean deviation from median	0.8631	0.8749	
	(iii) Mean deviation from mode	0.8007	0.8747	
	(d) Standard deviation	2895.08	2750.69	
	(i) Variance	8381488.21	7566295.48	
	(ii) C.V.	9.43%	10.65%	
	8. (i) Correlation			0.8478
	(ii) Probable error			0.0670

The above table shows the arithmetic mean, weighted arithmetic mean, median, mode, G.M. H.M., range, mean deviation, standard deviation, coefficient of variation correlation and probable error of foreign sales and actual sales. The arithmetic mean of budgeted foreign sales is higher than that of actual foreign sales. It indicates that actual sales is far from budgeted sales and should try to meet budgeted sales. The weighted arithmetic mean, median, mode, G.M., H.M., range, mean, deviations are also far from budgeted sales. Standard deviation of budgeted sales is 2895.08 and that of actual sales is 2750.69. It means that range or observation series of actual foreign sales is more uniform and homogenous.

The coefficient of variation of budgeted foreign sales is 9.43% and actual foreign sales is 10.65% which indicates that budgeted foreign sales (C.V. of budget) sales, less than actual foreign sales so, it can be said that actual foreign sales is more variable than that budgeted foreign sales. The correlation coefficient between budgeted and actual foreign sales is 0.8478.It means that there is positive relationship between budgeted sales and actual sales. The value of probable error 6PE (i.e. 6*0.067= 0.402<0.848) is less than the value of r that's why r is more significant which indicates that actual sales will go in the same direction of budgeted sales. If the trend does not change the possible sales will Rs. 29896.12-. (See Appendix)

4.10 Analysis of actual total income, operating expenses and operating profit.

Table No. 4.10

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fiscal Year	Actual Income		Operating expenses		operating profit	
	Amount	% increase	Amount	% increase	Amount	% income
2001/02	22315.57	-	18395.21	-	3920.36	-
2002/03	277 51.36	24.36%	2305263	25.32%	4698.73	19.85%
2003/04	27086.42	(2.40%)	23602.93	2.38%	4148.43	(11.71%)
2004/05	30312.37	11.91%	26251.92	11.22%	4060.45	(2.12%)
2005/06	27543.31	(9.13)	2510929	(4.35)%	2434.12	(40.05%)
2006/07	2412.12	17.68%	30130.43	20%	2308.69	(5.15)%
2007/08	36814.98	13.58%	34675.52	15.08%	2139.46	(7.33%)
2008/09	41496.15	12.71%	37580.26	8.38%	3915.89	83.03%

Source: annual report 2006/07, 2007/08, 2008/09

Sales and other income is taken as total or actual incomes cost of material, manufacturing overhead, personal overhead, administrative overhead and selling overhead are included in operating expenses.

The above table shows the trend of actual income, operating expenses and operating profit from F/Y 2001/02 to 2008/09 .In fiscal year 2002/03 actual income increased by 24.36% due to increase in the third countries export sales of Hajmola, herbal powders, shampoo and regular increase in sales of real fruit juice. Operating expenses is also increased by 25.32% which is higher than actual increase in actual income. Operating profit is 19.85% which is less than percentage increased in actual income In 2003/04 actual income decreased by 2.4% over the previous year mainly due to decrease in export sales of herbal products and Hajmola operating income i.e. 11.71% loss due to high operating expenses which is increased 2.39% where as sales decreased to 2.4 % operating cost with the increase in cost of material and personnel overheads.

In 2004/05 actual income increased by 11.91% over previous year is mainly due to increase in hair oil, Hajmola tablet and real fruit juice sales. Percentage of operating profit decreased by 2.12% over pervious year. It shows that the margin of sales is decreased.

In 2005/06 actual incomes decreased by 9.13% over the previous year, this is mainly due to shifting of manufacturing hair oil, shampoo and Hajmola to India post announcement of excise free and tax free zones there .The operating expenses also decreased with decreases in sales but operating income was decreased by 40.05 over previous year mainly decreases in sales higher input causes extra import duty burden on packing materials.

In 2006/07 the company income was increased by 17.68% over the previous year this is mainly due to increase in juice sales. The operating expenses increased by 20% due to high input cost and extra import duty burden on packing materials and operating cost decreased by 5.15% due to high operating cost and low margin.

In 2007/08 the company income was increased only by 13.58% which is less than compared to the previous year. This growth is achieved despite of the difficult business environment in Nepal during the last year due to continuous bands and unstable political situation. Operating expenses was increased by 15.08% where as the operating profit was decreased by 7.33%.

In 2008/09 actual income is increased 12.71% which is very low than the previous year operating expenses was increased by 8.38% and operating profit was increased by 83.03%. This growth is achieved despite of difficult business environment and unstable political situation. This analysis shows that income of the company was fluctuating trends where as operating expenses increased as a results of decreased in the actual income and operating profit.

4.11 Analysis of Ratio Between Actual sales and Net profit.

Fiscal year	Actual Sales	Net profit	% Net profit
2001/02	22249.16	1395.09	6.27
2002/03	27649.62	1642.99	5.94
2003/04	26995.05	1150.84	4.26
2004/05	30177.02	1212.73	4.02
2005/06	27287.90	453.43	1.66
2006/07	32270.23	121.28	0.38
2007/08	36608.41	303.75	0.83
2008/09	39476.24	580.25	1.47

Source: Annual Report 2006/07, 2007/08, 2008/09.

It can be shown by the following diagrams.

Diagram No. 4.6

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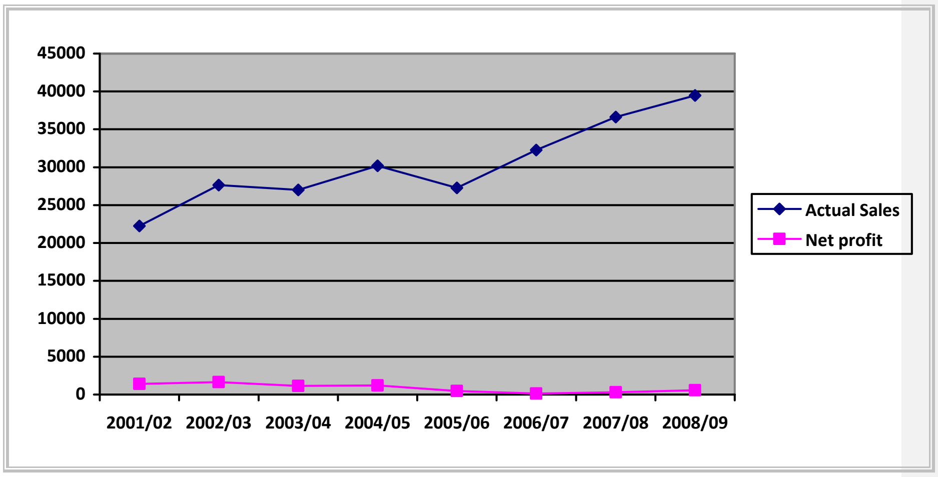

The above table shows that the clear picture of actual sales and net profit relationship of Dabur Nepal Private Limited. Sales are in fluctuating trend. Net profit in 2001/02 year is 1395.09 which is 6.27%, similarly in year 2002/03 the percentage of Net profit is in decreasing trend compared to the previous year which is only 5.49% .The net margin of the company is very low. The net profit of the company is decreased due to high cost of raw material administrative and selling expenses and increased in fixed cost. The company looses its net profit margin every year. At the end year (2008/09) of the study the net profit percentage is slightly increased 1.47% compared to the previous year (2007/08) which is only 0.83%. If the trend does not change the company will get income of Rs. 962.83 in next year.

4.12~~1~~ Fitting of trend line by using least square method

Table No. 4.12

Fiscal year (x)	Net income (y)	x=(X-A)	x^2	XY
2001/02	1395.09	-3	9	(4185.27)
2002/03	1642.99	-2	4	(3285.98)
2003/04	1150.85	-1	1	(1150.85)
2004/05	1212.73	0	0	0
2005/06	453.43	1	1	453.43
2006/07	121.28	2	4	242.56
2007/08	303.75	3	9	911.25
2008/09	580.25	4	16	2321
Total x = 8	$\phi x = 6860.37$	$\phi x = 4$	$\phi x^2 = 44$	$\phi xy = 4693.86$

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Since the no. of year is even the 4th year (2004/05) is assumed as a variable 'A'.

Let the trend line between dependent variable net profit 'y' and imdependent variable year 'x' (i.e. time) be represented by $y = a + bx$ ……… (i)

Where, a = y intercept

b = slope of the trend line or amount of change that comes in y for a unit change in x.

To find the variable of a and b we can solve the following two equations.

$\phi y = Na + b\phi x$ ……………. (ii)

$\phi xy = a\phi x + b\phi x^2$ …………. (iii)

Now solving the equations.

$\phi y = Na + bx$

$6860.37 = 8a + b4$

or, $8a + 4b = 6860.37$ ………………. (iv)

Again $\phi xy = a\phi x + b\phi x^2$

or, $4693.86 = a \times 4 + b \times 44$

or, $4a + 44b = 4693.86$ ………… (v)

Multiplying equation v by 2 and subtract (iv) from (v).

Now,

$$\begin{aligned} 8a + 88b &= 9387.72 \\ 8a + 4b &= 6860.37 \\ - \quad - \quad & \quad - \\ \hline 84b &= 2527.35 \end{aligned}$$

$\therefore b = \frac{2527.35}{84}$

$= 30.08$

Now substituting the value of b in equation (iv)

$8a + 4b = 6860.37$

or, $8a + 4 \times 30.08 = 6860.37$

or, $8a + 120.32 = 6860.37$

or, $8a = 6860.37 - 120.32$

or, $8a = 6740.05$

$\therefore a = \frac{6740.05}{8}$

$\therefore a = 842.51$

Now, putting the value of a and b in equation (i) we get

$y = a + bx$

$y = 842.51 + 30.08 \times 4$

$= 962.83$

If the trend does not change the company will get net income of Rs. 962.83 in fiscal year 2009/010. |

4.12. Analysis of Account Relievable:

DNPL sales its products in both cash and credit but it has no fixed policy to show how much percentage to be sold on credit of total sales. It provides trade and cash discount on sales. Its discount policy varies from product wise and place wise .It focuses on cash sales to company and used one bill system with it's customer, so its collection period is decreased. Company has average collection period of 30 days. It has not made any policy to motivate staff for effective collection of revenue and there is no record of penalty for their customers when there credit remain over dues. DNPL sales and accounts receivable relation can be shown in the following table.

