CHAPTER- I

Introduction

1.1 Introduction

A sales budget is a detailed schedule of expected sales for the coming period. It is usually expressed in both amounts and units. Once the sales budget has been set, a decision can be made on the level of production that will be needed to support sales and the production budget can be set well. The sales budget is the starting point in preparing the master budget. The sales budget is constructed by multiplying the expected sales in units by the sales price. Generally, a sales budget is accompanied is need to assist in preparing the cash budget for the year. Expected cash receipts are composed of collections on sales made to customer in prior periods plus collection on sales made in the current budget period. *[Garrison, 2000]*

The sales budget is the starting point in the preparation of the comprehensive master budget. All the other plans and budgets depends upon the sales budget. The budget is usually presented both in unit and in dollars (rupees) of the sales revenue or sales volumes. The preparation of a sales budget is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period.

The sales budget should be worked out on a sound and reasonably detailed manner. It should reflect seasonal influences and any anticipated irregularities in sales. It should be broken down not only into time periods but also into geographical or responsibility areas by the use of sales quotas. A well-developed sales plan is generally built up on the quota basis in the first place, so that the double check by individual quota on total plan is

inherent in the building. In a multi-plant situation, where there is a choice of manufacturing product items in more than one plant, the geographical distribution of sales are of special importance for production planning. Adequate sales planning is a basic fundamental of a profit-planning program.

The sales plan is the foundation for periodic planning of the firm because practically all other enterprise planning is built around it. The primary source of cash is sales, the need of capital addition, the plan of expenses, the manpower requirement, production level, and other important operational aspect depend on the volume of sales. A comprehensive sales plan includes two separated but related plans the strategic and the tactical sales plans. A comprehensive sales plan incorporates such management decisions as objectives, goals, strategies and premises. Both long-term\strategic and short-term tactical plans must be developed in harmony with comprehensive profit plan.

1.2 Background of Chilime hydropower Limited

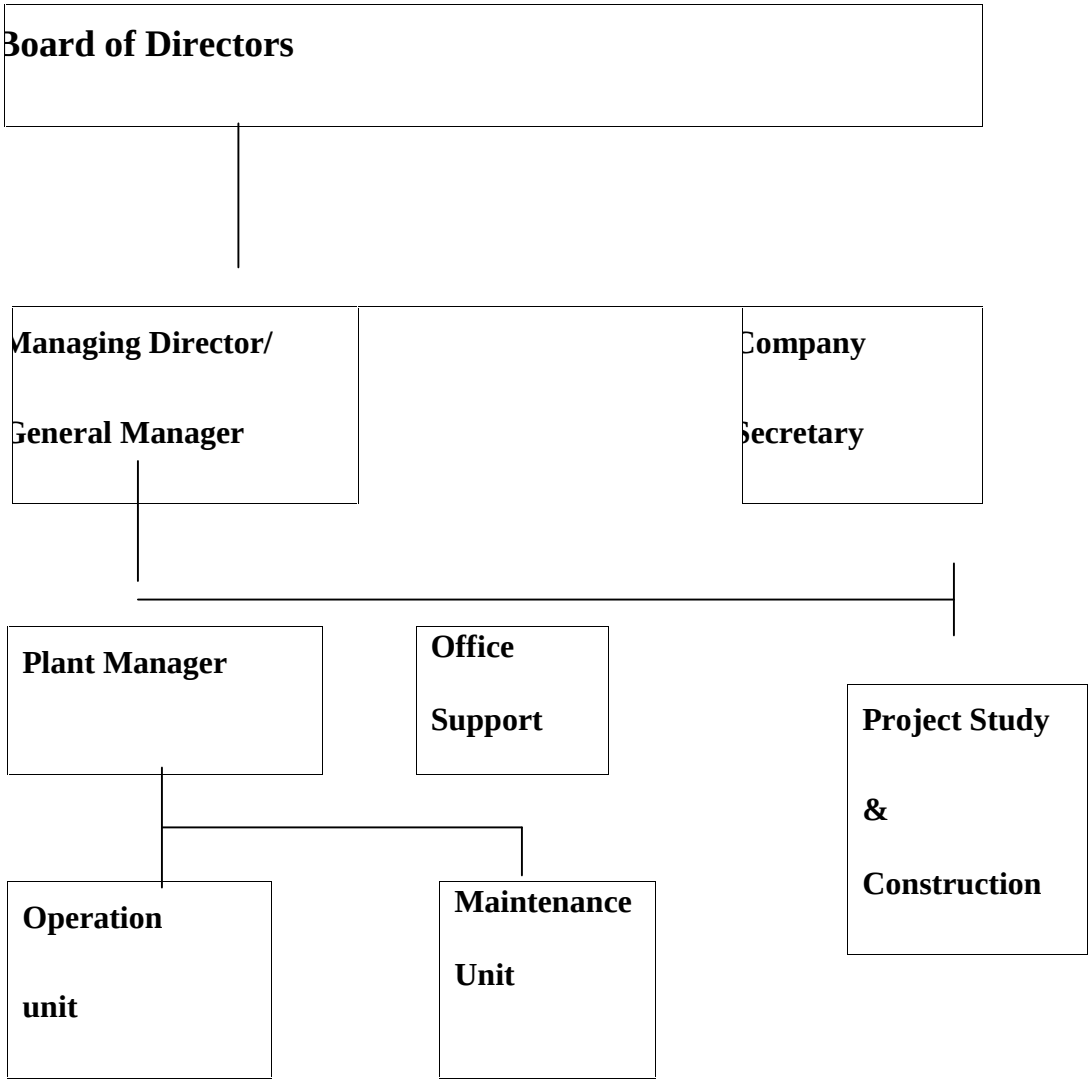
Despite, hydropower being major resource endowment of Nepal, it is under utilized. The underutilization of this vast resource has been due to various reasons such as lack consistent project selection criteria, lack of effective planning for developing transmission and distribution system, lack of sustainable policy mechanism, lack of financial resources for investment, lack of confidence on Nepalese Engineers and Technicians for developing hydropower utilizing their expertise without technical assistance from outside, lack of entrepreneurship for investment in hydropower Sector, excessive dependence on multilateral and bilateral funding for its development, etc.

The nation's hydropower potential has been assessed at 83,000 MW. Of this potential, about 43,000 MW is assessed to be economically viable. Numerous run-of-river and multipurpose hydro schemes have been identified but remain undeveloped. Small and micro hydropower potentials remain virtually untapped in the country.

Chilime Hydroelectric Project a run-of-river scheme owned by Chilime Hydropower Company Ltd. is located in the Chilime and Syabrubesi VDCs in Rasuwa District of Bagmati Zone in the Central Development Region of Nepal. The scheme has an installed capacity of 22.10 MW, generating 20MW as based on the power purchase agreement with Nepal Electricity Authority (NEA). The power plant diverts water from Chilime Khola and fed into two turbines (11.28 MW each) installed into the underground powerhouse situated near Syabrubesi Bazar on the right bank of Bhote Koshi River. The Project is designed to generate 137 GWh energy per annum. The generated energy from this Project is being fed in to the National Grid of Nepal Electricity Authority (NEA) through a 38 km long 66 kV transmission line at Devighat, Nuwakot District from 2060/05/08 the date of commercial generation, almost after 10 years from the date of its conception. As per Power Purchase Agreement (PPA) made on 2054/03/11 the NEA takes the generated electricity from the power plant. Chilime Hydropower Company limited issuing by 24% of share general public, 25% of share issuing by NEA employee and 51% of share hold by NEA. (11^{th} Annual report of CHPCL F\Y 2063/064)

Chilime Hydropower Company Limited

Organization Chart



1.3 Project Financing

This Project is owned and implemented by Chilime Hydropower Company Limited a company established in the public sector. The Project financing structure is set as 60% loan from financial institutions of Nepal and 40% equity share of NEA, NEA employees and the public. NEA will cover the default, if any.

1.4 Access to the project site

The powerhouse site lies just after crossing the Bridge over Bhote Koshi River on Kathmandu-Trishuli-Somdang road (Pasang Lhamu Rajmarg). The headwork site is accessible through a 5km long access road constructed by the project off taking from Trishuli-Somdang road at chainage 72km. The power plant site can be reached in 6hrs, drive from Kathmandu.

A 72 km long asphalt road links Kathmandu to Trishuli. From Trishuli a gravel road exists up to Somdang which is named as Trishuli-Somdang road and is a part of Pasang Lhamu road. The project powerhouse site is located at a distance of 62 km from Trishuli. The headworks site of the project is located at a distance of 15 km from the powerhouse. The existing road of the Trishuli Somdang road served as the access road upto the Chainage 72 km at Ronga Bhanjyang pass. From this point a 6.5 km long access road to the intake site was completed during the construction of the project. In addition to this a half kilometer of access road to the project's main office camp at Syabrubesi was constructed. For the construction of the surge tank and headrace tunnel from the downstream face on 1km long access road was constructed by the project.

The road stretch between the district headquarters Dhunche and the project site was not maintained by the concerned authority. So the project had to carry out the annual maintenance and rehabilitation of this part of the road for a length of twenty five kilometers on its own cost and management.

1.5 Project Camps and Power Supply

The project established camps at two locations one in Syabrubesi Bazaar near the powerhouse site and the other in Thambuchet at the headworks site. The contractors had constructed their own camps, warehouses and labor camps separately in the land area allocated to them by the Employer. Additional land area required to the Contractor of the underground works was leased. A V-SAT telephone system was installed for communication purpose by the Contractor of the underground works. This V-SAT telephone system was also used by the project specially for the use of internet and transmitting documents between Kathmandu and site.

The construction power for the project was supplied through an 11 kV transmission line of NEA from Trishuli. The power line was greatly disturbed in the rainy season and windy days. The 66kV transmission line constructed between Sybrubesi to Devighat Substation to evacuate power was charged in 2000 for the supply of construction power. However, the 66 kV line also used to be frequently interrupted in monsoon months of each year. Diesel generators were installed & operated to carry out the underground construction works, which required power supply round the clock throughout the construction period.

1.6 Feasibility Study

Feasibility study of the Project was started in November 1993 and it was competed in August 1994. A staff gauging station was fixed on Chilime Khola for river discharge measurement in January 1994 at the upstream of the Head works Site. Different alternative Run-of-River schemes with the combination of two options of inlet portal and two options of the surge tank were worked out with the head works site up and other

waterway up to peaking pondage being common. The catchment's area was estimated at 158 km^2. The design discharge for all options was 6 cumecs.

The headwork site was located on Chilime Khola about 550 m upstream from the confluence of Chilime and Bemdang Khola. An 11m long diversion weir with a height of 3.3m was planned. Side intake with two openings having size 4.5mx1.5m was proposed. The De-sanding basin was proposed on a flat terrace land near the confluence of Chilime Khola and Bemdang Khola. A Dufour type de-sanding basin with size of 50mx7mx3.5m was proposed being common for all options. The peaking pondage site for four hours peaking was located on a long flat terrace in Thambuchet village.

The inlet portal of option – 1 was located just beyond the outlet of the peaking pondage and for the option – 2 about 550 m downstream from it. Two different surge tank locations were selected for surface and underground powerhouse located in Syabrubesi village. The headrace tunnel alignment was studied in four options named HRT 1-1, HRT 1-2, HRT 2-1 and HRT 2-2. The surface powerhouse site was proposed on the river terrace on the right bank of Bhote Kosi River on the opposite bank of the confluence with Langtang Khola. The underground powerhouse was proposed about one kilometer downstream from the surface powerhouse site near to the bridge over Bhote Koshi River.

The feasibility study carried out study of different tunnel alignments and the optimum was adopted in consideration to minimum annual cost. The selected project option in the feasibility study was with an installed capacity of 17 MW with gross head of 351m having an underground powerhouse in Syabrubesi. The other project features defined in this selected options were: (i) the length of headrace tunnel 3340m having its inlet portal at the middle of the peaking pondage with two construction adits namely Adit No. 1

(110m long) at Thambuchet and the other Adit No.2 (116m long) at Komin, (ii) a surface surgetank located in Komin village,(iii) a 460 m long steel penstock shaft, and (iv) an underground powerhouse cavern of size 9mx15m with a length of 36 m located inside sound rock with the position defined by 136 m long tailrace tunnel. The construction works of the access road to the head works site was initiated in 1995 by involving local people, specially those families likely to be affected by the project. The earth excavation works of the road was given to different groups of the affected families on petty contract basis instead of awarding any bigger contract.

A gauging station was fixed at Chilime Khola in January 1994 at the upstream of the headwork site. The hydrological investigation was continued. The project hydrology was reviewed and refined with the use of gauging records from the gauge installed by the Department.

