

CHAPTER I

INTRODUCTION

1. Cost

Cost may be defined as the sacrifice or giving up of resources for a particular purpose. Monetary units that must be paid for goods and services frequently measure cost. Cost is initially recorded in elementary form. Then these costs are grouped in different ways to help managers make decisions such as evaluating subordinates and sub-units for the organization, expending or deleting equipment. To aid decisions managers want to know the cost of something they want to do or acquire. Basically cost mean money paid in exchange of any things expense as including all expired cost which are reducible from revenue . The cost is playing the vital role in G.D.P to growing National economic. The cost is day to day problem of any industries. It is very essential to ensure a continuous production flow by utilizing the maximum capacity. In a developing economic like our countries optimum utilization of resources is a carrying need of the day. The maximum utilization of resources is minimized the cost. Cost accounting is a dynamic discipline and it has a long way to traverse in our country. Cost accounting is a branch of accounting and has been developed due to limitation of financial accounting. Financial accounting is primarily concerned with record keeping directed towards the preparation of profit and loss account and balance sheet. Management needs systematic, comparative cost- information as will as analytical cost and profits data to manage an enterprise, without determining the cost we can't decide which products should we make? Or Delete?, Should we manufacture a product component or should we acquire it outside? , what prices should we charge? Should we buy the proposed equipment? Should we change our manufacturing methods? Should we promote this manager? Should we expand the department? Etc.

Cost accounting is the classifying, recording and appropriate allocation of the expenditure for the determination of the cost of products or services and for presentation of suitable arranges data for purpose of control and guidance of management. It includes the

ascertainment of the cost of every order, job, contract, process, service or unit as may be appropriate. It deals with the cost of production, selling and distribution, It is these the provision of such analysis and its classification of expenditures as will enable the cost of any particular unit of production or service to be ascertained with reasonable degree of accuracy and at the same time to disclose exactly how such total cost is constricted lie. The value of material used the amount of labor and other expenses incurred so as to control and reduce its cost. Thus cost accounting relates to the collection, classification ascertainment of cost and its accounting and control relating to the various element of cost. It established budgets, standard cost and actual cost of operation, processes department or production and the analysis of variances profitability and social use of funds.

1.2 Cost Accounting

Cost accounting is quantitative method that accumulates, Classifies, summaries, and interprets information for three major purposes viz. Product or service costing operational planning and control and non-routine decisions.

It how refers to the gathering and providing of information for decision needs of all sorts. Today cost accounting is generally indistinguishable from management accounting. In this content a reference to the current official terminology of institute of cost and management accounts of may be made. It defines cost accounting as "that fast of management accounting as which establishes budgets, and standard costs and actual cost of operation, process department of product and the analysis of variances, profitability of social use of funds."

These are many parties interested in the organization and they provide the information and supplied by the organization, they are employees and trade union, government, community etc. These users of accounting information require information for decision making the objective of accounting is to provide sufficient information to meet need of the various users at the lowest possible cost.

C.Gollespie " cost accounting is a set of procedures for determining the cost of product and various activities involved in its manufacture and sale for planning and measuring performance."

1.3 Financial Accounting

Financial accounting is concerned with the recording of financial transaction and to ascertaining profit and loss and financial position of business enterprise. It provides a financial statement that shows the operating result of the business transaction and financial position of the concern. These financial statements are essential to external users such as shareholders, creditors, government etc for accounting information.

1.4 Managerial Accounting

A business enterprise today operates in a dynamic environment, which involves many new forms management problems. Due to the complex environment management has to carry out its basic function of cost minimizing and maximizing of profit in an atmosphere of uncertainty.

Managerial accounting is concerned with providing both financial and non financial information that win help decision-makers to make good decisions an understanding of accounting therefore requires an understanding for the decision-making process and an awareness of the users of accounting information.

American Accounting Association

Managerial accounting is defined as "the process of identifying measuring and communicating economic information to permit information judgment and decision by users of the information."

As the management accounting assist in management function if simply stated, it is the accounting for planning, controlling and decision making activities of an affair. For the successful operation of the business; all the management functions should be effective planning decision making and controlling the managers need various information that is provided by the management accounting.

1.5 Differences between cost and financial Accounting

Cost accounting prepared to ascertain the cost of product and services and to make control on cost but financial accounting prepared to ascertain the profit or loss and the financial position of business enterprises.

Cost accounts are generally kept voluntary to meet the requirement of management but financial accounts are kept to meet requirement of company act and income Tax act

In cost accounting stokes are valued at cost price. In financial accounting stokes are valued at cost or market price whichever is less.