Table No. 4.13

Account receivable , Debtor Tumor Ratio, Average Collection period of DNPL

Fiscal year	Account Receivables	Actual Sales	Debtor Turnover ratio	Average collection period
2001/02	2572.52	22249.16	8.65	42.19
2002/03	2503.39	27649.62	11.04	33.06
2003/04	2471.57	26955.05	10.91	33.45
2004/05	2217.45	30177.02	13.61	26.82
2005/06	1564.92	27287.90	17.41	20.93
2006/07	2302.81	32270.23	14.01	26.05
2007/08	1883.38	36608.41	19.44	18.78
2008/09	2589.79	39476.24	15.24	23.95
Average	2263.23	30334.20	13.79	28.15

Source : Annual Report 2006/07, 2007/08, 2008/09

(Average Collection period 365 day / debtor turn over ratio)

The above table shows the relationship between account receivable and sales revenue and the analysis of average debtor turnover and average collection period. In the year 2001/02 debtor, turnover ratio is 8.65 and average collection period is 42.19. In year 2002/03 also decreased the debtor turnover ratio is raised to 11.04 but the average collection period is decreased to 33.06. In the year 2003/04 the debtor turnover ratio is slightly decreased and average collection period is also decreased approximately remained to the last year .In the year 2004/05 debtor turn over ratio is increased to 13.61 and average collection period is decreased to 26.82 days. Similarly, in year 2005/06 Debtor turnover ratio is increased to 17.44 and average collection period is decreased to 20.93 days. In year 2006/07 debtor turnover ratio is decreased to 14.01 and average collection period is increased to 26.05 days. In year 2007/08 Debtor

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turnover ratio is increased 19.44 & collection period is decreased to 18.78. Similarly in the year 2008/09 Debtor turnover ratio is decreased to 15.24 and average collection period is increased to 23.95 days.

Short/low collection period indicates cash is quickly received and higher collection period means there is a chance of being bad debt. Higher debtor turnover ratio creates more working capital. Therefore DNPL should pay more attention to collect debtors.

4.13 Analysis of cash flow

Table No. 4.14

Cash flow of DNPL

Rs. in Lakhs

Fiscal year	cash flow from operating activities	Cash flow from investing activities	Cash flow from financing activities	Net cash flow
2001/02	1731.37	(1194.08)	(517.70)	19.59
2002/03	2152.62	(809.75)	(1316.74)	26.13
2003/04	1173.49	(1273.59)	85.97	14.13
2004/05	1003.27	(506.87)	(431.88)	64.52
2005/06	2659.61	(2365.19)	(326.44)	(32.02)
2006/07	2185.28	(2417.15)	176.08	(55.79)
2007/08	1065.71	(805.63)	(174.34)	85.74
2008/09	8195.96	(3829.71)	(3889.11)	477.15
Average	252096	(1650.24)	(799.27)	71.39

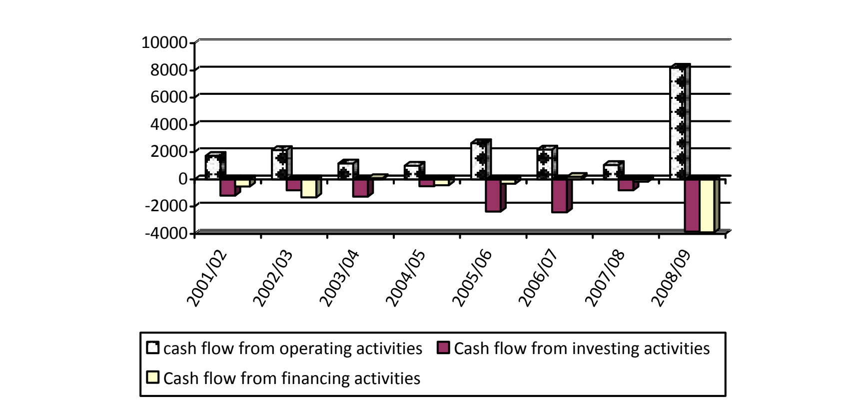
Source annual report (2006/07, 2007/08, 2008/09)

The above table shows that the cash flows of DNPL are in the fluctuating trend. The cash flow from operating activities are highly fluctuating .The average cash in flow from operating activities is Rs2520.96 lakhs. In the year 2008/09 cash inflows from operating activities is higher than other years.

The cash inflow from operating activities increase with increase in sales in year 2005/06 and 2008/09 but cash flow in year 2006/07 and 2007/08 decrease due to high operating cost and cost of packing material increase during that year. It can be shown by the following diagram.

Diagram 4.7

Budgeted Sales and Target Sales



The cash flow from investing activities is cash outflow. The average cash outflow from investing activities is Rs.1650.24 lakhs. The cash outflow in the year 2008/09 is higher (ie.3829.71 lakhs) compared to other years. DNPL invested large amount for the project of installing TBA22 Filing line for the fruit juice segment and Chyawanprash project has been started and completed. Now both the plants are operational. It also invested amount to purchase fixed assets.

The cash flow from financing activities is also in fluctuating trend. It has cash inflow in the year 2003/04 and 2006/07 only. The cash outflow from financing activities in the year 2008/09 is Rs.3889.11 which is very much higher than in other years. The company has average cash flow from financing activities was Rs.799.27 lakhs. It has high cash outflow in the year 2008/09 due to the repayment of secured and unsecured loan and payment of interest.

The net cash flow of DNPL is also in fluctuating trend. In the year 2003/04, 2005/06 and 2006/07 the situation is net cash outflow by Rs.(14.33), (32.02), (55.79). Besides that in the remaining years there is the situation of cash inflow. The average cash flow for the study period is 71.39 lakhs.

4.14 Analysis of sales per employee

Table No. 4.15

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fiscal year	Ac~~f~~tual sales	No. of employees	Sales per employee
2001/02	22249.16	1000	22.24916
2002/03	27649.62	1000	27.64952
2003/04	26995.05	1000	26.94505
2004/05	30177.02	1000	30.17702
2005/06	27287.90	1000	27.28790
2006/07	32270.23	1000	32.27023
2007/08	36608.41	1000	36.60841
2008/09	39476.24	1000	39.47624

[Source: Annual Report (2006/07,2007/08,2008/09)]

There is constant number of employees employed directly by DNPL since the Fiscal year 2001 to 2008 i.e.1000. The sales per employee in the fiscal year 2001/02 is Rs.22.24916 lakhs which is lowest than other years. In fiscal year 2003/04 sales per employees decreased to 26.99505 which is lower than 2002/03. Similarly in 2005/06 the sales per employee is also decreased than 2004/05. From 2006/07 the sales per employee is gradually increased and become higher in the year 2008/09.

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4.15 Cost Classification

The DNPL classified it's cost as fixed and variable according to the nature of expenditure. It has classified raw material cost and packing material cost as variable cost and other expenditure are fixed cost.

Table 4.16

Variable Cost

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F/Y	Raw material cost	Packing material cost	Total Vc
2001/02	11260.67	4348.36	15609.03
2002/03	14471.49	5189.22	19660.71
2003/04	14559.02	4733.13	19292.15
2004/05	14215.46	7939.63	2215.09
2005/06	13666.74	6875.78	20542.52
2006/07	15712.02	8702.99	24415.01
2007/08	15916.24	12308.49	28224.73
2008/09	16797.96	13281.63	30079.59

Table No. 4.17 Fixed cost

F/y	Manufacturing overhead	Personal overhead	Adm.& selling overhead	Royalty	Financial expenses	Depreciation & Amortization	Total Fc.
2001/02	1157.26	333.40	1207.25	88.27	1295.09	845.66	4926.93
2002/03	1548.61	422.11	1314.90	106.30	1284.67	1076.87	5753.476
2003/04	1496.45	482.61	1531.10	106.94	1215.33	1096.84	5929.27
2004/05	1513.76	746.31	1742.06	94.70	854.75	1037.36	5988.94
2005/06	1618.20	891.29	1988.04	69.24	631.69	1056.84	6255.30
2006/07	2020.71	1228.42	2502.51	103.35	734.06	1274.88	7863.93
2007/08	2312.07	1375.58	2765.23	104.91	572.78	1304.23	8434.80
2008/09	2113.34	2142.80	3427.48	111.68	1239.94	1396.69	10431.93

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4.16 Cost volume profit Analysis.

Table 4.18

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F/y	Total Fc.	Total VC.	Actual sales	P/V ratio	BEP sales	Margin of safety
2001/02	4926.93	15609.03	22249.16	0.298	16533.32	5715.84
2002/03	5753.46	19660.71	27649.62	0.289	19908.16	7741.46
2003/04	5929.27	19292.15	26995.05	0.285	20804.45	6190.60
2004/05	5988.94	22155.09	30177.02	0.266	22514.81	7622.21
2005/06	6255.3	20542.52	27287.90	0.247	25325.10	1962.80
2006/07	7863.93	24415.01	32270.23	0.243	32361.85	(91.62)
2007/08	8434.80	28224.73	36608.41	0.229	36833.18	(224.77)
2008/09	10431.93	30079.59	39476.24	0.238	43831.64	(4355.40)

[P.V ratio = 1-variable cost (V)]
Sales

[BEP sales = Fc÷Pv ratio]

[Margin of safety = Actual sales-BEP sales]

From the above table the variable cost is in fluctuating trend. It is decreased in the year 2003/04 and 2005/06. It is increased in the year 2002/03, 2004/05, 2006/07, 2007/08, 2008/09. Fixed costs are in increasing trend. It is increased gradually from the year 2001/02 to 2008/09. Profit volume ratio is decreased continuously from the year 2001/02 to 2007/08 and it has increased slightly in the year 2008/09. P/V ratio means how much is left from sales revenue after covering variable expenses that are contributed toward profit for the period. If the P/V ratio is not sufficient to cover the fixed expenses then a loss occurs for the period. It indicates why operating income changes as the volumes of sales changes. Decrease in PV ratio shows the variable cost of the company is increased BEP sales is in increasing trend. It is continuously increased from 2001/02 to 2008/09. Breakeven point is the bridge between loss and profit area. Profit begins from the breakeven point. It is the survival point where all firms must at least remain to sustain or continue the business. The firm must remain above the breakeven point to ensure it's continuity in future.