1.7 Significance of Hydro-Electric Power in Economy

Electric energy has an important role to play in the economic development of a nation. On the one hand, the availability of electricity is a basis of overall development and on the other hand the consumption of electricity is regarded an indicator of economic situation in the country. Hence, for the supply of electricity that plays an important role in the overall development of the nation. It has become necessary to change existing immense quality of water resources into electricity. Potentiality and installed capacity we can suggest that there is an ample opportunity and potentiality for hydropower development in Nepal. Since energy plays and important role in the balance development of agriculture, industry and other sector nit is essential to supply energy in affordable

price and utilized it effective. Undoubtedly, energy development is an immense for balanced development of the nation. Since large amount of financial investment is needed for the development of energy sector, maximum utilization of available financial resources is essential.

1.8 Objective of CHPCL.

Chilime Hydro Power Company Limited is a public company established with the objective to work on all the generation, transmission and distribution systems. It carries out feasibility study, construction operation and management of small and middle hydropower project. It makes also an agreement between the company and the organization or individual to sale and purchase electricity. Besides, this gives and takes the work in contract between company and the different organization.

1.9 Statement of Problem

Chilime Hydro Power Company Limited is a public company established with the objective to work on all the generation, transmission and distribution systems. It also has been suffering from different problems. It is true that success of organization depends upon the planning system, management system and other various factors which affect its operation.

Despite of almost guaranteed market for power generated CHPCL sales plan can't be justified. This is due to various reasons like (a) Heavy investment (b) high cost of storage and shortage of proper storage place (c) uncertain sales demand (e) managerial problem. Due to this reason the production of the CHPCL could not reach the level which deserves. So under the study problem related with following items.

- Present Sales budgeting system and its effectiveness.

- Relation between planned sales and actual sales are effective.

1.10 Objective of Study

The main objectives of the study are as follows.

To analyzed sales budget prepared by Chilime Hydropower Company Limited.

- To evaluated the variance between budgeted and actual achievement of Chilime Hydropower Company Limited.
- To compare Production with sales
- To compare the sales with profit of the CHPCL.

To provide the suitable suggestion and recommendations for the improvement of planning system of CHPCL

1.11 Limitation of the study

The study is confined only to sales budgeting and its relation with profit planning in CHPC. The following factors have limited the scope of the study.

- This study covers only last five years trends and data.
- This study concerns only sales and its relation with profit planning in CHPCL, this study may or may not be applicable to other published.
- Time constraints may limit the area covered by the study.
- The entire study will be based upon secondary data and a few primary data.

1.12 Chapter Plan of the Study

According to study, the research work has been classified into five chapters.

Introduction

It is an initial phase of research which is incorporated background, importance of the study, objectives of the study, scope and limitations of the study.

Review of literature.

This chapter concern about income and expenditure, sales planning, profit planning and conceptual setting and review of related thesis to highlight the related terms and to present the available information about previous related studies.

Research Methodology.

This chapter includes introduction, research design, sources and nature of data, data collection instruments, statistical tools that are used for the study.

Data presentation, Analysis, & Interpretation

In this chapter, the data collected are presented, tabulated as required by the research objectives. Data are here interpreted and analyzed with the help of various analytical tools and techniques.

Summary, Conclusion and Recommendations

This chapter is the last chapter for this research. In this chapter, summary and conclusion are drawn from the study. It also includes valuable recommendations and suggestions to the company on the basis of the study.

CHAPTER-II

REVIEW OF LITETATURE

Review of literature is an essential part of all studies. It is a way to discover what other research in the area of our problem has been conducted and what is their finding and what aspect proper study is different for them. A critical review of the literature helps the researchers to develop a thorough understanding and insight into previous research works that relates to the present study. It is also way to avoid investigating problems that have already been definitely answered.

In this chapter, the focus has been made on the review of literature relating to the sales plan of Chilime Hydropower Company Limited. Every study is very much based on past knowledge which is key of present knowledge. This chapter helps as adequate feedback to broaden the information and to base the inputs of study. Therefore, the review of literature has its own important.

2.1 Conceptual framework

The purpose of including this chapter is to clarify the concept of Sales Plan of CHPCL, Budgeted and Actual Sales of CHPCL, Correlation coefficient between Sales Budget and Actual Sales and compare the sales with profit of CHPCL reviewed with the help of related text books, reference book and articles etc.

2.1.1 Comprehensive Sales Planning\

The sales planning process is a necessary part of PPC because (a) it provides for the basic management decision about marketing, and (b) based on those decisions, it is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic, most if not all of the other parts of the overall profit plan is not realistic. Therefore, if the management believes that a realistic sales plan cannot be developed; there is little justification for PPC. Despite the views of particular management, such a conclusion may be and implicit admission of incompetence. Simply, if it is really impossible to assess the future revenue potential of a business, there would be little incentive for investment in the business initially or for continuation of it except for purely speculative ventures that most manager and investors prefer to avoid. (*Welsch, Hilton and Gordon)*

A comprehensive sales plan includes two separate, but related, plans the strategic and the tactical sales plans. A comprehensive sales plan incorporates such management decisions as objectives, goals, strategies, and premises. These translate into planning decisions about planned volume (units or jobs) of goods and services, prices promotion and selling efforts.

The primary purposes of a sales plan are (a) reduce uncertainty about future revenues, (b) to incorporate management judgments and decisions into the planning process (e.g. in the marketing plans), (c) to provide necessary information for developing other elements of a comprehensive profit plan, and (d) t facilitate management's control of sales activities.

2.1.2 Sales Planning Compared with Forecasting

Sales planning and forecasting often are confused. Although related, they have distinctly different purposes. A forecast is not plan; rater it is a statement and/or a quantified as based on one or more explicit assumptions. A forecast should always state the assumption upon which it is based. A forecast should be viewed as only one input into the development of a sales plan. The management of a company may accept, modify, or reject the forecast. In contrast, a sales plan incorporates management decision that are based on the forecast, other inputs, and management judgments about such related items as sales volume, price, sales efforts, production, and financing. *(Goet, Bhattrai and Gautam)*

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

It is important to make a distinction between the sales forecast and the sales plan primarily because the internal technical staff should not be expected or permitted to make the fundamental management decision and judgments implicit in every sales plan. Moreover, the influence of management actions on sales potentials is difficult to quantify for sales forecasting. Therefore, the elements of management experience and judgment must mold the sales plan. Another reason for identifying sales forecasting as only one step in sales planning is that sales forecast are conditional. The normally must be prepared prior to management decisions or plans in such areas as plant expansion, price

changes, promotional programs, production scheduling, expansion or contraction of marketing activities and other resource commitments. The initial forecasts and there should usually be more than one to indicate probable sales under various alternative assumption are an important source of information in the development of managerial strategies and resources commitments.

2.1.3 Method of Sales Forecasting

Personal Judgment Method or Non-mathematical Method

a. Sales fore Composite: This approach of sales forecasting emphasized the maximum participation from bottom up. Under this projection method, sales forces from sales divisions engage in sales projections. Sales force collects socio-economic information from the area through informal chat, ocular survey or formal data collection. Based upon the historical sales data and socio-economy information, sales forces prepare sales projections and submit it to sales departments. Sales departments, after collecting sales projection of all territories makes adjustment on projected figures, and compiles the figure and submits to chief executive for budget to sales projection for the company. After checking the figure, chief executive returns back the budget to sales department with tentative approval.

b. **Sales division manager composite**: This approach emphasizes the participation of district or product sales managers rather than the individual sales persons. Under this method of sales projections, district or product sales managers with the historical and analyzed information project the sales of future and submit to chief executives for

approval. The chief executives return the sales projection to sales department with its tentative approval.

c. Judgment of chief executives (Rule of thumb): Under this approach, chief executive him\herself involves in projecting sales. He\she receives historical sales data from sales department and gets information after environmental assessment. With this available information, he\she uses his \her judgment to forecast the sales.

Mathematical or statistical Method

a. **Economic rhythm method:** Under this approach, sales are projected based upon economic rhythm i.e. movement of economy. While projecting sales using this method, first of all, the factors of economy that have a high influences on demand or sales of the product are analyzed. Then historical sales are adjusted with the influences of economic factors. Sometime such factors push the sales and sometimes pull the sales. Generally, cyclical variance, seasonal variance and price variances are observed in economic factors.

Regression Method: Regression method is the most popular statistical techniques of demand estimation. In regression method of demand\sales forecasting, the firm estimates the demand function for a product. In the demand function, quantity to be forecasted is a “dependent” variable. For example, demands for meat in affect the demand are called “independent” or “explanatory” variables. For example, demand for meat in Katmandu may be said to depend largely on ‘per capital income’ of the

city and its population. Here demand \sales for ‘meat’ is dependent variable and per capital income and population are the ‘explanatory’ variables.

b. Time series analysis: One of the most frequently used forecasting methods of sales is time-series analysis. Regression analysis can be used to quantify the relationship between variables but data collection can be more complex if regression model consists a large number of independent variables. When changes in a variable show discernible patterns over time, time series analysis is an alternative method for forecasting future values of sales. Time series data refers to the values of a variable arranged chronologically by days, weeks, months, quarters, or years. The first step in time series analysis is usually to plot past values of the variables that we seek to forecast (say, the sales of a firm) on the vertical axis and time on the horizontal axis in order to visually inspect the movement of the time series overtime. Time series analysis attempts to forecast future values of time series by examining past observations of the data only. In this assumption is made that the series will continue to move as in the past. For this reason, it is often referred as “Naïve forecasting”.

2.1.4 Strategic and tactical sales plans compared

In harmony with a comprehensive profit plan, both strategic long-term and tactical short-term sales plans must be developed. Thus, the usual case is a five or ten year strategic sales plan and a one year tactical sales plan. Many sales and product decisions commit a large amount of resources involving a life span of many years. Basic strategies and major decisions that involve commitments of resources and long life spans are difficult to stop.

Sometimes it may be helpful to view the development of the long-range and short-range sales plans as separate activities. However, they must be integrated because the short –range sales plan should dovetail with the strategic long-rang plan in all major respects.

Strategic sales plan

As a practical approach, a company may schedule completion of the strategic long-term sales plan as one of the first steps in the overall planning process. For example, a company operating on a calendar year may complete a long-term sales plans, at least in tentative form, by the end of July because this gives sufficient lead time for interim considerations essential to development of next year's comprehensive short-term profit plan during the latter part of the preceding calendar year. Long-term sales plans are usually developed as annual amounts. The long-term sales plan uses broad groupings of products (product lines) with separate consideration of major and new products and services. Long-term sales plans usually involve in depth analyses of future market potentials, which may be built up from a basic foundation such as population changes, state of the economy, industry projections, and finally

company objectives. Long-term managerial strategies would affect such areas as long-term pricing policy; development of new products and innovations of present products, new directions in marketing efforts, expansion or managerial strategy decisions is explicitly brought to bear on the long-term sales plan primarily on a judgment basis.

Tactical sales plan

A common approach used for short time horizons in a company is to plan sales for twelve months into the future, detailing the plan initially by months for the first quarter. At the end of each month or quarter throughout the year, the sales plan is restudied and revised by adding a period in the future and by dropping the period just ended. Thus, tactical sales plans are usually subject to review and revision on a quarterly basis. The short-term sales plan includes a detailed plan for each major product and for groupings of minor products. Short-term sales plans are usually developed in terms of physical units (or jobs) and in sales and \or service dollars. Short-term sales plans must also be structured by marketing responsibility (e.g. by sales districts) for planning and control purposes. Short-term sales plans may involve the application of technical analyses; however, managerial judgment plays a large part in their determination.

The amount of detail in a tactical sales plan is a function of the company's environment and characteristics. A short-rang plan should be in broad terms. To establish policy about detail in the short-rang sales plan, the main question is use of the results. First, the major consideration is to provide detail by responsibility for planning and control purposes. Second, the short-range sales plan must provide

detail needed for completing the profit plan components by other function managers. That is, the production managers will need sufficient detail for planning production levels and plant capacity need; the financial manager will need sufficient detail for assessing and so on. Third, the amount of detail also depends on the type of industry, size of the firm, availability of resources, and use of the results by management.

2.1.5 Components of comprehensive sales plan

Component	Strategic plan	Tactical plan
Management policy and assumption	Broad and general	Detailed and specific for the year
Marketing plan (sales and services revenues)	Annual amounts; major groups	Detailed; by product, time and responsibility
Advertising and promotion plan	General; by year	Detailed and specific for the year
Distribution (selling) expenses plan	Total fixed and total variable expenses; by year	Fixed and variable expenses; by month and by responsibility

2.1.6 Developing a comprehensive sales plan

Step 1 Develop management guidelines specific to sales planning including the sales planning process and planning responsibilities.

Step 2 Prepare one (or more) sales (market) forecasts consistent with specified forecasting guidelines including assumption.

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

Step 4 Based on step 1, 2 and 3 above, apply management evaluation and judgment to develop a comprehensive sales plan.