Cost accounting has no compulsion to follow the "GAAP" standard. Financial accounting is presented in accordance with "GAAP" standard.

Cost accounting is only part of the financial accounting. Which discloses profit or less of each product job or service but financial accounting is the accounting of the whole business. Which discloses the net profit or loss of the business as a whole?

1.6 Differences between cost and management Accounting

Managerial accounting is very closed linked to cost accounting: so closely in fact, that it is difficult to say where cost accounting ends and where managerial accounting begins. Cost accounting simply aims to measure the performance of department's goods and services; however managerial accounting is much more compared to it.

Managerial accounting and cost accounting are in their objectives. The primary objective of cost accounting is to ascertain the cost production as well as to control the same after careful analysis whereas managerial accounting aims to supply the accounting information to the management for taking proper decision. In cost accounting, accountants are prepared according to pre-determined standards and budget. But in managerial accounting reports are submitted to the management after measuring the variances between actual performance and budget. As a result past errors and defects may be rectified and there by efficiency is improved.

Managerial accounting does not replace financial and cost accounting as is commonly understood, but supplement the basic structure of traditional accounting to serve the diverse requirements of modern management.

1.7 Method of Costing

- 1) Job order costing method
- 2) Contract or terminal costing method.
- 3) Unit or single output costing method.
- 4) Process costing methods.
- 5) Multiple costing methods.
- 6) Operating costing/Batch costing methods.
- 7) Service costing.
- 8) Form socting.
- 9) Department costing
- 10) Operation costing.

1.8 Types of Costing or Techniques of Costing

- 1) Historical costing
- 2) Direct costing
- 3) Variable costing
- 4) Absorption costing
- 5) Standard costing
- 6) Uniform costing
- 7) Marginal costing

1.9 Classification of Cost

- 1) Accounting to nature or elements of cost
 - a) Material cost

- b) Labor cost
- c) Overheads cost
- 2) According to Function
 - a) Production cost
 - b) Administration cost
 - c) Selling and Distribution cost
- 3) According to Variability
 - a) Fixed cost
 - b) Variable cost
 - c) Semi variable cost
- 4) According to control
 - a) Controllable cost
 - b) Uncontrollable cost
- 5) According to managerial decision
 - a) Relevant cost ad irrelevant cost
 - b) Avoidable and unavoidable cost
 - c) Opportunity cost
 - d) Differential cost
 - e) Marginal cost
 - f) Sunk cost
 - g) Impunked cost
 - h) Out-of-pocket cost
 - i) Replacement cost

1.10 Growth of Public Enterprises in Nepal

Public enterprise

Previously, government was considered to maintain the law and order in the state to ensure the territorial security of the state and to provide public utility services. But this concept slowly gave way to the concept that the provision of necessary infrastructure for the economic and industries growth of a country is also the responsibility of the state. The growth of the public enterprises could be ascribed to the awareness on the part of state to bring about social and economic justice.

Industrialization is an important factor for achieving the basis objective of a country is economic and social progress. Industrialization not only provides goods and services but also creates employment opportunities. It facilitates an effective mobilization of the resources of capital and skill which might otherwise remain unutilized. It also acts as a vehicle for fostering innovation and technological improvement. Industrial development those has a multiplier effect on the economy.

Public enterprise were established in order to prepare infrastructure services to product the required foods in the country and to help in controlling the price situation to create the opportunity for employment to increases government revenues and to contribute significantly in the national development as well as to assist in the country economic advancement.

Public enterprises help in the rapid economic growth and industrialization at the countries and create the necessary infrastructure for economic development. Earn returns on investment and thus generate resource for development promotes and redistribution of income and wealth and create employment opportunity to balance regional development.

The political foundation of the establishment of public enterprise can be attributed to the constitutional arrangement for mixed economy system whereby both public and private sector co-exists. Corporation Coordination Council (ccc) of Nepal has generalized the rational for the establishment of public enterprises in Nepal as follows:

- 1) To provide communication system, develop infrastructures and provide basic utilities and produce defense goods and services under government monopoly.
- 2) To spread important sectoral development such as agriculture and industry by providing total packages of services.
- 3) To provide adequate supplies and stabilize the prices of essential goods, services and strategic development materials.
- 4) To maximized foreign exchange earnings for government.
- 5) To minimize imports.
- 6) To maximize outputs, minimized cost and regenerate surplus for further investment.
- 7) To help and support the smooth operation of already established industries in state.
- 8) To be a model enterprises and an employer.
- 9) To operate efficiency on commercial principle and to improve the serving government departments by the conversion into public enterprises.
- 10) To revitalize important sick industries in the country and also to initiate important industries in which private capital is shy.