The margin of safety is also in fluctuating trend. It is positive from the year 2001/02 to 2005/06 and it is negative from 2006/07 to 2008/09. The margin of safety is the excess of budgeted (or actual) sales over the breakeven volume of sales. It states the amount by which sales can drop before losses begin to be incurred in an organization. Margin of safety = Budgeted sales – Breakeven sales .

The higher the margin of safety, the safer is the business. But in this case there is just opposite. Margin of safety is in negative which indicates the DNPL company is in the condition of unsafe. Margin of safety is lowest because of heavily increase in fixed cost.

4.17 Major Findings

The major findings of the above analysis of various budget and other revenue related variance shows that DNPL had been suffered from various internal and external problems for formulating and implementing revenue plans and it's management. The profit ability of the company is decreased per year.

The major findings of the research work as follow.

1. DNPL used to prepare short-term budget plan only.
2. The budgeted sales are increased but actual sales are in fluctuation in each fiscal year.

3. The turnover (excluding other income) of DNPL in year 2008/09 is increases by 7.8% as compared to that of fiscal year 2007/08.
4. The mean and standard deviation of budgeted sales are greater than actual sales but there is positive correlation between budgeted sales and actual sales.
5. The DNPL has achieved a growth of 16.6% in domestic sales and 12.7% in export sales in the fiscal year 2007/08. This growth is achieved as a result of increase in sales of fruit Juice, Dabur Lal Toothpaste, Vatika shampoo, DantaMukta, Glucose D , Honey and Hajmola Candy and Hajmola tablets.
6. DNPL did not prepare production budget. It assumed budgeted sales as it's production budget.
7. The company follows the mercantile system of accounting and recognizes income and expenditure on accrual basis in case of significant uncertainties relating to income.
8. Deprecation is charged on written down value on all fixed assets at the rates based on the estimated useful lives of such assets determined by the management. Land is not depreciated.
9. Amount towards staff Housing and Bonus have been provided as required under Labour Act 2048 and Bonus Act 2030 respectively
10. DNPL has good average collection policy Average collection period is nearly one month which give less chance of being bad debt.
11. The main source of cash generation is from operating activities and cash are outflow by investing and financing activities.
12. DNPL lost it's net profit year by year it was 6.27% in fiscal year 2001/02 and it is 1.47% at the end of study period. It indicates that company will suffer from loss very soon.
13. DNPL has adopted cost plus pricing strategy so that the price of DNPL production is cheaper than Nepal levers production.
14. DNPL sales revenue does not depend upon the number of employee. It depends on market strategy and export sales.
15. Manpower planning of DNPL is not good. The company does not create new opportunity for new and fresh human resource. The structure of manpower remained constant during the years.

16. DNPL BEP sales is increasing year by year. It becomes greater in year 2006/07 to 2008/09 than actual sales as a result of which margin of safety is in negative figure which indicates the poor sales policy of DNPL.
17. The amounts given in the figure of same year do not match in the annual report of 2007/08 and 2008/09 i.e. manufacturing overhead is given 2312.07 in annual report of 2007/08 and it is given 1857.25 in annual report of 2008/09 of the year 2007/08. similarly personnel overhead of the year 2007/08 is given as 1375.58 in annual report of 2007/08 and 1881.71 in annual report of 2008/09. This makes the researcher uncleared about the figure and this type of analysis plays vital role in the calculation profit or loss of the company.
18. Sales are recognized on dispatch to customers and are recorded net of value added tax. Domestic sales include excise duty of Rs.167.24 lakhs payable to Government of Nepal. Export sales do not attract any value added taxes.
19. The company has spent Rs.163.42 lakhs in year 2007/08 on purchase of land for the staff housing colony and Rs.367.60 lakhs on workers quarters up to 31st Ashad 2065.
20. As per the marketing agreement Royalty payable for the year to Dabur International ltd is Rs.104.91 lakhs in year 2008/09.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Revenue is the aggregate amount received by DNPL by selling goods and rendering services to the customer or clients. Planning means thinking in advance about what to do? When to do? How to do? etc or describing the future course of action .The revenue plan should be made to co- ordinate the efforts of the sales department and production department. It helps management for decision making process. Revenue planning is the essence of management without planning any firm cannot reach on their destination only preparation of revenue planning is not sufficient for the survival of business its effective implementation is very necessary.

Dabur Nepal private ltd is a manufacturing company. It was established in 1992 with an initial investment of 80 millions. The factory and~~re~~ registered office is situated at Rampur Tokani, Bara district. It has succeeded in fulfilling the needs in health care, herbal care and food products. The main objectives of the present study is to high light the current practice of preparation of sales budgets and its effectiveness from the year 2001/02 to 2008/09. The study mainly depends upon secondary data. The data has been analyzed by using statistical and financial tool. ~~–~~Descriptive as well as analytical approach have used to analysis the quantitative data. In statistical tools mean, weighted arithmetic mean, median, mode, measure of dispersion, standard deviation, correlation, coefficient of variance and P/E ratio have been used and in financial tools, liquidity ratio, activity ratio, leverage ratio and porfitability ratio and CVP analysis have been used.

From the analysis of statistical tools budgeted sales and actual sales are far from each other. Actual sales are trying to meet the budgeted sales but can not able to meet because of various reasons such as difficult business environment and unstable political situations. Although there is a vast difference between statistical tools i.e. mean, median mode, measures of dispersion but there is high degree of positive correlation which indicates that actual sales are going in the same direction of budgeted sales and standare deviation shows the homogeneity and uniformity not exactly but approximately between budgeted and actual sales.

Ratio analysis shows that DNPL could not able to meet the standard such as 2:1 current ratio and 1:1 in quick ratio and collection of inventories to pay off its current obligations. Despite of there factors the company has a proper and adequate internal control system to safeguard and protection of all assets and that the transactions are authorized recorded and reported correctly but annual report do not match with the formula which we use in calculation of ratio analysis. Since the company has very aggressive sales and expansion plan for beating the global recession no dividend is proposed in the year 2008/09 because there is a scarce of sufficient liquidity.

The report shows that DNPL could not meet budgeted sales however company is able to make profit but not satisfactorily. This study has be organized into five chapters consisting of Introduction, Review of literature, Research methodology. Data presentation and analysis and summary, conclusion and recommendation.

5.2 Conclusion

DNPL has not prepare a systematic and scientific plan strategy, only few products can improve their market share .The market demand worldwide has reduced sharply affecting the world economy negatively and Nepal is also not an exception. to this despite of these negative factors it has a very proactive business plans and taken sufficient measure's to ensure the healthy sales and profit growth along with the sound financial health. Although the mean and standard deviation of actual sales are lower than budgeted sales there is positive correlation between sales target and sales achievement. The company has a proper and adequate internal control system to ensure safeguard and protection of all assets and that transactions are authorized recorded and reported correctly. The company has very aggressive sales and expansion/modernization plan for the next year despite of global recession. For meeting these plans and beating the global recession, the company needs sufficient liquidity. So keeping in view these factors, no dividend was ~~are~~ proposed during the study period~~this year~~.

The main resource of revenue collection is from export sales. Export sales contributes 80% of revenue more than domestic sales .The main products of DNPL is Real fruit juice and Dantamukta, which, contributes 59.57% and 8.50 respectively and Lal Danta Manjan contributes 9.31% of total sales .The net profit of the company decreasing year by year .It was in the year 2003/04 was Rs. 1212.73 and now it is Rs. 580.25 which is higher than the year 2007/08. In that year only Rs.174.77 was received of from net profit after tax. It has fixed structure of manpower which directly influence in generating revenue .It has good average collection period. Total variable cost is in fluctuating trend and fixed cost is increasing year by year and P/V ratio is also in decreasing trend from the year 2001/02 to 2007/08 and it is increased in year 2008/09 by 0.238 which indicates that DNPL is trying to improve their situation. Its positive side is its debtor turnover ratio and average collection policy. It has adopted cost plus pricing policy and its product is found cheaper than Nepal Lever's product~~.~~, it ~~It~~'s competitor~~,~~. T ~~t~~he management of DNPL does not have cost control. Production programme and doesn't adopt the nature and content of profit planning. It can be concluded that company is not seriously conscious about their performance

5.3 Recommendation

Based on the above study some suggestions are given to DNPL for its better performance by formulating and implementing of revenue plans to lead the factory in the strong position in future. Some recommendation and suggestions can be highlighted by the following points.

1. DNPL has to make long term strategic plan on realistic ground according to the requirement of business and seriously concentrate on its implementation.
2. In order to prepare annual report DNPL should consider the figures in RS. Which was written in previous year report? Difference in figure may create researcher problems in writing conclusion.
3. It should develop specific goals to achieve better performance .such goals may be return on capital employed, net profit on sales etc.
4. It should consider on SWOT analysis of the competitors in order to achieve the objectives of the company.
5. DNPL should prepare budgeted sales or production budget to compare with actual sales. Budgeted sales are estimated in the period of study on the basis of previous year thesis.

6. Effective management of human resource is necessary to motivate in working environment of business so that goals can be achieved easily.
7. It should prepare periodic report for evaluating the manpower and their performance towards the goal.
8. It should innovate and modernize its product according to the time and new technology.
9. It should follow the strategy that products create demand through advertisement and distribution of free samples
10. Workers or employees should be participated in the decision making process and there should be continuous flow of information from top to down and down to top level.
11. DNPL should develop Nursery in to different parts of the country so that the cost of raw materials purchase is minimized and it reduces variable cost.
12. DNPL should issue shares for public so that amount can be collected to develop it current situation
13. The DNPL service should be custo`mer oriented rather than profit oriented because its products directly related with the health of the people .
14. DNPL should treat its customer or client politely and courteously when they visit in case of research work or any other work otherwise there will be negative impact of the company.
15. It should expand its business with international companies as well as national companies to save its existence with varieties of healthy products
16. A systematic approach should be made toward effective implementation of planning to increase profit.
17. Ratio analysis should be calculated correctly in annual report because it creates the confusion for study and it also make a researcher difficult to find out its in strength and weakness.
18. DNPL should destroy its date expired products which are directly related to the health of people.
19. It should provide its free samples for the products whether its products are attracting customer or not.
20. It should provide its free samples for the students involve in researches work for future benefit or for positive impact of the company.