Step 5 secure managerial commitments to attain the goals specified in the comprehensive sales plan.

2.1.7 Objective of Budgeting

The main purpose of budget is to ensure the planned profit of the enterprise. So, it is considered as a tool of planning and controlling the profit. On of the primary objective of an annual budget is to measure the profit expectation for the next financial year with regarded to all the circumstances favorable and unfavorable that can influence the trading prospect. (Regineld and frention 1982:17)

The main purposes of budgeting are:

1 To help provide direction for choosing from among many future alternatives.

2 To help identify potential problem of achieving the specified goals and objective.

3 To communicate objectives, constraints and expectation of budget to people

through out an organization (Munakarmi 2002:215- 216).

The main objective of budgeting may summarized as follows.

1) It is a plan, which reflects the policy of a business in financial terms.

2) It is a plan of action and services as a declaration of policies.

3) It is a control document by which management can monitor actual performance.

4) It is the plan to forecast for future to avoid losses and to maximize profits, i.e. to help in planning.

5) It is a plan to state the firm's expectations (goals) is clear, formal terms to avoid confusion and to facilities their attainability.

6) It defies the objective for the entire executive's communication.

7) It is a plan to bring about co ordination between different functions of an enterprise i.e. to help in co ordination.

8) It is a plan to communicate expectations to all concerned with the management of the firm so that they are understood, supported and implemented.

9) It acts as a motivator of employees.

10) It provides a means of coordination and communication.

11) It is a measure against which to evaluate the quality of management.

12) Budget facilitates centralized control with delegated authority and responsibility. (Rathnaman:1974:2)

2.1.8 Characteristics of Good Budgeting

The characteristics of good budgeting are as follows.

1) Budget may be formulated for the organization as a whole or for any sub- unit.

2) A good system of accounting is also essential to make the budgeting useful.

3) A budget is a qualitative expression of a plan of action and aid to coordination and implementation.

4) A good budgeting system should involved persons at different levels while preparing the budgets the subordinates should not feel only Imposition on term.

5) Budget are designed to carry out a verity of functions planning, evaluating activities and implementation of plans (Rathnaman, 1974:21-22

2.1.9 Classification of Budgets

Budgets may be classified from various viewpoints depending upon various bases adopted for such classification. The following bases of classification are generally in use:

1. On the basis of time.
2. On the basis of function.
3. On the basis of flexibility
4. On the basis of nature of business activity

I. On the Basis of Time

On the basis of time, there are three types of budgets. They are:

a. Long Term Budget

These budgets normally cover of a firm over a prospective of five to ten years.

b. Short Term Budget

These budgets are usually prepared for one to two years. These are always prepared of production plan in monetary terms.

c. Current Budgets

These budgets are usually prepared for one to twelve months and are the short term budgets adjusted to current conditions or prevailing circumstances.

II. On the Basis of Function

Those budgets whose number depends on the size and nature of the business are called functional budget. Normally the following are the types of functional budget.

a. Sales Budget

It is primary budget of PPC. This is a forecast of total sales classified according to groups of products, salesman and geographical.

b. Production Budget

Production budget is transformation process of sales budget. It is a forecast based on sales, productive capacity and requirement of inventories.

c. Direct Material Budget

Direct material budget can also be classified into two types:

Direct Material Usage Budget

Material budget is prepared after the determination of production need. Material consumption budget is depended upon production volume. Material consumption per unit of output helps to prepare material use budget for different of materials to be consumed by output. Budgeted production volume multiply by material per unit of output gives the budgeted consumption of materials.

Direct Material Purchase Budget

Manufacturing company purchases raw materials for its products to be produced. The quantity of materials to be purchase is determined by both production volume and inventory requirement. Purchase budget helps to determine the quantity and volume of materials required to be maintained (Munakarmi, 2002:220)

d. Direct Labor Cost budget

Labor cost budget is calculated on the basis of labors for budgeted production volume and labor hour related for each type of labor force. Given budgeted production, the engineering and personnel department can work together to determine the necessary labor requirement for the production department. Labor requirements are stated in total number of workers, specific number of skilled and unskilled workers and production hour need for given production volume. Labor cost computation includes monetary cost and fringe benefits given to labor force. (Munakarmi, 2002:222)

e. Overhead Budget

Overheads, here are classified as factory overhead, administrative overhead and selling overhead. Factory overhead is also known as manufacturing or works

overhead. It is aggregate of indirect expenses of factory department. It includes both variables and fixed overhead and including following expenses: factory rent and rates, lighting and heating, factory power, fuel and insurance, factory salaries, indirect wages and pension, factory stationary and printing, canteen, medical, educational and entertainment facilities to the factory workers repair and maintenance expenses, depreciation etc.

f. Cost of Production Budget

Budgeted production cost is known as cost of production budget. It is the aggregate of budget material cost, budgeted direct labor cost and budgeted factory overhead.

g. Selling and Administrative Expenses Budget

Selling and administrative expenses include both fixed and variable expenses. Administrative expenses include critical wages and executive salaries, supplies, postage and telephone etc. Likewise selling and distribution expenses include sales commission and salaries, advertising and sales services expenses, traveling expenses, carriage and freight on sales, packing cost etc.

h. Cash Budget

Cash budget is the planning of cash flows and cash requirement for the budgeted period.

Capital Budget

Capital budget involves the entire process of planning expenditures with returns that are expected to extend beyond one year. The choice of one year is arbitrary, of course, but it is a convenient cut off point for distinguishing between kinds of expenditures. Obvious example of capital outlays are expenditures for land, buildings and

equipment and for permanent additions to working capital associated with sales growth.

III . On the Basis of Flexibility

On the basis of flexibility, budget may be classified into two types**.**

a. Static Budget

It shows only one active level at once. They don't change in the volume of activity. Such budgets are usually prepared from one to three months in advance of the fiscal year to which they are applicable.

b. Flexible Budget

It shows the series of activity level. The main objective of flexible budget is to select least cost combination for the firm. In case of such budgets, revenue and cost targets are set in respect of different level of activity even from zero to hundred percent of production volume.

IV. On the Basis of Nature of Business Activity

Budgeted may also be classified on the basis of nature of business activity. They are:

a. Capital Expenditure Budget

Capital expenditure budget is needed to compute or plan the cost of capital and appraise the project. Such budgets assume more significance in the case of large and progressive manufacturing concerns.

b. Operating Expenditure Budgets

Operating budgets deal with the plan for routine activities. These budgets are based on forecast like sales, reproduction costs, revenue etc.

2.1.10 Budgetary Control

Budgetary control is a system of controlling cost, which includes the preparation of budgets coordinating the departments and establishing responsibilities, comparing actual performance with the budgeted and outline upon results to achieve maximum profitability.

- Budgetary control involves the following process:
- Preparing budgets sets.
- The actual figure is recorded.
- The budgeted and actual figure is compared for studying the performance of different cost centers.
- If actual performance is less than budgeted norms, a remedial action is taken immediately.
- The business is divided into various responsibility centers for preparing various budgets.

2.1.11 Problems and Limitations of Budgeting.

Budgeting is not fast proof; it can suffer from certain problems and limitations.

The major problems of budgeting system are as follows:

1) Developing meaningful forecast and plans specially the sales plan.

2) Seeking the support and involvement of all level of management.

3) Establishing realistic objectives, policies, procedures and standards of desired performance.

4) Maintaining effective follow up procedures and adopting the budgeting system wherever the circumstance changes.

5) Applying the budgeting system in a flexible manner.

6) Educating all individuals to be involved in the budgeting process and joining their full participation. (Welsch, Hilton and Gordon, 2000:56).

The following are the limitations of budgeting system;

1) Budgeting is not an exact science it success hinges upon the precision of estimates.

2) The installation of a perfect system of budgeting is not possible in a short period. Budgeting has to a continuous exercise. It is a dynamic process.

3) The success of the budgetary program is to understand by all and that managers and subordinates put concerned effort for accomplishing the budget goals.

4) Budgeting will be ineffective and expensive if unnecessarily detailed a complicated. It should be flexible and rigid in applications.

5) The presence of a budgeting system should not make management complacent. To get the best results of management, management should use budgeting with intelligence and foresight. Budgeting can not replace management.

6) The purpose of budgeting will be defeated if carelessly budget goals are determined as the conflict with enterprise objectives.

7) Budgeting will hide in efficiencies if a proper evaluation system lacks. It should be re-examined regularly.

8) Budgeting will lower rural and productivity if unrealistic targets are gets and if it is used as pressure tactic. (Welsch, Hilton and Gordon, 2000:57).

2.2 The structure of Nepalese Power Sector

One can think of Nepalese power structure comprising of three tiers-Licensing Authority, the utility and the Tariff regulating Authority. Department of Electricity Department (DED) represents the licensing authority NEA is the generation transmission and distribution utility, and Electricity Tariff Fixation Commission (ETFC) is the tariff regulating authority. DDE is a government department, NEA is a public enterprise wholly owned by the government and ETFC is a quasi-government agency. Beside these three, there is also a research and consulting wing under Ministry of Water Resource, called Water and Energy Commission Secretariat (WECS).

According to the present structure, the Ministry of Water Resources is the apex ministry responsible for overall power sector policy. It has a Water and Energy Commission Secretariat as the policy advisory body that formulates short and long term water and energy policies. The Department of Electricity Development aims to help develop hydroelectricity and encourage private sector entrepreneurs through licensing, promotion and one-window mechanism.

The Tariff Fixation commission is a regulatory agency that reviews and approves tariff. Electricity Tariff Fixation Commission is constituted under Electricity Act 2049.

The NEA in accordance with its own act is a public sector undertaking permitted to generate, transmit and distribute electricity throughout Nepal. NEA is the result of amalgamation of Nepal Electricity Corporation and Electricity Department in August

1985 (Bhadra 1, 2042 BS). Prior to the creation of Nepal Electricity Authority, then Electricity Department of HMGN had the responsibility of development and construction of power projects whereas the than Nepal Electricity corporation was involved in generation, transmission and distribution of electricity.

At a time when IPPs are coming up in the field of power generation, NEA has retained its identity as the sole purchaser of power generated by the IPP. Following the issuance of survey and development licenses to BOT\BOOT promoters by the Ministry of Water Resources, IPPs have to sign power-purchasing agreement to sell their output to the NEA.

The present structure of Nepal's energy sector is not regarded as strong enough to provide efficient service. Despite the liberalization of the sector, NEA still remains the sole body for energy transmission and distribution. Overstaffing and frequent political intervention along with high energy losses have increase overhead costs. Thus, there have been growing calls for father reforms in the energy sector to bring in efficiency.

Under the current institutional framework, there is no clear separation of policy, regulatory, and operational functions in the electricity sector. Furthermore, coordinating bodies designed to ensure consistent policy making between sectors is not functioning adequately (The World Bank, 2000). It is also observed that there is an overlapping roles and responsibilities and conflict of interest between different institution involved in the power sector development. Therefore, clarifying roles and responsibilities of public sector institutions as well as private sector participation is most for creating and environment that will accelerate power development in the country in a sustainable manner.

2.2.1 Power Policy for the future

In the context of restructuring of power sector and Privatizing of NEA in future, the World Bank has of the following suggestions (The World Bank 2000):

- Though in the South Asian regional context NEA, as an integrated utility has been performing better than many other publicly owned utilities, serious problem still persists. Its operational efficiency is weak (transmission and distribution losses of the NEA system (technical and non-technical) are around 30% and is some as high as 50 percent), its credit worthiness is insufficient to allow access to private capital markets, and there are growing conflicts of interest with existing and new independent power producers, some of which are joint ventures between private investors and NEA for which NEA is also a principal buyer.
- The need for restructuring NEA is clear and the rationale for restructuring is grounded in the needs for the future, inter alias, mobilizing private capital necessary for much lager future facilities contemplate by NEA's generation expansion plan (such as Upper Karnali and Arun).
- The Bank has also suggested some restructuring models that are appropriate to Nepalese context. At the same time it also suggest that before deciding on suitable configuration for unbundling of the power sector, preparatory studies are required which should include, inter alia, definition of technical boundaries, allocation of assets, liabilities and personnel, transfer pricing, dispatch and system operation rules, wheeling arrangement etc.

- Restructuring issues is beyond the scope of this study. However, in analyzing emerging scenario of power market and its implication on financial and operational efficiency of NEA, this development in power sector is also has to be considered to some extent and therefore some highlights are deliberated in this study.
- HMGN has published Electricity Development Policy-2058. Unbundling of the present power sector and granting more roles to private sector – these are the major policy planks for the future.

The policy envisages achieving the following by year 2007:

- A dominant private sector contributing 75% of total investment in hydropower.
- Boosting of industrial consumption by 125%.
- Establishment of power development fund and infrastructure development bank.
- Boosting of the hydro capacity to meet a demand of 820 MW of which 70 MW to be export.
- Privatization of NEA.