To systematical develop the economics and social welfare of countries realized systematic economic plan. Although the formal evaluation of public enterprise in Nepal was stated along with of economic planned system. Nepal bank limited was established in 1994 under company act 1993. After establishing the Udhayog Parishad in 1936 there are many industries were established. Under promote the company act 1936 the Gharelu Prachar Ilam Adda established in 1940, these after cigarette, match cotton paper industries has established. Juddha Match Factory in 1978, Nepal Plywood and Babbin company in 1943. Morang mill in 1942, Raghupati Jute Mill had established in...Biratnagar Jute Mill also established in 2003 B.S.

The concept of public enterprise in Nepal for the first time emerged in 1932 when Nepal government gave the charter to set up the Nepal Trading Corporation in Katmandu "In order to promote government trading in Nepal". But the step toward the incorporation of PE was only initiated when the Nepal Bank Ltd. established.

1.11 Introduction of Salt Trading Corporation

Before the formation of salt trading corporation ltd, even the supply of adequate, quality salt to the people was not possible. The people made complaints from time to time to the government. Bearing this in mind the government announced the formation of STCL to provide quality and adequate at reasonable price to people in Nepal. The Corporation was established on 27th Bhadra 2020 and was listed in the Securities Board on 2041. Since the time of formation the corporation has provided high quality at reasonable price and adequate supply of salt to the people. Salt is the only the item in Nepal that is sold at lesser price than the imported price from India. This is example in itself. The corporation is delivering its services to the people through 93 branches sub-branches in 75 districts throughout Nepal with the help of its 6000 dealers. It has reserve capacity of 75000 metric tons to be stored at its godowns at different places. The central office located at Kalimati, Kathmandu.

The corporation has managed in supplying the following goods.

a) Edibles; salt, ghee, oil, sugar, Maida, flour, pulse, rice.

b) Other materials;

Lubricants, coal, cement, tractor, metal, detectors.

c) The corporation has managed to mix the following nutrients bearing in mind the health of the people.

I) iodine mixed salt.

II) Vitamins 'A' and 'D' has been mixed in ghee and oil.

d) The corporation is supplying high quality agro based items such as chemicals, fertilizers, various types of seeds to uplift the life structures of its farmers as the 80% of the population is dependent on the agriculture. This facility has been provided to the farmers through branches at different places of the country.

1.12 Statement of the Problem

Generally public enterprises are established of the important devices for the rapid industrialization and achieving economic goods and social and political objectives. Involving social justice and social welfare, accelerating the rate of economic growth, mobilization of funds, to making available of essential goods and services cheaply and adequately and national defense as well as public welfare. In other hand developing the infrastructures requires huge amount of investment where private sector cannot be able to invest and manage.

In reference to Nepalese public enterprise, it can be observed that most of them have not been able to contribute to word the generation of surplus.

The public enterprise have poor performance or even negative results more over there are other problems also management problem wastage control, quality control, repair and maintenance, material management, accountability of the enterprise are not clear rules and regulations have remained only on papers and not in practice, poor decision and poor implementation, lack of proper planning, impractical performance, monopoly and bureaucracy tendency, poor profitability, lack of contuinity and stability etc. so most of the Nepalese PE's are unable to achieve their pre-established objectives and goals.

STCL is also a public enterprise. It is also a victim of above mentioned problems. Nowadays STCL has been suffering from loss. The total cost of STCL is high and return is not satisfactory. It is running with the help of government subsidy.

To saw the problem the researcher selects the STCL in a sample of many PE's for the study in these periods. There are many questions arise in researcher mind they are:

1) Why the STCl can't generate surplus and its total cost is high.

- 2) To know the STCI this condition the research examines different cost structure methods would apply and analysis of their relation.
- 3) There any specific relation between production cost, administration and selling and distribution cost.
- 4) Is there any relationship between fixed cost and variable cost.
- 5) How much these management involvement and committee men, to ward cost accounting system.

1.13 Objectives of the Study

The basic objectives of this study are to examine the cost structure applied by STCI. Other sub-objective are

- a) To assess the proposition of different cost elements in total cost.
- b) To analysis the ratio between cost: sales and cost: profit.
- c) To provide suitable recommendation and suggestions.

1.14 Limitation of the Study

The study will have some limitation. Basically the study is done for the partial fulfillment of masters of Business studies.