Appendix - 2

Fiscal Year	Budgeted Sales (x)	Actual Sales (y)	$x=x-\bar{x}$	$y=y-\bar{y}$	x^2	y^2	xy
2001/02	26511.21	22249.16	(9199.15)	(8090.04)	89624360.72	65448747.2	74421491.49
2002/03	31013.26	27649.62	(4697)	(2689.58)	22061809.00	7233840.58	12632957.26
2003/04	33286.01	26995.05	(2424.35)	(3344.15)	5877472.923	1118339.22	8107390.053
2004/05	34795.50	30177.02	(914.86)	(162.18)	836968.82	26302.35	148372.00
2005/06	36517.32	27287.90	806.96	(3051.3)	651184.44	9310431.69	2462277.05
2006/07	36732.51	32270.23	1022.15	(1931.03)	1044790.62	3728876.86	1973802.31
2007/08	41979.55	36608.41	6269.19	(6269.21)	39302743.26	39302994.02	39302868.64
2008/09	44847.39	39476.24	9137.3	(9137.04)	83485317.22	83485499.96	83485408.59
N = 8	ϕx = 285682.85	ϕy = 242713.63	0.03	0.03	ϕx^2 = 237884647	ϕy^2 = 219720032	ϕxy = 222534567.4

For budgeted sales (x)

$$\text{Mean } (\bar{x}) = \frac{\phi x}{N} = \frac{285682.85}{8} = 35710.36$$

For actual sales (y)

$$\text{Mean } (\bar{y}) = \frac{\phi y}{N} = \frac{242713.63}{8} = 30339.24$$

Weighted Arithmetic Mean

Fiscal Year	Budgeted Sales (x)	wx	Actual Sales (y)	wy
2001/02	26511.21	26511.21	22249.16	22249.16
2002/03	31013.26	62026.72	27649.62	55299.24
2003/04	33286.01	99858.03	26995.05	80985.15
2004/05	34795.50	139182.00	30177.02	120708.08
2005/06	36517.32	182586.6	27287.90	136439.5
2006/07	36732.51	220395.06	32270.23	193621.38
2007/08	41979.55	293856.85	36608.41	256258.87
2008/09	44847.39	358779.12	39476.24	315809.92

N = 8	ϕx = 285682.85|	ϕwx = 1383195.59|	ϕy|X|| ΛΝΛΓΚΜΘΩΜ|	ϕwy = 1181371.3 |

For budgeted sales

$$\text{Weighted arithmetic mean } (\bar{x}_w) = \frac{\phi wx}{\phi w} = \frac{1383195.58}{8} = 172894.44$$

For actual sales

$$\text{Weighted arithmetic mean } (\bar{y}_w) = \frac{\phi wy}{\phi w} = \frac{1181371.3}{8} = 147671.41$$

Median

For median the value of series are arranged in ascending order.

Fiscal Year	Budgeted Sales (x)	Actual Sales (y)	Arranged in ascending order
2001/02	26511.21	22249.16	22249.16
2002/03	31013.26	27649.62	26995.05
2003/04	33286.01	26995.05	27287.90
2004/05	34795.50	30177.02	27649.62
2005/06	36517.32	27287.90	30177.02
2006/07	36732.51	32270.23	32270.23
2007/08	41979.55	36608.41	36608.41
2008/09	44847.39	39476.24	39476.24

$$\text{Mean (Md)} = \frac{N+1}{2}^{\text{th}} \text{ term}$$

$$= \frac{8+1}{2}^{\text{th}} \text{ term}$$

$$= \frac{9}{2}^{\text{th}} \text{ term}$$

$$= 4.5^{\text{th}} \text{ term}$$

$$\therefore \text{Median for budgeted sales (Mdx)} = \frac{34795.50 + 36517.32}{2}$$

$$= 35656.41$$

$$\text{Median for actual sales (Mdx)} = \frac{27649.62 + 30177.02}{2}$$

Mode : = 28913.32

For budgeted sales

Mode (Mo) = 3× 35656.41 - 2 35710.36

= 106969.23 - 71420.72

= 35548.51

For actual sales

Mo = 3 × 28913.32 - 2 × 30339.20

= 86379.96 - 60678.48

= 26061.48

Geometric Mean (G.M.)

$$\text{Geometric Mean (G.M.)} = \sqrt[x]{x_1 \times x_2 \times x_3 \ldots\ldots\ldots\ldots\ldots xn}$$

G.M. for budgeted sales

=

Error!

$$= \sqrt[8]{822201699.8} \times \sqrt[8]{1158203361} \times \sqrt[8]{1341372822} \times \sqrt[8]{1882673251}$$

= 13.01284618 × 13.58229324 × 13.8338699 × 14.43267623

= 35288.72

G.M. for actual sales

=

Error!

$$= \sqrt[8]{615180819.3} \times \sqrt[8]{814630163.8} \times \sqrt[8]{880586809.2} \times \sqrt[8]{1445162379}$$

= 12.54946895 × 12.99780631 × 13.12491568 × 13.96334861

= 29893.82

Harmonic Mean (H.M.)

$$\text{Harmonic Mean} = \frac{N}{\phi YN^{-}}$$

For budgeted sales

Fiscal Year	Budgeted Sales (x)	Reciprocals ($^1/_x$)
2001/02	26511.21	0.000037719
2002/03	31013.26	0.000032244
2003/04	33286.01	0.000030042
2004/05	34795.50	0.000028739
2005/06	36517.32	0.000027387
2006/07	36732.51	0.000027223
2007/08	41979.55	0.000023821
2008/09	44847.39	0.000022297
		$\phi\ ^1/_x =$ 0.000229472

$$\therefore \text{H.M.} = \frac{N}{\phi\ ^1/_x}$$

$$= \frac{8}{0.000229472}$$

$$= 34862.64$$

For budgeted sales

Fiscal Year	Actual Sales (y)	Reciprocals ($^1/_y$)
2001/02	22249.16	0.000044945
2002/03	27649.62	0.0000
2003/04	26995.05	0.0000
2004/05	30177.02	0.0000
2005/06	27287.90	0.0000
2006/07	32270.23	0.0000
2007/08	36608.41	0.0000
2008/09	39476.24	0.0000
		$\phi\ ^1/_y =$ 0.000271576

$$\therefore \text{H.M.} = \frac{N}{\phi\ ^1/_y}$$

$$= \frac{8}{0.000271576}$$

$= 29457.68$

Measures of Dispersion

Range

Range = L - S

Where,

L = Largest Value

S = Smallest Value

∴ Range for budged sales = 44847.39 - 26511.21

$= 18336.18$

For actual sales

Range = 39476.24 - 22249.16

$= 17227.08$

Coefficient of range for budgeted sales = $\frac{L - S}{L + S}$

$= \frac{44847.39 - 26511.21}{44847.39 + 26511.21}$

$= \frac{18336.18}{71358.6}$

$= 0.2569$

Coefficient of range for Actual sales = $\frac{L - S}{L + S}$

$= \frac{39476.24 - 22249.16}{39746.24 - 22249.16}$

$= \frac{17277.08}{61725.4}$

$= 0.2799$

Mean Deviation

(a) Mean deviation from Mean = $\frac{\phi |x - \bar{x}|}{n}$

For budgeted sales = $\frac{|285682.85 - 35710.36|}{8}$

$= 31246.56$

For actual sales = $= \frac{\sum |y - \bar{y}|}{n}$

$= \frac{|242713.63 - 30339.20|}{8}$

= 26547.18

(b) Mean deviation from Median = $\frac{\sum |x - Md|}{n}$

For budgeted sales = $\frac{|285682.85 - 35656.41|}{8}$

= 31253.305

For actual sales = $\frac{\sum |y - Md|}{n}$

$= \frac{|242713.63 - 28913.32|}{8}$

= 26725.038

(c) Mean deviation from Mode = $\frac{\sum |x - Mo|}{n}$

For budgeted sales = $\frac{|285682.85 - 35548.51|}{8}$

= 31266.79

For actual sales = $\frac{\sum |y - Mo|}{n}$

$= \frac{|242713.63 - 26061.48|}{8}$

= 27081.52

Coefficient of mean deviation

(i) $\frac{\text{Mean deviation from mean}}{\text{mean}}$

For budgeted sales

$= \frac{31246.56}{35710.36}$

= 0.87499

For actual sales

$$= \frac{26547.18}{30339.20}$$

$$= 0.8750$$

(ii) $\frac{\text{Mean deviation from median}}{\text{Median}}$

For budgeted sales

$$= \frac{31253.305}{35656.41}$$

$$= 0.8765$$

For actual sales

$$= \frac{26725.038}{28913.32}$$

$$= 0.9243$$

(iii) $\frac{\text{Mean deviation from Mode}}{\text{Mode}}$

For budgeted sales

$$= \frac{31266.79}{35548.51}$$

$$= 0.8795$$

For actual sales

$$= \frac{27081.52}{26061.48}$$

$$= 1.0391$$

Standard deviation

For budgeted sales

$$\text{Standard deviation } (\exists) = \sqrt{\frac{\phi x^2}{n} - \left(\frac{\phi x}{n}\right)^2}$$

$$= \sqrt{\frac{237884647}{8} - \left(\frac{0}{8}\right)^2}$$

$$= \sqrt{29735580.88 - 0}$$

$$= 5453.03$$

For Actual sales

$$\text{Standard deviation } (\exists) = \sqrt{\frac{\phi y^2}{n} - \left(\frac{\phi y}{n}\right)^2}$$

$$= \sqrt{\frac{219720032}{8} - 0}$$

$$= \sqrt{27465004 - 0}$$

$$= 5240.71$$

Variance

For budgeted sales

$$\text{Variance} = \exists^2 = (5453.03)^2$$

$$= 29735536.18$$

For actual sales

$$\text{Variance} = \phi^2 = (5240.79)^2$$

$$= 27465041.3$$

Coefficient of variation

$$\text{C.V.} = \frac{\text{S.D.}}{\text{X}} \times 100\ \%$$

$$\text{For budgeted sales (C.V.)} = \frac{5453.03}{35710.36} \times 100\%$$

$$= 15.27\%$$

$$\text{For actual sales (C.V.)} = \frac{\text{S.D.}}{y} \times 100\%$$

$$= \frac{5240.71}{30339.24} \times 100\%$$

$$= 17.27\%$$

Correlation analysis

$$r_{xy} = \frac{x\phi xy - (\phi x)(\phi y)}{\sqrt{x\phi x^2 - (\phi x)^2} \cdot \sqrt{x\phi y^2 - (\phi y)^2}}$$

$$= \frac{8\times222534567.4 - 0}{\sqrt{8\times237884647 - (0)^2} - \sqrt{8 \times 219720032 - (0)^2}}$$

$$= \frac{1780276539}{\sqrt{19030770176 \times 1757760256}}$$

$$= \frac{1780276539}{43624.27 \times 41925.65}$$

$$= \frac{1780276539}{182897587}$$

Calculation of probable error (P.E.)