Similarly, the hydropower policy and strategies aims at the following by year 2017:

- Development to hydropower to meet a demand of 2230 MW including 400MW for export;
- Expansion of electricity coverage of households to 38%

By years 2027, the policy and strategies aims at:

- Developing hydro capacity to meet a demand of 22030 MW including 15050 MW for export.
- To increase the household coverage to 60%.

The objectives and policies of the new electricity development policy 2058 are summarized below.

Objectives

- To utilize the existing water resource of the country and produce electricity at a low cost.
- To make the electricity service dependable, reliable and extend qualitative service within the whole kingdom at a reasonable rate.
- To tie-up the electrification with the economic activates.
- To extend the rural electrification in order to support rural economic development.
- To develop hydropower as and exportable commodity.

Policies

1. Efforts shall be made to maximize the use of country's hydropower potential in order to meet the domestic demand of electricity.
2. The construction and, implementation of hydropower projects shall be encouraged to promote on the principle of Build-Operate-Owned-Transfer (BOOT).
3. For making the electricity service dependable, reliable and extension of qualitative service delivery within the kingdom at a reasonable cost: the existing public sector institutions shall be restructured to promote the participation by creating competitive environment of community

corporation, institution local agencies and private sector in hydropower production transmission and distribution.

4. Small and medium hydropower project shall be developed and promoted for domestic use in order to strengthen the situation of domestic power supply. The priority shall be given to develop hydropower projects on a competitive basis suitable to the electricity system.
5. The hydropower projects shall be identified for export purposes. The private sector shall export the electricity by developing such projects.
6. The major multipurpose storage projects shall be developed in a way to render the maximum down stream benefit to the country.
7. The electrification program in the remote rural areas shall be encouraged by operating the small and mini hydropower projects at local level.
8. The rural electrification programs shall be expended in order to make the electricity services available to maximum people. A “Rural Electrification Fund” shall be established for this purpose.
9. The rural electrification development program shall be based on mobilization of people’s participation.
10. To deliver reliable and dependable electricity services and make it easily available to consumers and attention shall be made to safeguard their interests.
11. For supplying the electrical energy at a reasonable rate, the electricity tariff fixations process shall be made transparent and reasonable.

12. The unauthorized leakage of electricity shall be controlled. For this purpose necessary technical measures shall be adopted and legal arrangements shall be formulated. Besides these measures an emphasis shall be given to mobilize people participation to control the leakage.
13. Incentives shall be provided for the proper utilization of electrical energy, in this context, incentives shall be provided for the use of electrical energy demand is low (when supply is in excess of demand.)
14. The appropriate incentives provision shall be made to attract national and foreign investment for the development of hydropower and transparent process shall be followed.
15. Capital market shall be operated for investment in the electricity sector.
16. The use of local labor and skill shall be given priority in implementing the hydropower projects.
17. The industry producing the construction materials and equipment to be used in the electricity sector shall be encouraged to develop the industry.
18. Project arrangements shall be made to cover the risks arising in hydropower project.
19. Arrangements shall be made to provide appropriate benefits at the local level while operating hydropower projects.
20. The Adverse effects on environment shall be minimized caused due to the development and operation of hydropower projects and proper arrangements shall be made to resettle the displaced families.

21. Hydropower shall be developed to replace the biomes and thermal energy in order to contribute towards environmental conservation.

2.2.2 Corporate Development Plan 2001 of NEA

Elaborating the role of IPP in future, NEA's corporate development plan of December 2001 highlighted the following.

"Also in the future, joint ventures with private investors enter as a possible formula in hydropower development along BOT\BOOT lines. Such ventures are now being proposed for the Upper Karnali 300 MW, khimti 26 MW and Thulo Dhunga (24 MW) hydropower projects.

NEA, in the meanwhile, retained its identity as the sole buyer of power generated by the independent power producer (IPP). Interest shown by the IPPs was encouraging under market-strapped conditions. Following the issuance of survey and development license to BOT\BOOT promoters by the Ministry of Water Resources, several more IPPs sought to sell their generation to NEA including those for the projects of Madi I (20 MW), Upper Marsyangdi II/III (300 MW) and the Lower Modi (20 MW). Also, in accordance with the NEA's commitment to by up to 50 MW of generation from small hydropower projects in the range from 1-10 MW, power purchase agreement (PPA) were signed for purchase of power from the Syange (0.1MW), Pheme (0.95MW), Khudi (5MW) and Mailung (5MW) Khola Small Hydropower Projects. NEA also entered into a agreement for power purchae with Butwal Power co.(BPC) from their Andhi Khola and Jhimruk Plants previously.

2.3.0 REVIEW OF THESIS

A. Mr. Prakash Paudel

Mr. Prakash Paudel (2008) has submitted his research work on the topic of ***"Capital Budgeting of Hydroelectric Project With Reference to Chilime Hydropower Project".*** He has tried to analyze Capital Budgeting of Hydroelectric Project. He has also concluded some objectives, findings and recommendation as under.

Objectives

I. To evaluate investment worth in rupees.

II. To plan the Future Net Cash Flow.

III. To decided the project investment

IV. To point out the suitable recommendations and suggestions.

Finding

On the basis of comprehensive analysis of the data, observation and informal discussion, the following major finding have been drawn.

1. The Net Present Value (NPV) of project Chilime hydropower has positive Rs.7,252,411, 465.70 with 7.75% discount rate.
2. The number of the years required to recover the initial investment is 3.9321 years after commercial operation of CHP project. But it took 9.9321 years to recover the investment.
3. The CHP project has discounted cash inflows equal the initial investment outlay during 10.7174 years taken after establishment time.
4. The Chilime Hydropower project has 28.20 % Accounting Rate of Return.
5. The Internal Rate of Return (IRR) of project CHP has 27.777986%.

6. The profitability index (PI) or benefit cost ratio project CHP has 3.8948 times.

Recommendations

In the light of the study following are the recommendation for the further managerial actions to the Chilime Hydropower Company.

- Chilime Hydropower project should be utilized all its available capacity which helps to increase its sales revenue by help of effective capacity management.
- Chilime Hydropower Company Should practiced Capital budgeting tools to make long-term-investment decision.
- Chilime Hydropower Company should practiced Tax Law and Tax Planning.
- Loss of the electricity should be controlled. Meter joining system should be improved and transmissions and distribution line should be refurbished and modernized to control the leakage.
- CHP project should maintain its periodic performance report systematically and variance analysis should be effective.
- CHPC should be invest such kind of projects and used all available resource properly.
- CHPC should try to minimize its overall expenditure to maximize profit.
- The management should give training and take carrot and stick strategy for good performance.

- To increase the production of electricity CHPC should upgrade the it project.

B. Deepak Bhattarai

Mr. Deepak Bhattarai (2007) has submitted his research work on the topic of ***"A Study on Management of Income and Expenditure of Butwal Power Company Limited".*** Some remarkable finding pointed out by Deepak Bhattarai is as follows:

Finding

1. BPC's sales budget is fixed or stable and sales budget and sales performance is satisfactory.
2. The sales achievement percent of amount is 79.2 percent, 95.0 percent, 84.54 percent, 84.69 percent and 96.9 percent in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively. The achievement percentage of sales revenue is fluctuating during the study period. BPC did not get achieve the targeted sales due to the leakage and power loss situation.
3. There is positive and perfect correlation between budgeted and actual sales. It means actual sales change in same direction with budgeted sales.
4. BPC's actual sale is increasing trend during study period besides FY 2059/60. It was Rs.236279, Rs.96364, Rs.283167, Rs.323134 and Rs.358419 in thousand in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively. Due to the Maoist attack on Jhimruk Hydropower Plant in FY 2059/60 was decrease the sales.

5. From the analysis of chapter IV it can conclude that in every year more space is occupying by other sources rather than electricity and consultancy services sources. In FY 2060/61 is displaying very high space on total income of company by other sources rather than electricity and consultancy services sources due to dividend received from extra investment in other sectors. In the same way this category captures its impact on other next years as before in the generation of total income of the company.
6. Amount of expenditure of BPC is fluctuating during the study period. It was Rs.152619, Rs.153088, Rs.279371, Rs.197459 and Rs.201822 in thousand in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively
7. Administrative expenses is fluctuating trend. The administrative expenses was Rs.15249, Rs.25066, Rs.38371, Rs.41201 and Rs.36438 in FY2058/59, 2059/60, 2060/61, 2061/62 and 2062/62 respectively.
8. Amount of selling and distribution is in increasing trend but in FY 2059/60 and 2060/61 amount remains same.
9. The weight of power plant expenses in total expenditure are 26.1, 28.55, 16.96, 30.18 and 28.6 percent in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively.
10. The weight of consultancy services in total expenditure is 12.97, 9.8, 3.92, 7.55 and 6.78 percent respectively in FY 2058/59 to 2062/63.
11. The weight of other expenditure, in total expenditure is 31.49, 27.54, 55.67, 26.06 and 31.14 percent respectively in FY 2058/59 to 2062/63.
12. The original BEP is Rs. 138751 in thousand. If fixed cost is increase than

decrease in net profit and increase in BEP, when decrease in variable cost than contribution margin and net profit is decrease and BEP is increase.

13. BPC' income sources are mainly electricity sale and other consultancy services, interest from deposit, gain on sale of assets and scrap materials etc.
14. The main expenditure of BPC is power point expenses, consultancy services, administrative expenses, loss on fixed assets, depreciation, staff bonus etc.
15. The income of BPC is fluctuating during the study period. Income was Rs. 281521, Rs.108144, Rs.531611, Rs.397712 and Rs. 493710 in thousand in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively.
16. The expenditure of BPC was Rs. 152619, Rs.153088, Rs.279371, Rs.197459 and Rs.201812 in thousand in FY 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively. The expenditure is also fluctuating during the study period.
17. The coefficient of variation of income is 42.42percent, and expenditure is 23.50 percent and there is highly positive correlation between income and expenditure. It means expenditure change in same direction with income.
18. Net profit before tax was Rs. 128902, Rs.252240, Rs.198253, Rs.291888 in thousand in FY 2058/59, 2060/61, 2061/62, 2062/63 respectively and in FY 2059/60 BPC had got loss Rs. 44944 in thousand.
19. The coefficient of multiple correlations is between three variables income, expenditure and profit. The value of correlation shows that there is highly positive correlation between income and expenditure with profit. It means profit is change same direction with income and expenditure.

20. BPC has running full capacity but the reason of power loss situation BPC did not have to meet sales planning.
21. BPC provides electricity to costumer in cheap price than NEA.
22. BPC prepared income statement systematically and net profit after tax was Rs.142626, Rs. 235418, Rs.197761 and Rs.288419 in thousand in FY 2058/59, 2060/61, 2061/62, and 2062/63 in respectively. In FY 2059/60 had got loss Rs.44944 in thousand.

Recommendations

1. BPC should control the leakage of electricity to achievement the sales target.
2. Loss of the electricity should be controlled. Meter reading and meter joining system should be improved and transmission and distribution line should be refurbished and modernized to control the leakage.
3. BPC should prepared income and expenditure budget to present the actual financial condition of the company.
4. BPC should try to minimize its overall expenditure to maximize profit
5. BPC should clearly classify the costs as fixed, variable and semi-variable to assist to plan production and its operation.
6. BPC should maintain its periodic performance reports systematically and also should take correction action if necessary.
7. To increase the profit the sales of electricity to local consumer should extent rather than NEA. Because the selling price per unit of local consumer is higher than NEA.

8. The management should give training and take carrot and stick strategy for good performance.
9. To increase the production of electricity BPC should upgrade the Andhikhola hydropower.
10. It is suggested that BPC should invest in other hydro projects to increase the production and profit.
11. BPC should controlled the frequently line cut off used by new and modernized machine.
12. In BPC, planning should be communicated to lower level management and coordination among them should be established.

C. Vivak Paudel

Mr. Vivak Paudel (2006) has submitted his research work on the topic of ***"Sales Budget on Profit Planning and Control in Manufacturing Public Enterperises ".*** He has some remarkable finding and Recommendation pointed out as follows:

Finding

1. DDC has short term plan rather than long term planning.

2. DDC is not preparing its periodic performance report for the evaluation of performance to find the causes of poor achievement.

3. DDC has not collected all milk, which is offered by farmers.

4. The collection of milk and sales of milk and milk production are increasing but production of milk and milk products are in fluctuation trends.

5. The government has directly interferers to the price of raw milk and milk products. So the pricing policy of the DDC is not scientific.

6. There is no coordination between purchase department to production and sales department.

7. DDC has utilized plant capacity.

8. Only the top level executives is involved in planning and decision but lower level participation are not encouraged.

9. DDC is not trying to adopt new technology for planning its production target.

10. Sales forecasting is not based on realistic ground. DDC has not practice of using statistical techniques in sales forecasting.