- 1) This study will attempt to find out the impact of cost structure in STCI.
- 2) The cost figure of cost five years will be analyzed.
- 3) The study has to be done on the secondary data and primary data also using.
- 4) The limit time available with the researcher and the time resource constraints will also limit the work.

5) Accuracy of the study will be hoped on the data available from the management of STCI and the response made by respondents on the research questionnaire.

1.15 Organization of the Study

The whole study will be dividing into following five chapters.

Chapter I

First chapter deals with introduction. In this chapter introduction of cost, cost accounting. Financing accounting, managerial accounting, method of costing, growth of public enterprise, introduction of salt trading corporations Ltd. Statement of problem objectives of the study, Limitation of the study and organization of the study.

Chapter II

This chapter deals with the review of available literature. It includes review of related books, journals articles and previous unpublished master degree dissertation etc.

Chapter III

This chapter explains the researcher methodology used in the study. It includes research design, population and sampling sources of data, method of analysis, research variable etc.

Chapter IV

This is the most important chapter of the study. This chapter deals with presentation and analysis of data as well as major findings of the study.

Chapter V

The fifth and last chapter covers the summary of the study. The main conclusion that flows the study an after some recommendation as well as suggestions for further improvement.

CHAPTER II

LITERATURE REVIEW

2.1 Cost Accounting

Cost accounting is an accounting discipline that provides detailed information of cost to management relating to particular product an operation or an activity. It refers to the process of determining the cost of some particular product or activity. Thus cost accounting is concerned with the collection, classification, analysis and presentation of cost information.

Institute of Cost and Management Accountant (UK) defines cost accounting as ' that part of management accounting which establishes budgets and standard cost and actual cost of operation, processes, departments or product and the analysis of variances, profitability or social use of funds.

"Cost accounting is that provision of such analysis & classification of expenditure as will enable the total cost of any particular unit of production to be ascertained with a reasonable degree of accuracy & at the same time it disclose exactly how the total cost is constituted" (Horold james)

"Cost accounting may be defined as a system of recording an accounting he manufacturing of a certain commodity or on a particular job" (Carter)

"Cost accounting is the processing & evaluations of monetary & non-monetary data to provide information for external reporting internal planning & control of business operating & special analysis & decision" (Morse)

"Cost accounting is the application of costing & cost accounting principles, methods & techniques to the science, art & practice of cost control & the as containment of profitability. This includes the presentation of information derived there from for the purpose of management decision making." (Munankarmi, 2003:3)

Cost accounting is that branch of the accounting information system which records measures & reports information about costs. A cost is a sacrifice of resources. Cost are reflected in the accounting system by out lays of cash promises to pay cash at a future date & the expiration of the value of an assets. The primary purpose of cost accounting is cost ascertainment & its use in decision-making & performance evaluation accounting system provides data for both financial accounting & management accounting when costs are used by outsiders, such as shareholders or creditors to evaluate the performance of the management & make investment decision, they are said to be used for financial accounting purpose, on the hand, when cost data are used inside the organization to evaluate the performance of operations activities personnel etc, as the basis of decision making they are said to be used for management accounting purpose for instance in a manufacturing business, the cost o products sold & on hand include the total expenditure on materials, labors & all the other production cost each of these cost must first be measured than accumulated & finally distributed to the working process finished goods & costs of goods sold. Consequently the amount of profit reported by a manufacturing company depends on the accuracy of its cost calculations. Thus cost accounting is useful for performance appraisal. (Khan & Jain, 1999:6)

Cost accounting measures & reports financial & other information related to the organization of resources. It provides information for both management accounting & financial accounting. (Horngen, Foster, Dates, 1997:2)

Cost accounting also helps in planning. Planning is a process of a setting foals & allocation resources to the achieve these goals. The expected financial outcome of planning is expressed interims of budgets. A firm can increase its profits in two ways i) by increasing unit sale price sale volume & ii) by reducing costs. (Khan & Jain, 1999:7)

Cost accounting measures cost in accordance with the plans & needs of business management. Costs must be based on relevant facts competently observed & significantly measured to enable management to make valid decision. Cost accounting is a means to an end not an end in itself. (Matz/Usry, 1972:41)

In a planning phase, cost accounting deals with the future. It helps management to budget the future of predetermined materials costs, wages & salaries & other costs of manufacturing & marketing products. These costs might be used to set price of to assist in disclosing the profit that will result with the existence of these cost & expenses, considering competition & other economic condition. Cost information is also provide to assist management with problems such as product pricing, capital expenditure decision expansion of facilities for increased sales or production make or buy decisions or purchases or Pease decision. (Matz? curry, 1972:9)

In the control phase, cost accounting deals with the present comparing current results with predator mined standards & budgets. Cost control to be effective depends up on proper cost planning for each activity function & condition via the cost accounting medial managements is informed frequently of those operating function that fail to contribute their share to the total profit or that perform inefficiently these by leading to profit erosion. Periodically generally at the end of the fiscal period, cost accounting deals with past costs for the purpose of profit determination & there by with the allocation of historical costs to periods at time. (Matd/ curry, 1972:9)

Broadly speaking the function of cost accounting can be grouped under the following there heads.