$$\text{P.E.} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.97)^2}{\sqrt{8}}$$

$$= 0.6745 \times \frac{1\text{-}09409}{\sqrt{8}}$$

$$= 0.6745 \times \frac{0.0591}{2.8284}$$

$$= 0.014$$

Regression Analysis

Obtaining regression equations

Fiscal Year	Budgeted Sales (x)	Actual Sales (y)
2001/02	26511.21	22249.16
2002/03	31013.26	27649.62
2003/04	33286.01	26995.05
2004/05	34795.50	30177.02
2005/06	36517.32	27287.90
2006/07	36732.51	32270.23
2007/08	41979.55	36608.41
2008/09	44847.39	39476.24

Calculation of trend by fitting straight line trend, least square for actual sales trend and possible sales of DNPL.

Fiscal Year	Actual Sales (y)	x = (x-A)	x^2	xy
2001/02	22249.16	-3	9	-66747.48
2002/03	27649.62	-2	4	-55299.24
2003/04	26995.05	-1	1	-26995.05
2004/05	30177.02	0	0	0
2005/06	27287.90	1	1	27287.90
2006/07	32270.23	2	4	64540.46
2007/08	36608.41	3	9	109825.23
2008/09	39476.24	4	16	157904.96

N = 8	$\phi y = 242713.63$	$\phi x = 4$	$\phi x^2 = 44$	$\phi xy = 210516.78$

{Since the no. of year is even, year 4 is taken as assumed value A}

We have the equation.

$x = a + bx$

Where, y = Actual sales

a = Fixed cost

b = variable cost permits

x = x variable / required year

We know,

$$a = \frac{\phi x^2 . \phi x - \phi xy . \phi x}{N\phi X^2 - (\phi X)^2}$$

$$= \frac{44 \times 242713.63 - 210516.78 \times 4}{8 \times 44 - (4)^2}$$

$$= \frac{10679399.72 - 842067.12}{352 - 16}$$

$$= \frac{9837332.6}{336}$$

$$= 29277.77$$

Similarly $b = \dfrac{N\phi xy - \phi x . \phi y}{N\phi x^2 - (\phi x)^2}$

$$= \frac{8 \times 210516.78 - 4 \times 242713.63}{8 \times 44 - (4)^2}$$

$$= \frac{1684134.24 - 970854.52}{352 - 16}$$

$$= 2122.85$$

In the fiscal year 2008/09 the value of x will be 5 is assumed to be base year substituting the value of a and b in above equation, we get:

… $y = a + bx$

$y = 29277.77 + 2122.85 \times 5$

$= 29277.77 + 10614.25$

= Rs. 39892.02

If the trend does not change the possible sales will Rs. 39892.02

Appendix - 3

Budgeted domestic sales and actual domestic sales.

Fiscal Year	Budgeted domestic sales	Actual domestic sales	x = x - x	y = y - y	x^2	y^2	xy
2001/02	1764.44	1427.56	(3308.95)	(3070.86)	10949150.10	9467067.46	101811785.90
2002/03	2059.91	1880.89	(3013.48)	(2623.53)	9081061.71	6882909.66	7905955.18
2003/04	2727.70	2165.98	(2345.69)	(2338.44)	5502261.58	5468301.63	5485255.32
2004/05	2815.60	2542.41	(2257.79)	(1962.01)	5097615.68	3849483.24	4929806.56
2005/06	4960.75	4146.87	(112.64)	(357.55)	12687.70	127842.00	40274.43
2006/07	7613.73	6364.58	(2540.34)	1860.16	6453327.32	3460195.23	4725938.85
2007/08	7990.98	7422.01	2917.59	2917.59	8512331.41	8512331.41	8512331.41
2008/09	10654.04	10085.07	5580.65	5580.65	31143654.42	31143654.42	31143654.42
N = 8	ϕx = 40587.15	ϕy = 36035.34	ϕx = 0	ϕy = 0	$ϕx^2$ = 76752089.92	$ϕy^2$ = 68911785.05	ϕxy = 72423892.07

1. Mean

For budgeted domestic sales

$$\text{Mean } (x) = \frac{ϕx}{N} = \frac{40587.15}{8} = 5073.39$$

For actual domestic sales

$$\text{Mean } (y) = \frac{ϕy}{N} = \frac{36035.34}{8} = 4504.42$$

2. Weighted Arithmetic mean

Fiscal Year (w)	Budgeted sales	wx	Actual Sales (y)	wy
2001/02	1764.44	1764.44	1427.56	1427.56

2002/03	2059.91	4119.82	1880.89	3761.78
2003/04	2727.70	8183.10	2165.98	6497.94
2004/05	2815.60	11262.40	2542.41	10169.64
2005/06	4960.75	24803.75	4146.87	20734.35
2006/07	7613.73	45682.38	6364.58	38187.48
2007/08	7990.98	55936.86	7422.01	51954.07
2008/09	10654.04	85232.32	10085.07	80680.56
ϕw = 8	ϕx = 40587.15	ϕwx = 236985.07	ϕy = 36035.37	ϕy = 213413.38

For budgeted domestic sales

Weighted arithmetic mean (wx) $= \frac{\phi wx}{\phi w}$

$= \frac{236985.07}{8}$

$= 29623.13$

For actual domestic sales

Weighted arithmetic mean (yw)

$= \frac{\phi wy}{\phi w}$

$= \frac{213413.38}{8}$

$= 26676.67$

3. Median

Median (Md) $= \frac{N+1}{2}^{th}$ term

$= \frac{8+1}{2}^{th}$ term

$= 4.5^{th}$ term

For budgeted domestic sales

Median $= \frac{2815.60 + 4960.75}{2}$

$= 3888.175$

For actual domestic sales

Median $= \frac{2542.41 + 4146.87}{2}$

$= 3344.64$

4. Mode

Mode (Mo) = 3 Median - 2 mean

For budgeted domestic sales

Mode (Mo) $= 3 \times 3888.175 - 2 \times 5073.39$

$= 11664.525 - 10146.78$

$= 1517.745$

For actual domestic sales

Mode (Mo) $= 3 \times 3344.64 - 2 \times 4504.42$

$= 10033.92 - 9008.84$

$= 1025.08$

4. Geometric mean (G.M.)

Geometric Mean (G.M.) $= \sqrt[n]{x_1\, x_2\, x_3 \ldots\ldots x_n}$

Geometric mean for budgeted domestic sales (G.M.)

$=$

$$\sqrt[8]{1764.44 \times 2059.91 \times 2727.70 \times 2815.60 \times 4960.75 \times 7613.73 \times 7990.98 \times 106.54.04}$$

$= \sqrt[8]{3634587.6} \times \sqrt[8]{7680112.12} \times \sqrt[8]{37769811.1} \times \sqrt[8]{85136220.56}$

$= 6.6078 \times 7.2555 \times 8.8540 \times 9.8008$

$= 4160.3060$

$= 4160.31$

Geometric mean for actual domestic sales

G.M. $= \sqrt[n]{x_1\, x_2\, x_3 \ldots\ldots x_n}$

$=$

$$\sqrt[8]{1427.56 \times 1880.89 \times 2165.98 \times 2542.41 \times 4146.87 \times 6364.58 \times 7422.01 \times 10085.07}$$

$= \sqrt[8]{2685083.33} \times \sqrt[8]{5506089.21} \times \sqrt[8]{2639085.86} \times \sqrt[8]{74851490.39}$

$= 6.3624 \times 6.9599 \times 8.4661 \times 9.6444$

$= 3615.62$

5. Harmonic Mean (H.M)

$$\text{Harmonic Mean (H.M.)} = \frac{N}{\phi \frac{1}{x}}$$

Fiscal Year (w)	Budgeted sales	Reciprocals
2001/02	1764.44	0.0005667
2002/03	2059.91	0.0004855
2003/04	2727.70	0.0003666
2004/05	2815.60	0.0003552
2005/06	4960.75	0.0002016
2006/07	7613.73	0.0001313
2007/08	7990.98	0.0001251
2008/09	10654.04	0.0000938
$\phi w = 8$	$\phi x = 40587.15$	$\phi yx = 0.0023258$