11. Lack of the promotion in to the domestic market and competition to the private Dairy Company are the reason of under achievement of target sales.

12. The corporation does not have practice of preparing sales budget, although there is tentative sales target. There is a gap between target sales and actual sales. The correlation between target sales and actual sales show a positive correlation. It means that the company can meet its sales goals as specified in annual program.

13. The corporation has not practice of systematic and scientific tools used. Sales forecasting is based on the personal judgment of top level staffs.

14. There is no systematic and effective cost control mechanism to reduce cost.

15. Lack of communication between high level and low level staffs.

16. Rate of increase in cost is higher than rate of change in sales.

Recommendations

1. DDC should formulate systematic and scientific sales plan by considering different factors affecting sales. Sales forecasting should be done on realistic ground.

2. DDC should develop its overhead budget in scientific and systematic classified. All expenses related with purchase and production should be included in manufacturing overhead and similarly administrative overhead and selling and distribution overhead should be categorized systematically.

3. For the effective implementation of budgeting system worksheet or manuals should be communicated higher level to lower level of the management.

4. Cost-Volume-Profit relationship should be considered while formulating profit plan, especially in determining sales volume, selling price and profit.

5. DDC should develop the effective pricing policies according to the competitive market situation, to gain high market share.

6. DDC was interfered by government directly. DDC's management can not take its own decision in major issues with out prior acceptance of the government.

7. DDC should operate on commercial basis.

8. DDC should try to expand its collection centers all over the country as well as export its products to the foreign countries.

9. DDC should adopt long range and short range plan. The plan should be formulate with the participation of the most of the personnel to give them felling that they have formulated them and committed to accomplish them.

10. DDC should evaluate the profitability of the product line. There should be market studies focusing on demand, supply and pricing of milk and milk product should be carried out and loss oriented products identify and drop them.

11. DDC should prepare its periodic performance report for evaluating of performance of the poor achievement.

12. The corporation has been suffering from huge loss, due to high amount of expenses for interest. Without eliminating these expenses, there is no possibility of operating in good profitability condition. To avoid these expenses, the corporation should refund its long-term loan. The long-term loan should be paid either by issuing Equity shares or by issuing preference shares.

13. DDC should be used feedback mechanism to control overall activities.

D. Badrai Prasad Uprety

Mr. Badrai Prasad Uprety (2006) has made a research on ***"Sales Budgeting as the Tools of Profit Planning in Public Enterprises A Case Study of Nepal Electricity Authority"*** which is Submitted to faculty of management, Shanker Dev Campus. He has some remarkable objective, finding and Recommendation pointed out as follows:

Objectives

1. To analyze the sales budgeting and practices adopted by NEA.

2. To examine sales trend of NEA.

3. To analyze the relation between budgeted sales and its effect on profitability of NEA.

4. To provide recommendation and suitable suggestion to NEA.

Finding

1. NEA has a practice of preparing both strategic (long range) and tactical (short-rang) profit plan. But the strategic plan is limited only to the top level executive.
2. NEA has its own system and practices of budgeting.
3. NEA prepare almost all of the necessary budgets such as operation budget, financial budget, appropriation budget and NEA has been suffering from series of losses since last half decade.
4. The NEA'S sales achievement has neither touched nor crossed the target sales during five fiscal year is about 93% of target sales in average and the sales is increasing every year.
5. There is a high degree of positive correlation between planned sales and actual sales i.e. 0.99% approximately, it means actual sales changes in the same direction and in about the same speed of the planned sales.
6. The C.V and S.D. of actual sales is more variable than the budgeted sales.
7. NEA has been suffering from loss since last half decade. It's loss is in increasing trend in the first two fiscal years, than decreased in third fiscal year and again, it is increasing in last two fiscal years taken for the study.
8. The actual profit of NEA has a very high degree of negative correlation with actual sales i.e. -0.86 approximately, therefore an increase in sales decreases the profit of Authority. The reasons may be due to inability and insufficiency of NEA to increase the efficiency of costs by considering forthcoming risks, power leakage, wastage etc.

9. The actual profit of NEA has also very opposite relation with its target profit due to improper cost and profit budgeting system and policy.
10. The tariff rate of electricity is imposed on the basis of different category and voltage level.
11. Tariff rate of electricity is high in domestic, non-commercial, commercial and temporary supply but it is cheap in water supply, irrigation community sales, and transport and bulk supply (India) categories.
12. Category-wise sales analysis of NEA shows that the sales share (in GWH) of electricity of domestic, industrial, bulk supply (India) and commercial categories is high and sales share (in GWH) of community sales, temporary supply is low. The sales revenue of electricity (in Rs.) of domestic category is the highest and the lest is in the 'temporary' supply category.

E. Mr. Ghana Shyam Thapa

Mr. Ghana Shyam Thapa (2004) has submitted his research work on the topic of ***"Profit Planning in Nepalese public enterprises: A case study of NEA."*** He has tried to analyze and evaluate the financial performance of NEA in terms of profitability and rate of return on the basis of selective financial tools. He has concluded some objectives, findings and recommendation as under.

Objectives:

1. To examine the present profit planning premises adopted by the NEA.

2. To highlight the various functional budgets of NEA.

3. To evaluate the variances between planned and actual performance of NEA.

4. To provide the valuable suggestion and recommendations on the basis of study

Findings

1. NEA prepares both tactical and strategic profit plan but strategic plan is confined only to the top level executive.
2. NEA's actual sales revenue budgeted and actual production unit and amount of overhead are in increasing trend.
3. Achievement of capital expenditure is satisfactory.
4. Present power distribution system of NEA is not sufficiently efficient.
5. NEA has huge amount of long term liability.
6. NEA has not utilized its available capacity satisfactorily.
7. NEA has not maintained sound liquidity.
8. NEA's financial performance is not satisfactory because its return on investment is negative or very poor.
9. NEA has not prepared plan and program for the agriculture sector's consumption of electricity.
10. There is lack of proper co-ordination between various directors in regard of the goals, objectives and strategies.

Recommendation

1. To improve revenue collection of NEA, the government should issue circular to all officers to pay their outstanding bill to time.
2. Adequate counter facility is necessary for revenue collection.
3. Payment facility is also a factor it saves the consumers' time and transportation cost, NEA should make necessary arrangement for payment of bill through bank.
4. Leakage should be controlled for the improvement of the revenue.
5. Line connecter producer should be made shorter.
6. Assessment of electricity tariffs should be specified.
7. Line disconnected should be properly managed

2.4 Research Gap

The study doesn't find any research about the particular topic i.e. "Sales plan of Chilime Hydropower Company. Over all studies mentioned about the sales Budget, Profit Planning and Capital Budgeting .They are basically related to Nepalese Public Enterprises (NEA). Those studies have pointed the similar findings and conclusions. This study tries to find sales plan of Hydroelectric Company. Therefore, this study is designated to Sales Plan of Chilime Hydropower Company Limited.

CHAPTER- III

RESEARCH METHODOLOGY

3.1 Introduction

Research is common parlance refers to a search for knowledge. The Webster International Dictionary gives a very inclusive definition of research as a careful critical inquiry or examination in seeking facts and principals: diligent investigation in order to ascertain something (Saravanavel, 1990: 1)

Research methodology is a way to systematically solve the research problem (Khatri, 1990: 10). It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher, studying his research problem among with the logic behind them. This chapter looks into the research design, nature and sources of data, data collection procedure and tools & techniques of analysis.

This topic presents the short outline of the methods applied in the process of analyzing the credit management of selected joint venture banks. Research is a systemic method of finding out the solution to a problem whereas research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objective in view.

A research methodology helps us to find out accuracy, validity and suitability. The justification on the present study cannot be obtained without help of proper research methodology. For the purpose of achieving the objectives of study, the applied methodology used in the present study is briefly mentioned below.

3.2 Research Design

This study is manly focus on historical research design of CHPCL. Historical research is concerned with the past phenomena. It is a process of collecting evaluating, verifying and synthesizing past evidence systematically and objectively to reach a conclusion. Historical research may also attempt to discern trends in the past and reconstruct the origin and development of those events. The main purpose of conducting historical research is to show the relevance of past event to the present.

Accuracy of gathered information is the main ingredient of success in historical research. There are two main sources from where past evidences can be found. One is the primary source, where the researcher was a direct observer of the recorded event and the other is the secondary source, where he or she is reporting the observations of others. In most cases, the researcher has to depend upon the data observed by others rather than by him or herself. At the same time, the researcher must also be aware that inappropriate and biased information results in faulty conclusion and findings.

A research design, bearing the techniques and systematic steps of research, helps to collect various information required to researcher for thesis writing or any investigation. In the lack of the research design, the functional process on research is never achieved.

"After the research study has been formulated, the next logical steps are to construct the research design which refers to the entire process of planning and carrying out a research study. The research design asks what approach to the problem should be taken? What method will be used? What strategy will be must effective? Identification, selection and formulation of research problem may be considered as the planning stage of a research. The remaining activities refer to the designs, operation and completion of research study" (Wolf and Panta; 1999:53)

3.3 Period Covered

The study period cover the time period of five years from FY 2060/061 to 2064/065. This study is basically made on the bases of 5 years data, which are taken from CHPCL. It has main purpose to analyze sale plan. The budgeted and actual data are used for study.

3.4 Data Collection Procedure

As the study will also be based on primary data, information will be collected developing a scheduled questionnaire and distributing these to employees of the Company. Questions of both, open-end and close-end will be included in questionnaire. Besides this, junior employees and clients are also being observed and responses have been drawn form them about relevant questionnaires.

3.5 Method of analysis:

The data collection and arranged in proper from have been analyzed and interpreted through budgetary approach, financial tools and techniques are used. They are:

3.5.1 Financials tools

Financials tools which are used to measure the financial performance of the concern from long term as well as short term solvency point of view are called financial tools. There are wide range of financial tools that can be used in analyzing the performance and financial soundness of the organization. In this field work study, mainly following tools are used to measure the efficiency of CHPCL.

3.5.2 Statistical Tools Used

As the data used for this research study is secondary data, they are managed in proper table, format, and charts for meaningful interpretation. Various statistical, financial as well as mathematical tools are used as per need in order to come in conclusion. The tools that are used to in this study are:

1. Arithmetic mean
2. Standard deviation
3. Co-efficient variables
4. Graph and diagrams

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

A sales budget is a forecast of what the company can expect to sell during a budget period. It is forecast of total sales expressed and incorporated in quantities and money. A sales budget is the starting point in which other budgets are also based. All other budgets such as production budget, purchase budget, Labors budget, Overhead budgets etc. are affected by sales budget. Therefore, sales budget can be referred as a nerve centre or backbone of the enterprise.

Sales plan is the infrastructure of profit plan as other plans of profit plan depend upon the sales plan. The main purpose of the study in this chapter is to examine and analyze the budgeted and actual sales plan adopted by CHPCL.

The study is focused on two types of sales plans. The first is long-range sales plan and second is short-range sales plan. CHPCL has applied both long-term and short-range sales plans.

This study has focused mainly on budgeted and actual sales of CHPCL. Other related figures of previous years are also presented and analyzed to know the overall economic and financial trends; and some statistical tools to estimate the possible future trend of the corporation. For the purpose of this study, it covers the data of fiscal years from 2060/061 to 2064/065.

4.2 Sales Budget of CHPCL

Sales budget is the first step to create the all other budget procedures. The sales budget is the primary source of cash and all other functional budgets are prepared on the basis of sales budget. Sales budget helps to estimate of sales for uncertain period in future. When actual sales are nearer to the budgeted sales, it is known as a good plan.

In Nepalese public enterprises the objectives are mainly social welfare and commercial, in case of fulfilling the social obligation. Basically, most of the PE's objectives are social welfare. Profit is less important, at the same time there is also commercial obligation, and in this case the corporation should earn certain profit too for its sustainability. Sales plan is the foundation for periodic planning of the enterprise. The capital additions needed for the amount of expenses to be planned the manpower volume etc. depends on the volume of sales.

We find two types of sales budgets are prepared on the basis of time period covered by the budget. First on is the long-term sales budget which covers the time period of 3-5 years and second short-term sales budget, which covers the time periods of one accounting year.

The most important objective of this study is to analyze the sales budget as will as trend of actual and budgeted sales of CHPCL, then to evaluate through the comparison between actual sales and budgeted sales.

4.2.1 Budgeted and Actual Sales of CHPCL

The following table shows the budgeted and actual sales of CHPCL in terms of rupees in million for five years form fiscal year 2060/61 to 2064/65.