Harmonic mean for budgeted domestic sales

$$\text{H.M.} = \frac{N}{\phi \frac{1}{x}} = \frac{8}{0.0023258}$$

$= 3439.67$

Fiscal Year	Actual Domestic Sales (y)	Reciprocals
2001/02	1427.56	0.00007005
2002/03	1880.89	0.00005317
2003/04	2165.98	0.00004617
2004/05	2542.41	0.00003933
2005/06	4146.87	0.00002411
2006/07	6364.58	0.00001571
2007/08	7422.01	0.00001347
2008/09	10085.07	0.00000991

	|	$\phi \frac{1}{y} = 0.0027192$|

Harmonic mean for budgeted domestic sales

$$H.M. = \frac{N}{\phi \frac{1}{x}} = \frac{8}{0.0027192}$$

$$= 2942.04$$

6. Measures of Dispersion

(a) Range

Range = L - S

Where, L = Largest Value

S = Smallest Value

Range for budgeted domestic sales

= 7990.98 - 1764.44

= 6226.54

$$\text{Coefficient of range} = \frac{L - S}{L + S}$$

$$= \frac{7990.98 - 1764.44}{7990.98 + 1764.44}$$

$$= \frac{6226.54}{9755.42}$$

$$= 0.6383$$

Range for actual domestic sales

= 7422.01 - 1427.56

= 5994.45

$$\text{Coefficient of range} = \frac{L - S}{L + S}$$

$$= \frac{7422.01 - 1427.56}{7422.01 + 1427.56}$$

$$= \frac{5994.45}{8849.57}$$

$= 0.67737$

$= 0.6774$

(b) Mean Deviation

(i) Mean deviation from mean $= \dfrac{\phi|x - \bar{x}|}{N}$

For budgeted domestic sales $= \dfrac{40587.15 - 5073.39}{8}$

$= 3941.36$

(ii) Mean deviation from median $= \dfrac{\phi|x - Md|}{N}$

For budgeted domestic sales $= \dfrac{40587.15 - 3888.175}{8}$

$= 4587.37$

For actual domestic sales $= \dfrac{\phi|y - Md|}{N}$

$= \dfrac{36035.34 - 3344.64}{8}$

$= 4086.34$

(iii) Mean deviation from mode $= \dfrac{\phi|x - Mo|}{N}$

For budgeted domestic sales

Mean deviation from mode $= \dfrac{40587.15 - 1517.745}{8}$

$= 4883.67$

For actual domestic sales

Mean deviation from mode $\dfrac{\phi|y - Mo|}{N}$

$= \dfrac{36035.34 - 1025.08}{8}$

$= 4376.28$

(c) Coefficient of mean deviation

(i) $\dfrac{\text{Mean deviation from mean}}{\text{mean}}$

For budgeted domestic sales

Coefficient of mean deviation = $\frac{4439.22}{5073.39}$

= 0.8750

For actual domestic sales

Coefficient of Mean deviation from mean

= $\frac{3941.36}{4504.42}$

= 0.8749

(ii) $\frac{\text{Mean deviation from median}}{\text{median}}$

For budgeted sales = $\frac{4587.37}{3888.175}$

= 1.1798

For actual sales = $\frac{4086.34}{3344.64}$

= 12218

(iii) $\frac{\text{Mean deviation from mode}}{\text{mode}}$

For budgeted sales = $\frac{4883.67}{1517.745}$

= 3.2178

For actual sales = $\frac{4376.28}{1025.08}$

= 4.2692

Standard deviation

For budgeted domestic sales

Standard deviation (∃) = $\sqrt{\frac{\phi x^2}{n} - \frac{\phi x}{n}\ 2}$

$= \sqrt{\frac{76752089.92}{8} - (0)^2}$

$= \sqrt{9594011.24}$

= 3097.42

For actual domestic sales

Standard deviation $\exists = \sqrt{\frac{\phi y^2}{n} - \frac{\phi y}{n}2}$

$= \sqrt{\frac{68911785.05}{8} - (0)^2}$

$= \sqrt{8613973.13}$

$= 2934.96$

Variance = Square of standard deviation

For budgeted sales

Variance = $b^2 = (3097.42)^2$

= 9594010.66

For actual sales

Variance = $b^2 = (2934.96)^2$

= 8613990.20

Coefficient of variation

$$\text{C.V.} = \frac{\text{S.D.}}{\bar{x}} \times 100\%$$

For budgeted sales,

$$\text{C.V.} = \frac{\text{S.D.}}{\bar{x}} \times 100\%$$

$$= \frac{3097.42}{5073.39}$$

= 61.05%

For actual sales

$$\text{C.V.} = \frac{\text{S.D.}}{y} \times 100$$

$$= \frac{2934.96}{4504.42}$$

= 65.15%

Correlation analysis

$$r_{xy} = \frac{x\phi xy - (\phi x)(\phi y)}{\sqrt{x\phi x^2 - (\phi x)^2} \cdot \sqrt{x\phi y^2 - (\phi y)^2}}$$

$$= \frac{8 \times 72423892.07 - 0}{\sqrt{8 \times 76752089.92 - (0)^2} \times \sqrt{8 \times 68911785.05 - (0)^2}}$$

$$= \frac{579391136.6}{\sqrt{614016719.4} \times \sqrt{551294280.4}}$$

$$= \frac{579391136.6}{24779.36 \times 23479.66}$$

$$= \frac{5793911366}{581810947.8}$$

$$= 0.9958$$

Calculation of probable error (P.E.)

$$P.E. = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

$$P.E. = 0.6745 \times \frac{1 - (0.9958)^2}{\sqrt{8}}$$

$$= 0.6745 \times \frac{1 - 0.9916}{2.8284}$$

$$= 0.6745 \times \frac{0.0084}{2.8284}$$

$$= 0.002003$$

Regression Analysis

Obtaining regression equations

Calculation of trend line by least square method for actual domestic sales trend and possible sales of DNPL.

Fiscal Year	Actual domestic sales (y)	x = (x-A)	x^2	xy
2001/02	1427.56	-3	9	(4282.68)
2002/03	1880.89	-2	4	(3761.78)
2003/04	2165.98	-1	1	(2165.98)
2004/05	2542.41	0	0	0
2005/06	4146.87	1	1	4146.87
2006/07	6364.58	2	4	12729.16
2007/08	7422.01	3	9	22266.03
2008/09	10085.07	4	16	20340.28

N = 8	ϕy = 36035.34|	ϕx = 4|	44|	ϕxy = 269271.9 |

We, have the equations y = a + bx

Where,

y = actual domestic sales

a = fixed cost

b = variable cost

x = x variable required year.

We know

$$a = \frac{\phi x^2 . \phi x - \phi xy . \phi x}{N\phi X^2 - (\phi X)^2}$$

$$= \frac{44 \times 36035.34 - 69271.9}{8\times 44 - (4)^2}$$

$$= \frac{1585554.96 - 69271.9}{352 - 16}$$

$$= \frac{1516283.06}{336}$$

$$= 4512.75$$

$$b = \frac{N\phi xy - \phi x . \phi y}{N\phi x^2 - (\phi x)^2}$$

$$= \frac{8 \times 69271.9 - 4 \times 36035.34}{8\times 44 - (4)^2}$$

$$= \frac{554175.2 - 144141.36}{352 - 16}$$

$$= \frac{410033.84}{336}$$

$$= 1220.34$$

Substituting the value of a and b in equation.

y = a + bx,

we get

$$y = 451275 + 1220.34 \times 5$$

$$= 10614.45$$

(In the fiscal year 2008/09 the value of x is assumed as 5 as base years.)

Appendix - 4

Budgeted foreign sales and actual foreign sales

Fiscal Year	Budgeted foreign Sales (x)	Actual foreign Sales (y)	$x = x - \bar{x}$	$y = y - \bar{y}$	x^2	y^2	xy
2001/02	24764.77	20821.60	(5921.86)	(5013.18)	35068425.86	25131973.71	29687350.11
2002/03	28953.45	25768.73	(1733.18)	(66.05)	3003912.92	4362.60	114476.54
2003/04	30558.31	24829.07	(128.32)	(1005.71)	16466.02	1011452.60	129052.71
2004/05	32159.90	27634.60	1473.27	1799.82	2170524.49	3239352.03	2651620.81
2005/06	31556.57	23141.03	869.94	(2693.75)	756795.60	7256289.063	(2343400.88)
2006/07	92218.78	25905.65	(1467.85)	70.78	2154583.62	5009.81	103894.42
2007/08	34038.25	29186.40	3351.62	3351.7	11233356.62	11233892.89	11233624.75
2008/09	34243.02	29391.17	3556.39	3556.39	12647909.83	12647909.83	12647909.83
N = 8	ϕx = 245493.05	ϕy = 206678.25	0	0	ϕx^2 = 67051974.96	ϕy^2 = 60530242.53	ϕxy = 54016739.45

(1) Arithmetic mean for budgeted foreign sales

$$\text{Mean } \bar{x} = \frac{\phi x}{N}$$

$$= \frac{245493.05}{8}$$

$$= 30686.63$$

Arithmetic mean for actual foreign sales

$$\text{Arithmetic } \bar{y} = \frac{\phi y}{N}$$

$$= \frac{206678.25}{8}$$

$$= 25834.78$$

(2) Weighted Arithmetic mean

Fiscal Year (w)	Budgeted foreign Sales (x)	wx	y	wy
2001/02	24764.77	24764.77	20821.60	20821.60
2002/03	28953.45	57906.9	25768.73	51537.46
2003/04	30558.31	91674.93	24829.07	74487.21
2004/05	32159.90	128639.6	27634.60	110538.4

2005/06	31556.57	157782.85	23141.03	115705.15
2006/07	92218.78	175312.68	25905.65	155433.9
2007/08	34038.25	238267.75	29186.40	204304.8
2008/09	34243.02	273944.16	29391.17	235129.36
$\phi w = 8$	I|	$\phi y = 1148293.64$|	0	$\phi wy = 967957.88$ |

Weighted arithmetic mean for budgeted foreign sales $(w\ \overline{x}) = \frac{\phi wx}{\phi w}$

$$= \frac{1148293.64}{8}$$

$$= 143536.70$$

Weighted arithmetic mean for actual foreign sales $(w\ \overline{y}) = \frac{\phi wy}{\phi w}$

$$= \frac{967957.88}{8}$$

$$= 120994.73$$

(3) Median

For median variable x and y are arranged in ascending order.

Fiscal Year	Budgeted foreign Sales
2001/02	24764.77
2002/03	28953.45
2003/04	30558.31
2004/05	32159.90
2005/06	31556.57
2006/07	92218.78
2007/08	34038.25
2008/09	34243.02

Median for budgeted foreign sales median $= \frac{N+1}{2}^{th}$ term

$= \frac{8+1}{2}^{th}$ term

$= 4.5^{th}$ term

Median $= \frac{30558.31 + 3155657}{2}$

= 31057.44

Fiscal Year	Actual foreign Sales
2001/02	20821.60
2002/03	25768.73
2003/04	24829.07
2004/05	27634.60
2005/06	23141.03
2006/07	25905.65
2007/08	29186.40
2008/09	29391.17

Median for actual foreign sales median $= \frac{N+1}{2}^{th}$ term

$= \frac{8+1}{2}^{th}$ term

$= 4.5^{th}$ term

Median $= \frac{25768.73 + 25905.63}{2}$

= 25837.18

4) Mode

Mode for budgeted foreign sales

Mo = 3 median - 2 mean

= 3 × 31507.44 - 2 × 30686.63

= 94522.32 - 61373.26

= 33149.06

Mode for actual foreign sales

$= 3$ median - 2 mean

$= 3 \times 25837.18 - 2 \times 25834.78$

$= 77511.54 - 51669.56$

$= 25841.98$

(5) Geometric Mean (G.M.)

We have G.M. $= \sqrt[n]{x_1 . x . x_3 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots x_n}$

G.M. for budgeted foreign sales $= \sqrt[n]{x_1 . x . x_3 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots x_n}$

=

Error!

$= \sqrt[8]{717025530} \times \sqrt[8]{982752193.8} \times \sqrt[8]{922044476.4} \times \sqrt[8]{1165572476}$

$= 12.7921 \times 9.9783 \times 13.2006 \times 13.5931$

$= 22903.96$

G.M. for actual foreign sales $= \sqrt[n]{y_1 . y_2 . y_3 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots y_n}$

=

Error!

$= \sqrt[8]{536546188.6} \times \sqrt[8]{686141417.8} \times \sqrt[8]{599483423.8} \times \sqrt[8]{857822444.1}$

$= 12.3367 \times 12.7219 \times 12.5089 \times 13.0820$

$= 25682.911$

For budgeted sales

Fiscal Year	Budgeted Sales (x)	Reciprocals ($^1/_x$)
2001/02	24764.77	0.00004038
2002/03	28953.45	0.00003454
2003/04	30558.31	0.00003272
2004/05	32159.90	0.00003109
2005/06	31556.57	0.00003169
2006/07	92218.78	0.00003422
2007/08	34038.25	0.00002938

2008/09	34243.02	0.00002920
		$\phi\ {}^1/_x =$ 0.00026322

$\therefore$ H.M. $= \dfrac{N}{\phi\,{}^1/_x}$

$= \dfrac{8}{0.00026322}$

$= 30392.83$

For Actual foreign sales

Fiscal Year	Actual foreign Sales	Reciprocals $({}^1/_x)$
2001/02	20821.60	0.00004803
2002/03	25768.73	0.00003881
2003/04	24829.07	0.00004027
2004/05	27634.60	0.00003619
2005/06	23141.03	0.00004321
2006/07	25905.65	0.00003860
2007/08	29186.40	0.00003426
2008/09	29391.17	0.00003402
		$\phi\ {}^1/_x =$ 0.00031339

$\therefore$ H.M. $= \dfrac{N}{\phi\,{}^1/_x}$

$= \dfrac{8}{0.00031339}$

$= 25527.29$

Measures of Dispersion

Range

Range = L - S

Where,

L = Largest Value

S = Smallest Value

$\therefore$ Range for budgeted foreign sales = 34243.02 - 247647.77

$= 9478.25$

Coefficient of range for budgeted sales $= \dfrac{L - S}{L + S}$

$= \dfrac{34243.02 - 24764.77}{34243.02 + 34764.77}$

$= \dfrac{9478.25}{59007.79}$

$= 0.1606$

Range for actual foreign sales

Range $= 29391.17 - 20821.60$

$= 8569.57$

Coefficient of range for Actual foreign sales $= \dfrac{L - S}{L + S}$

$= \dfrac{29391.17 - 20821.60}{29391.17 + 20821.60}$

$= \dfrac{8569.57}{50212.77}$

$= 0.1707$

Mean Deviation

(a) Mean deviation from Mean $= \dfrac{\phi\, |x - \bar{x}\,|}{n}$

For budgeted foreign sales $= \dfrac{|245493.05 - 30686.63|}{8}$

$= 26850.80$

For actual foreign sales $= \; = \dfrac{\phi\, |y - \bar{y}\,|}{n}$

$= \dfrac{|206678.25 - 25834.78|}{8}$

$= 22605.43$

(b) Mean deviation from Median $= \dfrac{\phi\, |x - Md|}{n}$

For budgeted sales $= \dfrac{|245493.05 - 31057.44|}{8}$

$= 26804.45$

For actual sales $= \frac{\phi\,|y - Md|}{n}$

$= \frac{|206678.25 - 25837.18|}{8}$

$= 22605.13$

(c) Mean deviation from Mode $= \frac{\phi\,|x - Mo|}{n}$

For budgeted foreign sales $= \frac{|245493.05 - 33149.06|}{8}$

$= 26542.99$

For actual foreign sales

Mean deviation from mode $= \frac{\phi\,|y - Mo|}{n}$

$= \frac{|206678.25 - 25841.98|}{8}$

$= 22604.53$

Coefficient of mean deviation

(i) $\frac{\text{Mean deviation from mean}}{\text{mean}}$

For budgeted foreign sales

$= \frac{26850.80}{30686.63}$

$= 0.8749$

For actual foreign sales

$= \frac{22605.43}{25834.78}$

$= 0.8749$

(ii) $\frac{\text{Mean deviation from median}}{\text{Median}}$

For budgeted foreign sales

$$= \frac{26804.45}{31057.44}$$

$$= 0.8631$$

For actual foreign sales

$$= \frac{22605.13}{25837.18}$$

$$= 0.8749$$

(iii) $\frac{\text{Mean deviation from Mode}}{\text{Mode}}$

For budgeted foreign sales

$$= \frac{26542.99}{33149.06}$$

$$= 0.8007$$

For actual foreign sales

$$= \frac{22604.53}{25841.98}$$

$$= 0.8747$$

Standard deviation

Standard deviation of budgeted foreign sales

$$\text{Standard deviation } (\exists) = \sqrt{\frac{\phi x^2}{n} - \frac{\phi x}{n}^2}$$

$$= \sqrt{\frac{6705197.96}{8} - \frac{0}{8}^2}$$

$$= \sqrt{8381496.87}$$

$$= 2895.08$$

Standard deviation of actual foreign sales

$$\text{Standard deviation } (\exists) = \sqrt{\frac{\phi y^2}{n} - \frac{\phi y}{n}^2}$$

$$= \sqrt{\frac{60530242.53}{8} - \frac{0}{8}^2}$$

$$= \sqrt{7566280.32}$$

= 2750.69

Variance

For budgeted foreign sales.

Variance = Square of standard deviation

$= (2895.08)^2$

= 8381488.21

For actual foreign sales

Variance = Square of standaed deviation

$= (2750.69)^2$

= 7566295.48

Coefficient of variation

$$C.V. = \frac{S.D.}{\bar{x}} \times 100\%$$

$$\text{For budgeted foreign sales (C.V.)} = \frac{2895.08}{30686.63} \times 100\%$$

= 9.43%

$$\text{For actual foreign sales (C.V.)} = \frac{2750.69}{25834.78} \times 100\%$$

= 10.65 %

Correlation analysis

$$r_{xy} = \frac{x\phi xy - (\phi x)(\phi y)}{\sqrt{x\phi x^2 - (\phi x)^2} \cdot \sqrt{x\phi y^2 - (\phi y)^2}}$$

$$= \frac{8 \times 54016739.45 - 0}{\sqrt{8 \times 67051974 - (0)^2} - \sqrt{8 \times 60530242.53 - (0)^2}}$$

$$= \frac{432133915.6}{\sqrt{536415799.7 \times 484241940.2}}$$

$$= \frac{432133915.6}{23160.65 \times 22005.49}$$

$$= \frac{432133915.6}{509661452}$$

= 0.8478

Calculation of probable error (P.E.)

$$\text{P.E.} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.8478)^2}{\sqrt{8}}$$

$$= 0.6745 \times \frac{1 - 0.7188}{\sqrt{8}}$$

$$= 0.6745 \times \frac{0.2812}{2.8284}$$

$$= 0.0670$$

Regression Analysis

Obtaining regression equation fitting of trend line by least square method for actual sales trend and possible sales trend of DNPL.

Fiscal Year	Actual Sales (y)	x = (x-A)	x^2	xy
2001/02	20821.60	-3	9	(62464.8)
2002/03	25768.73	-2	4	(51537.46)
2003/04	24829.07	-1	1	(24829.07)
2004/05	27634.60	0	0	0
2005/06	23141.03	1	1	23141.03
2006/07	25905.65	2	4	51811.3
2007/08	29186.40	3	9	87559.2
2008/09	29391.17	4	16	117564.68
	$\phi y = 206678.25$	$\phi x = 4$	$\phi x^2 = 44$	$\phi xy = 141244.88$

We have the equation.

$x = a + bx$

Where, y = Actual sales

a = Fixed cost

b = variable cost per units

x = x variable / required year

We know,

$$a = \frac{\phi x^2 . \phi x - \phi xy . \phi x}{N \phi X^2 - (\phi X)^2}$$

$$= \frac{44 \times 206678.25 - 141244.88 \times 4}{8\times44 - (4)^2}$$

$$= \frac{9093843 - 564979.52}{352 - 16}$$

$$= \frac{8528863.48}{336}$$

$$= 25383.52$$

Similarly $b = \dfrac{N\phi xy - \phi x \,.\, \phi y}{N\phi x^2 - (\phi x)^2}$

$$= \frac{8 \times 141244.88 - 4 \times 206678.25}{8 \times 44 - (4)^2}$$

$$= \frac{1129959.04 - 826713}{352 - 16}$$

$$= 902.52$$

Substituting the value of a and b in the equation.