Schedule 4.1
Budgeted and Actual Sales of CHPCL
For the Year 2060/061

(Unit in '000')

Year 2060/061	Budgeted sales	Actual sales	Achievement %
Shawan			
Bhadra	10828.45	9664.17	89.25%
Ashoj	13536.00	11915.39	88.03%
Kartik	13536.00	13000.26	96.04%
Mangsir	9704.37	9887.17	101.88%
Poush	6388.97	7579.00	118.63%
Magh	5717.00	6685.00	116.93%
Falgun	5476.00	6831.98	124.76%
Chaitra	8761.00	7960.00	90.86%
Baishak	12826.00	10896.00	84.95%
Jestha	14438.00	15064.89	104.34%
Ashad	13987.00	14326.11	102.42%
Total	115198.79	113809.97	
Average Sales	10472.61727	10346.36	
S.D	3468.24009	2961.35	
C.V in %	33.1172237	28.62	

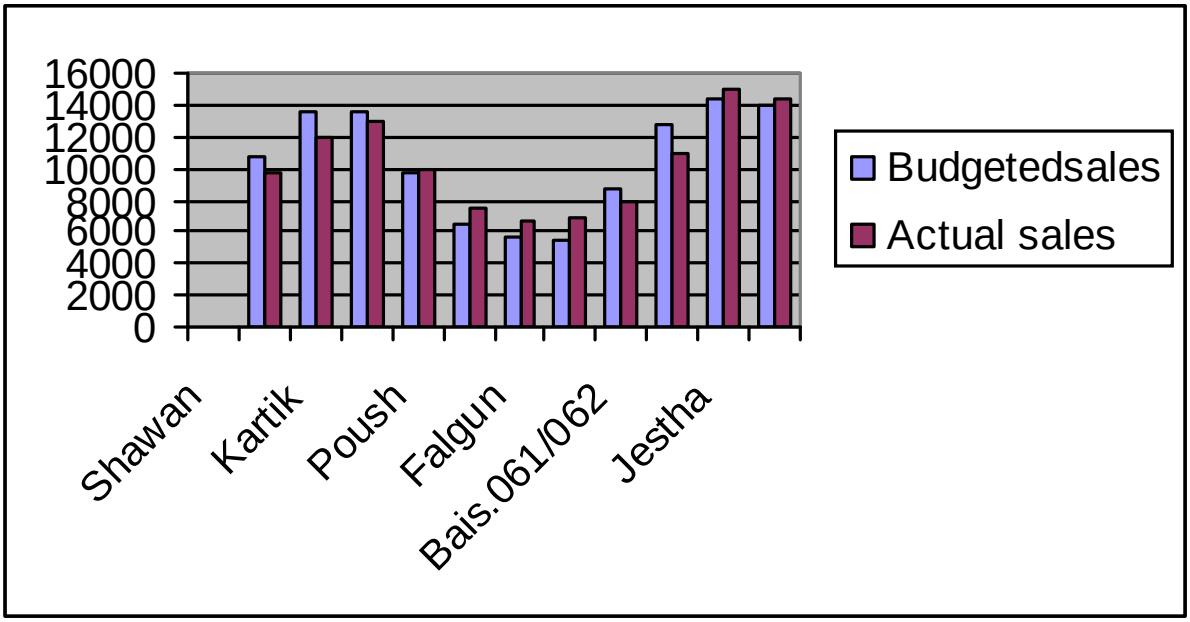
Source: CHPCL annual report.

In above table the first column shows the monthly sales of year 2060/061 , the second column shows the budgeted sales of CHPCL, third column shows the actual sales of CHPCL and fourth column shows the achievement percentage .

The actual sales achieved by CHPCL are 89.25, 88.03%, 96.04, 101.88, 118.63 ,116.93%, 124.76%, 90.85%,84.95%, 104.34 and 102.42% in month Bhadra, Ashoja, Kartik, Mangsir, Poush, Magh, Falgun, Chaitra, Baishak, Jestha and Ashadh respectively. Likewise, average Budgeted and actual sales in Unit 10472.61727 and 10346.36 respectively. As well, Standard Deviation is 3468.24009 and 2961.35 Budget sales and actual sales respectively and coefficient of variation is 33.12% and 28.62 %. Above table shows that unit sales are highly consistent. Analysis shows that the organization is unable to forecast the sales plan during the study year. Month Shawan ,Bhadra, Ashoj, Chitra and Baishak Company could not achieve target sales but month of Poush, Magh and Falgun Company success to achieve higher then planned Sales. The Budgeted and Actual Sales of CHPCL can also be presented by bar diagram as follows:

Figure: 4.1

Budgeted and Actual Sales of CHPCL
F.Y 2060/2061



Schedule 4.2
Budgeted and Actual Sales of CHPCL
For the Year 2061/062

(Unit in '000')

Year 2061/062	Budgeted sales	Actual sales	Achievements
Shawan	14438.00	14911.1	103.28%
Bhadra	13987.00	12179	87.07%
Ashoj	13536.00	4895	36.16%
Kartik	13084.00	14048	107.37%
Mangsir	10039.00	12519	124.70%
Poush	6176.00	9016	145.98%
Magh	5717.00	7064	123.56%
Falgun	5476.00	7021	128.21%
Chaitra	9053.93	8585	94.82%
Baishak	12826.00	12253	95.53%
Jestha	13986.81	14981	107.11%
Ashad	13987.00	14096	100.78%
Total	132306.74	131568.1	
Average Sales	11025.56167	10964.00833	
S.D	3555.94705	3485.508876	
C.V in %	32.25184492	31.79046176	

Source: CHPCL annual report

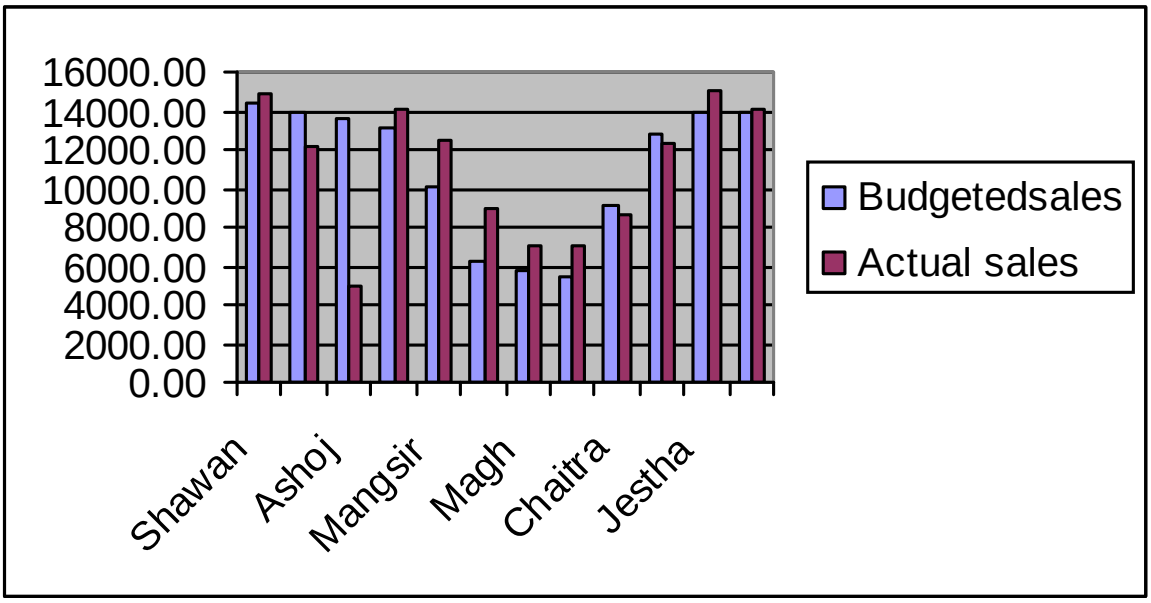
In above table the first column shows the monthly sales of year 2061/062 , the second column shows the budgeted sales of CHPCL, third column shows the actual sales of CHPCL, fourth column shows the achievement percentage.

The actual sales achieved by CHPCL in twelve month period are 103.28%, 87.07%, 36.16%, 107.37%, 124.70%, 145.98%, 123.56%,128.21%, 94.82%, 95.53%, 107.11% and100.78% in month Sharwan, Bhadra, Ashoja, Kartik, Mangsir, Poush, Magh, Falgun, Chaitra, Baishak, Jestha and Ashadh respectively. Likewise, average Budgeted and actual sales in Unit 11025.56167and 10964.008 respectively. As well, Standard Deviation is 3555.94 and 3485.50 Budget and actual sales respectively and coefficient of variation is

32.25% and 31.79 %. Analysis shows that the organization is unable to forecast the sales plan during the study year, month Bhadra, Ashoj, Chitra and Baishak Company could not achieve target sales but month of Mangsir Poush, Magh and Falgun Company success to achieve higher then planned Sales. The Budgeted and Actual Sales of CHPCL can also be presented by bar diagram as follows:

Figure: 4.2

Budgeted and Actual Sales of CHPCL
F.Y 2061/2062



Schedule 4.3
Budgeted and Actual Sales of CHPCL
For the Year 2062/063

(Unit in '000')

Year 2062/063	Budgeted sales	Actual sales	Achievements
Shawan	14438.00	11184	77.46%
Bhadra	13987.00	14278	102.08%
Ashoj	13536.00	13684	101.09%
Kartik	13536.00	13220	97.67%
Mangsir	10039.00	12376	123.28%
Poush	6176.00	8176	132.38%
Magh	5717.00	5779	101.08%
Falgun	5476.00	8160	149.01%
Chaitra	9053.00	8401	92.80%
Baishak	12826.00	11807.8	92.06%
Jestha	13987.00	15262	109.12%
Ashad	13987.00	15542	111.12%
Total	132758.00	137869.8	
Average Sales	11063.16667	11489.15	
S.D	3582.093213	3182.833588	
C.V in %	32.37855237	27.70295094	

Source: CHPCL annual report

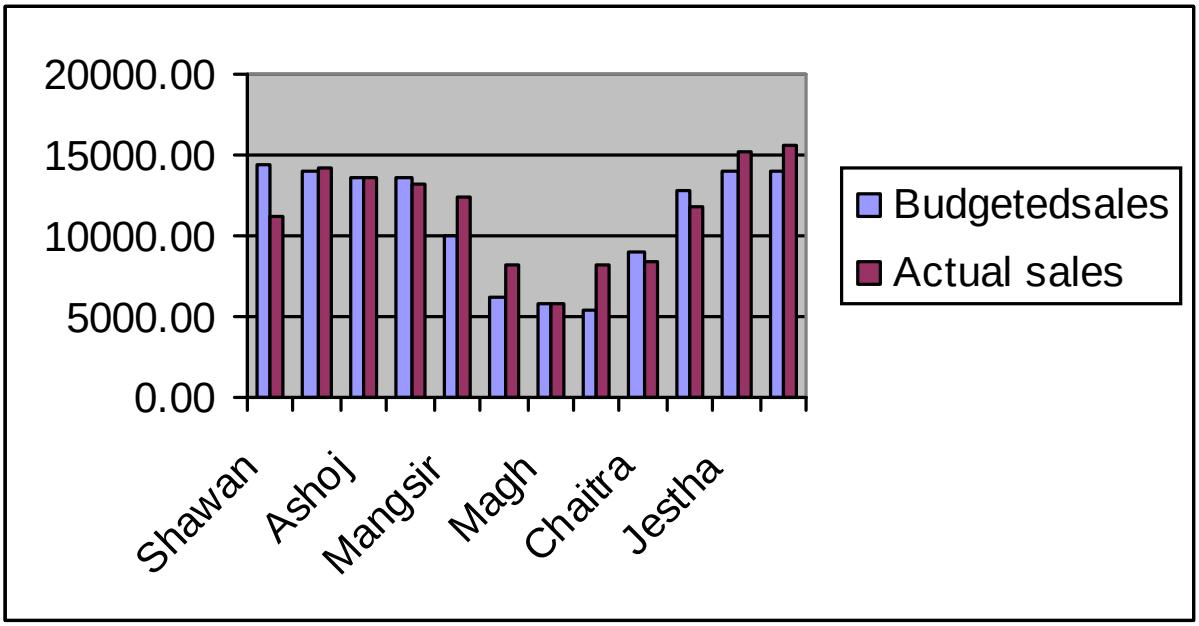
In above table the first column shows the monthly sales of year 2062/063 , the second column shows the budgeted sales of CHPCL, third column shows the actual sales of CHPCL, fourth column shows the achievement percentage .