… $y = a + bx$

$y = 25383.52 + 902.52 \times 5$

$= 25383.52 + 4512.6$

= Rs. 2989.12

[… In the fiscal year 2008/09 the value of x will be 5 is assurance to base year)

If the trend does not change the possible sales will Rs. 29896.12

Appendix - 5

Fitting the trend line by using least square method for possible Net Income/Loss for the year 2008/09.

Fiscal Year	Actual Sales (y)	x = (x-A)	x^2	xy
2001/02	1395.09	-3	9	(4185.27)
2002/03	1642.99	-2	4	(3285.90)
2003/04	1150.84	-1	1	(1150.84)
2004/05	1212.73	0	0	0
2005/06	453.73	1	1	453.73
2006/07	121.28	2	4	242.56
2007/08	174.77	3	9	524.31
2008/09	580.25	4	16	2321
	$\phi y = 6731.68$	$\phi x = 4$	$\phi x^2 = 44$	$\phi xy = (5080.49)$

We have the equation.

$x = a + bx$

Where, y = Actual sales

a = Fixed cost

b = variable cost per units

x = x variable / required year

We know,

$$a = \frac{\phi x^2 . \phi x - \phi xy . \phi x}{N\phi X^2 - (\phi X)^2}$$

$$= \frac{44 \times 6731.68 - (5080.49) \times 4}{8\times 44 - (4)^2}$$

$$= \frac{296193.92 + 20321.96}{352 - 16}$$

$$= \frac{316515.88}{336}$$

$$= 942.01$$

Similarly $$b = \frac{N\phi xy - \phi x . \phi y}{N\phi x^2 - (\phi x)^2}$$

$$= \frac{8(5080.49) - 4 \times 6731.68}{8 \times 44 - (4)^2}$$

$$= \frac{(40643.92) - 26926.72}{352 - 16}$$

$= (201.10)$

Substituting the value of a and b in the equation.

… $y = a + bx$

$y = 942.01 + (201.10) \times 5$

$= 942.04 - 1005.5$

$= (63.49)$

[… The value of x is assumed as 5 as year for the next year.]

If the trend does not change there will be loss of Rs. 63.49 lakhs in next year.

Appendix -1

Ratio Analysis of the year 2008/09

(1) Liquidity ratios

(a) Current ratio = $\frac{\text{current assets}}{\text{current liabilities}} = \frac{16920.24}{14044.87} = 1.20$

(b) Quick ratio = $\frac{\text{quick assets}}{\text{current liabilities}} = \frac{\text{current assets - inventory}}{\text{current liabilities}}$

$= \frac{16920.24 - 2589.79}{14044.87} = 1.02$

(2) Leverage ratios

(a) $\frac{\text{Debt}}{\text{Equity ratio}} = \frac{\text{Debt}}{\text{Equity}}$

or, Debt/Equity ratio = Total debt/ Total Equity

or, Debt/Equity ratio = long term debt / shareholder's equity

Hence,

Long term debt = long term loan + working capital loan

= 615.07 + 6089.90 = 6704.97

Shareholder's equity = Share capital + share premium + reserve and surplus+ P/L a/c

= 798.52 + 600 + 859.30 + 5951.69

= 8209.51

∴ Debt/Equity ratio = $\frac{\text{Long term debt}}{\text{Share holder's equity}}$

$= \frac{6704.97}{8209.51} = 81.67\%$

(b) Capital gearing ratio = $\frac{\text{Preference share capital + debt}}{\text{Shareholder's fund except + preferece share}}$

$= \frac{798.52 + 6704.97}{9209.51 - 798.52}$

$= \frac{7503.49}{7410.99}$

= 1.01

3. Activity ratio

(a) Assets turnover ratio = sales / total assets

Sales = 39475.25

Total assets = 15122.73

$\therefore$ Assets turnover ratio = $\frac{39476.25}{15122.73}$

= 2.61

(b) Fixed assets turnover ratio = sales / fixed assets

Sales = 39476.25

Fixed assets = 12247.36

$\therefore$ Fixed assets turnover ratio = $\frac{39476.25}{14247.36}$

= 3.22

(c) Working capital turnover ratio = $\frac{\text{sales}}{\text{working capital}}$

Sales = 39476.24

Working capital = 6089.90

$\therefore$ Working capital turnover ratio

= $\frac{39476.24}{6089.90}$

= 6.48

(d) Inventor turnover ratio

cost of goods sold / average inventory

or, $\frac{\text{Sales (Net)}}{\text{Closing Inventory}}$

Sales = 39476.24

Closing Inventory = 11317.82

$\therefore$ Inventory turnover ratio

= $\frac{39476.24}{11317.82}$

= 3.48 times

(4) Profitability ratio

(a) operating profit ratio = $\frac{\text{operating profit}}{\text{sales}} \times 100\%$

= $\frac{1279.26}{39476.24} \times 100\%$

= 3.24%

(b) Return on capital employed ratio = $\frac{\text{Return}}{\text{Capital employed}} \times 100\%$

Return on capital employed = $\frac{\text{Net profit after tax}}{\text{capital employed}}$

Net profit after tax = 580.25

Capital employed = Paid up equity share capital + paid up preference share capital

= Share premium

= Capital reserve

= Debenture

= Long term loan

= Mortgage

= 798.52 + 600 + 859.30 + 5951.69 + 615.07

= 8824.58

… ROCE = $\frac{580.25}{8824.58} \times 100\ \% = 6.57\%$

(c) Earning Per Share = $\frac{\text{Total Earning available to shareholder}}{\text{no. of share outstanding}}$

EPS = $\frac{\text{Net Profit after tax - Perferance dividend}}{\text{No. of equity shares outstanding}}$

$= \frac{580.25 - 0}{795820}$

$= \frac{580.25 \times 100000}{795820}$

= 72.91

BIBLIOGRAPHY

Books

Agrawal G.R. (2003). *Entrepreneurship Development in Nepal*. Katmandu : MK Publishers & Distributors.

Bajracharya, P., Ojha K. P., Goet J. & Sharma S. (2004). *Managerial Accounting Nepalese Perspective*. Kathmandu : Asmita Books Publishers and Distributors.

Bhattacharya, S. (1981). *Corporate Planning*. New Delhi: Mohan Primani Oxford and IBH Publisher Co.

Bhattarai, I. and Koirala G. P. (2004). *Tax Law and Tax Planning*. Dhaulagiri Books and stationers.

Dangol, B. D. (2007). *Implementation Aspect of Budget* Kathmandu: The Kathmadu Post vol. xv no.152

Dangol, R.M and Prajapati, K. (2001). *Accounting for Financial Analysis and Planning*. Katmandu: Taleju Prakashan.

Dhakal, C. S. (2007). *Fundamental Aspects of public Administration*. Katmandu : Nepal Printers and Trades Co-operative Limited, Chabahil.

Finnny, H.A. and Miller, H.E (1963). *Principles of Accounting Englewood Eliffs.* Prentice Hall Inc.

Gautam D. K., Shrestha M. P. (2005). *Essence of Nepalese Business Environment*. Kathmandu : Asmita Books Publisher and Distributors.

Gautam K. R., Deepak D. K. (2005). *A Complete Solution on Profit Planning and Control* Kathmandu : Dhaulagiri Books and stationary.

Goet, J., Bhattarai, I. and Gautam. A. (2005). *Budgeting Profit Planning and Control*, Kathmandu : Asmita Book Publisher & Distributors.

Joshi P.R. (2005). *Research Methodology*. Kathmandu : Buddha Academic Enterprises Pvt. Ltd.

Koontz, H. and Donnal, C. O.(1990). *Essential of Management.* New York: Mc Graw Hill Publishing Co.

Lynch, R. M. and ~~Robert~~ Willimson ~~W~~R. W. (1983). *Accounting for Management Planning and Control*. New York Mc Graw Hill.

Niswonger, C. R. and Fers P. E. (1983). *Accounting Principles, Cincinnati Chicago.* South Publishing House Pvt. Ltd.

Van H., James C.(1996). *Financial Management and Policy.* New Delhi : Prentice Hall of India Pvt. Ltd.

Varma Dr. and Agrawal (1996). *Management Accounting.* New Delhi: King Book Educational Publishers.

Welsch, G. A., Hiltan, R.W., Gorden, P.N. (2000). *Budgeting Profit Planning and Control.* ~~New Delhi~~USA:~~,~~ Prentice Hall ~~of India Pvt. Ltd.~~Inc.

Weston, J.F. and Copeland, J.E. (1992). *Managerial Finance.* Chicago : The Dryden Press.

Unpublished Master Level Thesis

Acharya, Bishwas (2004). *Revenue Planning and Management of Manufacturing Companies in Nepal. A case study of National Biscuits and Confectionary Pvt. Ltd. (NEBICO).* Kathmandu: Shanker Dev campus, Tribhuvan University.

Amatya, Anjana (2004). *Budgeting in Manufacturing concerned : A case study of Dabur Nepal Pvt. Ltd.* Kathmandu : Saraswoti Multiple Campus , Tribhuvan University

Goet, Mr. Goginder (1999). *Revenue planning and management of Nepal Electricity Authority?* (NEA) (Respected teacher of Shanker Dev campus Tribhuvan University).

Panta, Lekhnath Prasad (2006). *A study in revenue planning in manufacturing enterprises, A case study of Royal Drugs limited"* Shanker Dev Campus Tribhuvan University.

Pokhrel, Harihar (2008). *Revenue Planning and management of Dabur Nepal Private Ltd.* Shanker Dev campus, Tribhuvan university (upto 2001/02to 2006/07)

Poudel, Narayani (2003). *Relationship between sales budget and profit planning and control of DNPL*. Shanker Dev Campus, Tribhuvan university.

Articles, Journals, Publications and Reports.

Central Bureau of Statistics "Nepal in figure 2006" HMG/N–NPCS, CBS Kathmandu.

Central Bureau of Statistics, "Statistical pocket book in Nepal, 2006,GoN, -NPCS, Kathmandu

National planning commission secretariat, "Tenth Plan" GoN - NPCs, Kathmandu.

Nepal Government (2000) Economic Survey," Katmandu, Central Bureau of Statistics, National Planning commission secretariat.

Web Sites

http://www.dabur.com/Nepal

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