The actual sales achieved by CHPCL in twelve month period are 77.46%, 102.08%, 101.09%, 97.67%, 123.28%, 132.38%, 101.08%, 149.01%, 92.80%, 92.06% ,109.12% and 111.12% in month Sharwan, Bhadra, Ashoja, Kartik, Mangsir, Poush, Magh, Falgun, Chaitra, Baishak, Jestha and Ashadh respectively. Likewise, average Budgeted and actual sales in Unit 11063.16 and 11489.15 respectively. As well, Standard Deviation is 3582

and 3182 Budget and actual sales respectively and coefficient of variation is 32.37% and 27.70 %. Analysis shows that the organization is unable to forecast the sales plan during the study year, month Shawan, Kartik, Chitra and Baishak Company could not achieve target sales but month of Mangsir, Poush, and Falgun Company success to achieve higher than planned Sales. The Budgeted and Actual Sales of CHPCL can also be presented by bar diagram as follows.

Figure: 4.3

Budgeted and Actual Sales of CHPCL
F.Y 2062/2063



Schedule 4.4
Budgeted and Actual Sales of CHPCL
For the Year 2063/064

(Unit in '000')

Year 2063/064	Budgeted sales	Actual sales	Achievements
Shawan	13987.20	15145	108.28%
Bhadra	13654.00	13654	100.00%
Ashoj	13987.00	15284.07	109.27%
Kartik	13536.00	13783	101.82%
Mangsir	9704.00	10195	105.06%
Poush	6389.00	8391	131.34%
Magh	5717.00	6792	118.80%
Falgun	5476.00	6928	126.52%
Chaitra	8760.90	11578	132.16%
Baishak	12826.00	13571	105.81%
Jestha	13987.20	14786	105.71%
Ashad	14438.19	14476	100.26%
Total	132462.49	144583.07	
Average Sales	11038.54108	12048.58917	
S.D	3589.893663	3194.205918	
C.V in %	32.5214504	26.51103688	

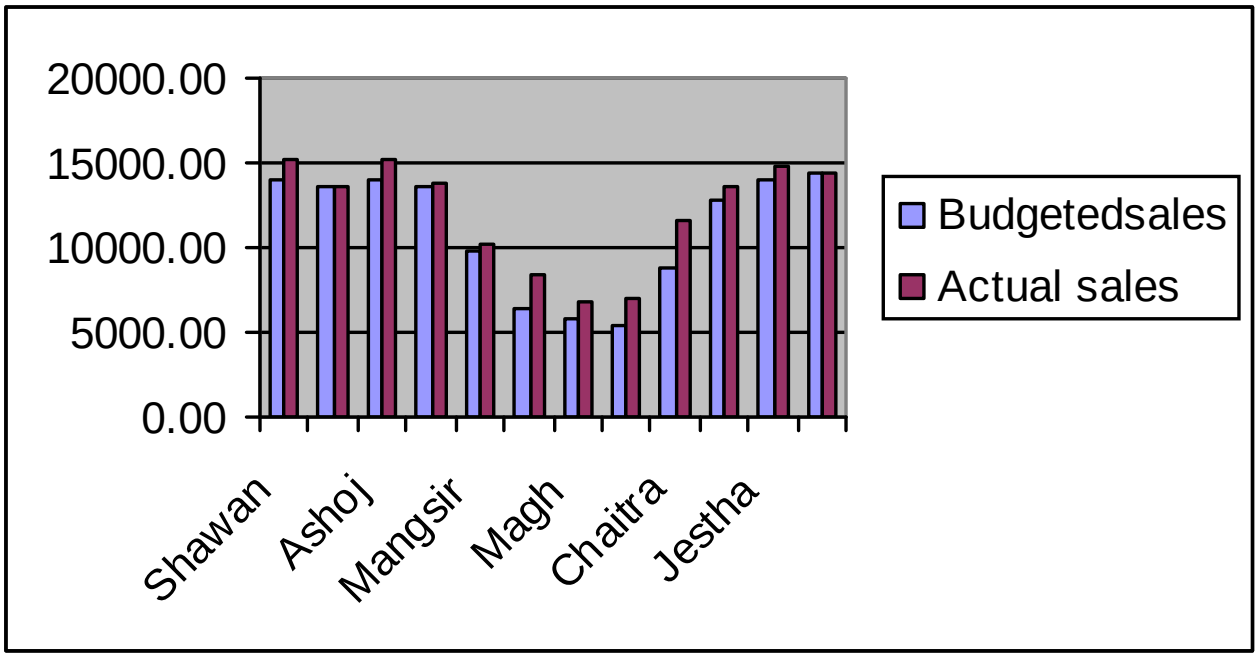
Source: CHPCL annual report

Above table depicted the market plan detail by budget and actual sales plan over the twelve month period for F.Y 2063/064. The achievements are 108.28%, 100%, 109.27%,101.82%, 105.06%, 131.34%, 118.80%, 126.52%, 132.16%, 105.81%, 105.71% and 100.26% in month Sharwan, Bhadra, Ashoja, Kartik, Mangsir, Poush, Magh, Falgun, Chaitra, Baishak, Jestha and Ashadh respectively. Likewise, average Budgeted and actual sales in Unit 11038.54 and 12048.58 respectively. As well, Standard Deviation is 3589.89 and 3194.20 Budget and actual sales respectively and coefficient of variation is 32.52% and 26.51 %. Analysis shows that the organization is unable to forecast the sales plan during the study year, month of Mangsir, Poush, and Falgun Company success to

sales achieve higher then planned Sales. The Budgeted and Actual Sales of CHPCL can also be presented by bar diagram as follows.

Figure: 4.4

Budgeted and Actual Sales of CHPCL
F.Y 2063/2064



Schedule 4.5
Budgeted and Actual Sales of CHPCL
For the Year 2064/065

(Unit in '000')

Year 2064/065	Budgeted sales	Actual sales	Achievements
Shawan	14438.00	15412	106.75%
Bhadra	13987.00	14726	105.28%
Ashoj	13536.00	13290.08	98.18%
Kartik	13536.00	14739.78	108.89%
Mangsir	9704.37	11425	117.73%
Poush	6388.96	9419	147.43%
Magh	5717.00	6953	121.62%
Falgun	5476.00	7168	130.90%
Chaitra	8034.13	7815	97.27%
Baishak	12826.00	12745	99.37%
Jestha	14438.00	15388	106.58%
Ashad	13403.93	12107	90.32%
Total	131485.38	141187.86	
Average Sales	10957.11508	11765.655	
S.D	3626.630269	3204.490768	
C.V in %	33.09840448	27.23597427	

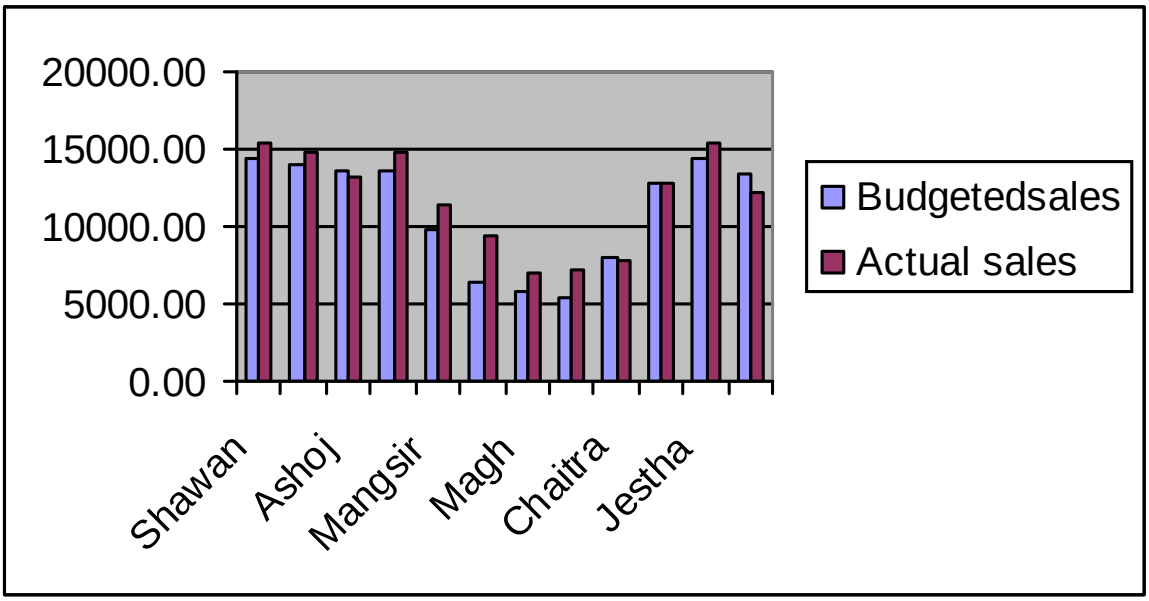
Source: CHPCL annual report

Above table depicted the market plan detail by budget and actual sales plan over the twelve month period for F.Y 2064/065. The achievements are 106.75%, 105.28%, 98.18%, 108.89%, 117.73%, 147.43%, 121.62%, 130.90%, 97.27%, 99.37%, 106.58% and 90.32% in month Sharwan, Bhadra, Ashoja, Kartik, Mangsir, Poush, Magh, Falgun, Chaitra, Baishak, Jestha and Ashadh respectively. Likewise, average Budgeted and actual sales in Unit 10957.11and 11765.65 respectively. As well, Standard Deviation is 3626.63 and 3204.49 Budget and actual sales respectively and coefficient of variation is

33.09% and 27.23 %. %. Analysis shows that the organization is unable to forecast the sales plan during the study year, month Ashoj,, Chitra and Baishak Company could not achieve target sales but month of Mangsir, Poush, and Falgun Company success to achieve higher then planned Sales. The Budgeted and Actual Sales of CHPCL can also be presented by bar diagram as follows.

Figure: 4.5

Budgeted and Actual Sales of CHPCL
F.Y 2064/2065



4.2.2 Profit

Profit is necessary to run PEs. It is the primary objective of enterprises. Profit shows efficiency of public enterprises. Simply stating profit is the excess of income over cost of production. There are so many aspects in profit. According to lynch and Williamson, "usually profit does not just happen, profit are managed. Before, we can make intelligent approaches to the management concept of profit. These are after all several different interpretations of the terms; and economist says that profit is the reward of entire. Entrepreneurship may say for risk taking. A lab our leader might say it is a measure of how efficiently labor has produced and that it provides base for negotiation a wage increase. An investor will view it has as a gauge of return on his or her money. An internal review agent might regard as the base for determining income taxes. It can be said that the excess of firm's revenue over expenditure in a given fiscal period.

"Profit is a single for the allocation of resource and yardstick for judging managerial efficiency" *(Kulkarni P.V. Financial Management, 1985, p-245)*

Schedule 4.6
Profit of CHPCL
For the Year 2060/2061 to 2064/065

(Unit in '000')

Years	Sales Unit	Per Unit Cost	Total Sales Rs.	Total Cost	Net Profit	Ratio of profit
2060/2061	113809.97	4.756	541280.22	267455.18	273825.04	0.5059
2061/2062	131568.1	5.136	675733.76	290296.87	385436.89	0.5704
2062/2063	137869.8	5.547	764763.78	257005.07	507758.71	0.6639
2063/2064	144583.07	5.991	866197.17	198720.21	667476.96	0.7706
2064/2065	141187.86	6.47	913485.45	238668.26	674817.19	0.7387
Total	669018.8		3761460.4	1252145.6	2509314.8	

Source: CHPCL annual report

Above table show that market plan summary and net profit of CHPCL from the fiscal year 2060/061 to 2064/065 of five years studies period. The company earns Net profit Rs.273825.4, Rs.385436.89, Rs.507758.71, Rs.667476.96, and Rs.674817.19 in fiscal year 2060/061, 2061/062, 2062/063, 2063/064 and 2064/065 respectively. The ratio of profit with sales revenue are50.59%, 57.04%, 66.40%, 77.06% and 73.87% in the fiscal year 2060/061 to 2064/065 respectively.

Comparison:

Table 4.1 to 4.5 shows the planned and actual sales of CHPCL during the five year of study period. F.Y 2060/061 eleven month has 84% to 100% achievement in month shawan ,Bhadra, Ashoj, Kartik, mansir, Chitra and Baishak. And remaining month

CHPCL achievement actual sales are more then planed sales. So that, in Fiscal Year 2061/062 Company can't able to achievement average actual sales. In these period actual average sales has less then planned sale. Likewise, CHPCL able to achievement above 100% actual sale expect month of Sharwan ,Chitra and Baishak in fiscal year 062/63.

In year 2063/064 company has success achievement above 100% actual sales all twelve month. But fiscal year 2064/065 company has achievement above 100% actual sales expect Chaitra and Baishak. The above analyses show that the organization is unable to forecast the sales plan properly.

In order to find sales plan and actual sales of different years we have to calculate the arithmetic means, standard deviation and coefficient of variation of the planned and actual sales. In fiscal year 2060/061 to 2061/062 result shows that actual sales are less variable then planned sales. But after fiscal year 2061/062 the calculated mean of actual sales has grater then actual sales. The standard deviation of planned sales is grater then actual sales and coefficient of variance of planned sales is also grater then planned sales. CHPCL can to be earn more then 50% profitability ratio overall study period.

4.2.3 Production Budget

After the sales budget has been prepared, the production requirement for the forth-coming budget period can be determined and organized in the form of production budget. Sufficient goods will have to be available to meet sales needs and for the desired ending inventory. A portion of these goods will have already existed in the firm of beginning inventory. The remainder will have to be produced. Thus, production needs can be

determined by adding the budgeted sales units to the desired ending inventory and deducting the beginning inventory from the total. (Horngren, Datar and Foster, 1999)

The production budget is an estimate of the quantity of goods to be manufactured during the budget period. In developing a production budget, the first step is to formulate policies relative to inventory levels. The next step is to determine the total quantity of each product that is to be manufactured during the budget period. The third step is to schedule this production to interim period. Production budget is the initial step in budgeting manufacturing operations. To plan production effectively, the manufacturing executive must have, or overlap, information relative to the manufacturing operations necessary for each product. The total power produced by Chilime Hydro Power Company Ltd. is sold to NEA. So, there is no chance of leakage. So production budget of this company could not be made.

4.3 Coefficient of correlation between budget sales and actual sales

Budget sales are independent variable and actual sales are dependent variable. The main objectives of computing 'r' between these two variables are to justify whether budget sales are significantly used to get actual sales proper away or not. The value of 'r' explains whether percentages change in budget sales contribute to change the same percentage of actual sales or not.

Table 4.7
Correlation between Budget sales and Actual sales

Years	Budget Sales (X)	Actual Sales (Y)	X2	Y2	XY
2060/2061	11.51	11.38	132.4801	129.5044	130.9838
2061/2062	13.23	13.15	175.0329	172.9225	173.9745
2062/2063	13.28	13.79	176.3584	190.1641	183.1312
2063/2064	13.25	14.46	175.5625	209.0916	191.595
2064/2065	13.15	14.12	172.9225	199.3744	185.678
N= 5	Σ X= 64.42	Σ Y = 66.9	Σ X^2 = 832.3564	Σ Y^2 = 901.057	Σ XY = 865.3625

Where,

X = Budget Sales

Y = Actual Sales

Total = Summation of the value from F/Y 2060/061 to 2064/065.

Here, Σ X =64.42, Σ Y =66.9, Σ X^2 = 832.356, Σ Y^2 =901.057, Σ XY =865.36, N = 5

Now, Correlation (r) = $$\frac{N\phi XY - \phi X\phi Y}{\sqrt{N\phi X^2 - (\phi X)^2} \times \sqrt{N\phi Y^2 - (\phi Y)^2}}$$

r = +0.91

The above calculation shows that there is positive relationship between planned sales and actual sales of CHPCL. That means, if the planned sales is increased absolutely the actual sales is also increased and vice versa. The coefficient of correlation between budget sales

and actual sales is 0.91 and probable error is 0.0750. Comparing the value of 'r' and 6 times P.E., we can say that there is significantly positive relationship between budget sales and actual sales because 'r' is higher than 6 times P.E., i.e. 0.91>0.4506.

From the above analysis, we can conclude that CHPCL has positive relationship with significant between budget sales and actual sales.

4.4 Major Finding

On the basic of comprehensive analysis of CHPCL's data presentation and other relative analysis made, remarkable findings have been made. The major findings of this study are drawn on the basis of secondary data. The key findings are as follows:

1. CHPCL sales achievement less than planned sales in years 2060/061 and 2061/062.
2. CHPCL sales achievement is far more then planned in year after 2061/062 so, CHPCL should make plan properly to meet actual achievement.
3. The production budget shows that CHPCL is not utilizing its full capacity first two fiscal years in study period.
4. But CHPCL utilizing excess capacity in fiscal year 2062/063, 2063/064, and 2064/065.
5. CHPCL can earn profit more then 50.59% profitability compare with sales and net profit ratio.
6. Every fiscal year expect 2063/064 the company can't able to achievement actual sales plan in month Chitra and Baishak.
7. There is positive and perfect correlation between budgeted and actual sales, it means actual sales changes in same direction with budget sales.

8. CHPCL has running full capacity but the reason of power loss situation, CHPCL did not have to meet sales planning in first two fiscal years.
9. The company has supply more units of energy then Power Purchase Agreement with Nepal Electricity Authority.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMEDATION

5.1 Summary

Planning is primary function of the management process. Planning is the process of setting goals and objective and translating them into activities and resources required for the accomplishment within a specified time horizon. A budget is quantitative expression of a plan of action and an aid to co-ordination and control. Budgets may be formulated for the organization as a whole or for a sub unit. Budget, basically, are forecasted financial statements formal expressions of managerial plans. They are target that encompass all phases of operations including sales, production, purchasing, and manpower and financing. But in this study we have taken consideration only Sales plan of Chilime Hydropower Company Limited.

Sales budgeting play most important roles in profitability. Without sales we can't imagine the profit of an organization. In market, without profit an organization can not survive in future. The sales plan plays main role in financial plans in an organization. It estimates about the sales in future. All other budgets are built up on the basis of the sales budget.

It will be easy for the enterprise to decide how much products is sold by the organization in current year, and how much will be sold in future. It helps to know about production plan, how much the products should be produced by organization (if manufacturing

company), or how much goods should be brought from the manufacturer (if non-manufacturing company) to sell in the market.

The sales manager is directly responsible for the preparation and exaction of this budget. When actual sales are near to the targeted sales, the planned sale is known as good plan. The efficiency of a planner or planning expert can be evaluated from the comparison between actual and budgeted (planned) sales.

This study has examined the “Sales Plan of Chilime Hydropower Company Limited” that has been taken as representative of public enterprise of Nepal. The study also analyzes the sales budgeting process as tools of profit planning in CHPCL.

Public enterprises play important role in the industrialization activities in the developing country like Nepal. Nepal is a landlocked country; we need to import lots of things from India and from third countries too. In Nepal, we have some certain industries which are not enough to fulfill the demand of the people.

CHPCL is selected as representative enterprise for this study. This research work tries to analyze and examine the practice, procedure and technique of certain question state in the statement of problem.

CHPCL has main objective to work on all the generation, transmission and distribution systems. It carries out feasibility study, construction operation and management of small and middle hydropower project. It makes also an agreement between the company and the organization or individual to sale and purchase electricity. Besides, this gives and takes the work in contract between company and the different organization.

This study has been organized in five main chapter i.e. introduction, literature review, research methodology, data presentation and analysis, and final summary, conclusions and recommendation.

The secondary data have been used for analysis. Statistical tools like percentage, graph, mean, standard deviation, variation, correlation have been used to analyze the data.

Detail presentation of the data relating to CHPCL consists of presentation of budgeted and actual sales, the condition of present sales and import good and applies sales policy. The actual sales, budgeted sales and profit\loss of CHPCL have been analyzed with various statistical tools wherever necessary.

The Strategic long-range sales plan of CHPCL has produced 139650818 units per year according to PPA agreement with NEA but in first three years study period CHPCL can't able to produce agreement unit.

5.2 Conclusion

After analyzing the present practice in CHPCL, the conclusions are made as follows:

1. CHPCL is the private profit oriented company. The principal shareholders of the company are 51% of NEA, 25% of NEA employee and 24% taken general public.
2. CHPCL has been practicing of preparing budgets or plan since its establishment. It is able to prepare systematic, scientific, and appropriate budgets by considering relevant factors, polices and ides.

3. Sales and production budget is fixed or stable in this organization. So it is not necessary to make comprehensive sales and production budget.

4. CHPCL sales achievement has touched to the planned sales during the study period expect first two fiscal year of study period.

5. CHPCL has a high degree of positive correlation coefficient between budgeted sales and actual sales i.e. 0.91. It means actual sales change in same direction of budgeted sales.

6. CHPCL can to be success earn more then 50% profitability ratio on overall study period.

7. Selling price per unit is different in every fiscal year increase by 8% per annum.

8. CHPCL has sell electricity to NEA under PPA.

9. Profit planning and control has two side, one is revenue planning and other is cost planning. If these both are planned properly, profit will be automatically planned. In CHPCL revenue planning and cost planning are systematically and scientifically.

10. CHPCL is in more satisfaction position in sales volume is incising every year.

11. Main income source of CHPCL is sale to electricity, other consultancy services, gain on sale of assets and scrap materials etc.

12. The main expenditure of BPC is power plant expenses, distribution expenses, consultancy services, and administrative expenses, loss on fixed assets, depreciation, and staff bonus.

5.3 Recommendations

Base on the above study, the following suggestions and recommendations are outlined to improve the formulation and implementation of profit planning and controlling system.

1. CHPCL should control the leakage of electricity to achievement the sales target.
2. Loss of the electricity should be controlled. Meter reading and meter joining system should be improved and transmission and distribution line should be refurbished and modernized to control the leakage.
3. CHPCL should prepared income and expenditure budget to present the actual financial condition of the company.
4. CHPCL should try to minimize its overall expenditure to maximize profit
5. CHPCL should clearly classify the costs as fixed, variable and semi-variable to assst to plan production and its operation.
6. CHPCL should maintain its periodic performance reports systematically and also should take correction action if necessary.
7. The management should give training and take carrot and stick strategy for good performance.
8. To increase the production of electricity CHPCL should change upgrade the Chilime hydropower Project.
9. It is suggested that CHPCL should invest in other hydro projects to increase the production and profit.

10. CHPCL should controlled the frequently line cut off used by new and modernized machine.
11. In CHPCL, planning should be communicated to lower level management and coordination among them should be established.

BIBLIOGRAPHY

Books:

- Bajrachrya. P, Ojha, K.P, Goet. J & Sharma S (2005) ***Management Accounting Nepalese Perspective Second edition Kathmandu*****:** Asmita Bools & Publishers & Distributors.
- Dangol, R.M., Gurung, P. & Danjol, J (2062 B.S.). ***Cost and Management Accounting*** **(3rd ed.)**. Kathmandu: Taleju Prakashan.
- Gupta, S.C.1982 "***Fundamentals of Statistics",*** New Delhi Himalayan Publication House.
- Hampton, John J, 1994 ***"Financial Decision making***" :concepts, problems and cases prentice Hall of India, New Delhi.
- Hilton, R.W (2000). ***Management Accounting*** (4th edition) New York: MaGraw-Hill Inc.
- Lynch, R.M. and Williamson, R.W. (1984). ***Accounting for Management for Control*** **(3rd ed.)** New Delhi: Tata MC. Graw Hill Publication
- Pandey, I.M.(1994***). Management Accounting*** **(3rd ed.).** Delhi: Vitas Publishing House Pvt. Ltd.
- Welsch, G.A., Hilton, R.W. and Gordon, P.N. (2000). ***Budgeting: Profit Planning and Control*** **(5th ed.)**. New Delhi: prentice-Hall of India Pvt. Ltd.

- Weston, J.F. & Copeland, J.E. (1992). ***Managerial Finance Chicago***: The Dryden Press.
- Wolff, H.K. and Pant, P.R. (2002).***Social Science Research Thesis Writing*** (3rd ed.). Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.

Thesis

- Bhattrai Deepak (2007) ***"A Study on Management of Income and Expenditure of Butwal Power Company Limited.*** An unpublished Master Degree Thesis submitted to faculty of Management, Shanker Dev Campus Kathmandu.
- Goet Jogindar (1999) ***Revenue planning and Management "A case Study of Nepal Electricity Authority.*** An Unpublished Master Degree Thesis submitted to Facility of Management, Shanker Dev Campus Kathmandu.
- Paudel Prakash (2008) **Capital Budgeting of Hydropower Project with Refrance to Chilime Hydropower Company Limited**. An unpublished Master Degree Thesis Submitted to Facility of Management, Shanker Dev Campus Kathmandu.
- Sharma Dilli Raj (2002) ***"A Case Study in Revenue Collection of NEA***." An unpublished Master Degree Thesis submitted to faculty of Management, Shanker Dev Campus Kathmandu.

- Thapa, Ghan Shyam (2006) ***"A Case Study of Profit Planning of NEA"***. An unpublished Master Degree Thesis submitted to faculty of Management, Shanker Dev Campus Kathmandu.

o JOURNALS, REPORTS, MAGASINES AND MEDIA

- Asian Development Bank RRP: 26862
- Annapurna Post Daily, Kathmandu: News Media Pvt. Ltd.
- Annual Report of CHPC
- Kantipur Daily, Kathmandu: Kantipur Publication Pvt. Ltd.
- NEA, A Year in Review. Kathmandu: NEA Head Office.
- Vidhyut Patrika, Half yearly. Kathmandu: NEA Head Office

Website

http://www.nea.np

http://www.google.com

http://www.cob.gov.

http://clinton2.nara.gov/pcscb/wt_reischauer.html.