- a) Ascertainment & analysis of cost & income by production function & responsibility.
- b) Accumulation & utilization of cost data for control purpose o have the minimum possible cost consistent either maintenance of quality. This objective is achieved through fixation of targets of targets as containment of actual comparison of actual with targets analysis of reasons of deviation between actual forgets & reporting deviation to the management for taking corrective action.
- c) Providing useful data to the management for taking decisions. (Mitz/ usry, 1977:18)

2.2 Cost Accounting in Management

Costing a branch of accounting has developed because of limitations of financial accounts. These limitations will be apparent from the advantages of costing. Costing has been defined as classifying recording & appropriate allocation of expenditure for the determination of the costs of product or service & for the presentation of suitably ascertained data for purposes of control & guidance of the management. It includes the ascertainment of the cost of every order. Job contract process services or such unit of output as may be appropriate. It with the cost of production, selling & distribution. Costing means such an analysis of information to enable management. To know the cost & producing & selling that is the total cost of various products & services & also to know the total cost is continued. (Shukla 1990:1191)

Now a days the function of accounting is the same as that of the nervous system in a human being just as never convey news of happenings to the mind it is the duty of the account division to collect all information analysis it in to what is ordinary & what is extra-ordinary & draw the attention of management to everything that was not in the ordinary course or was not expected. Also, management need detailed but significant data & information about the various alternative course of action so that decision made is correct future planned action is a necessity & significant information must be collected for the formulation of plans. If accounting assumes the function of providing information for all such needs of management it becomes management accounting. (Shukla 1990:1191)

Cost accounting is an integral parts of the management process. It is regarded as a tool of management it provides the management with detailed record of the relating to products or operations or activities cost accounting refers to the process of determine the cost of product or activity. (munankarmi, 2003:2)

Management accounting uses all techniques of financial accounting, cost accounting & statistics to collect & process data for making it available to management so that it can take decision in a scientific manner. (Shukla, 1990:1352)

Management accounting plays a vital role in research planning, decision making & controlling in the field of study of what has happened in the concern itself also. (Shukla, 1990:1352)

2.3 Evolution of Cost Accounting

After having discussion some conceptual aspect of costing it may be desirable to trace very briefly the historical background or the evolution of cost accounting.

Although financial accounting had its beginning early in the modern civilization & development along with trade & industry cost accounting beginning may be traced to Robert Loders farm accounts for 1610-20. Efforts were made by many industrial in Great Britain in the United States to install factory cost system as early as in 1805. Such efforts were however sporadic.

Lawrence & Hampherys say, some good starting point was 1875 with the writings of John Walker a practical foundry man, when he published in liver pool, prime cost keeping for engineers, iron founder, Boiler & Bridge market etc, practically explained, with the method of arriving at all the general averages required. Although walkers book was entitled prime cost keeping. He started with the basic data of costing & showed how they should be recorded. He explained how average costs of material & labor over fined period of such average being quarter of the year. The averages of each quarter were used for costing in the subsequent quarter & the total prime costs for each article produced were there by assessed this shows two content to wait twelve months to how what he was raining. Secondly, it contained the germ of what he was raining. Secondly it contained the germ of what the profession developed at a later stage standard cost.

Serious studying in accounting stared in 1890's with the writings of Meacalfe, Gerckle & Folls. Notron, Lewins & later with church, Nicholson & Clark. They were truly the pioneer who introduced new cost concepts like fined & variable costs. Standard cost, cost centers, relevant costs etc. In the period was also slow. This was due to two main reasons. Firstly, cost accounting tried to adapt itself within the framework of financial accounting. Secondly, there was a tendency among the accountants not to disclose the cost accounting methods they had developed within their own trim. The First

World War brought in cost-plus contract in the field of cost accounting. In order to avoid delays in estimating for urgent contracts were being placed for work on the basis that they would reimburse the cost plus a percentage to cover the administration & other overhead expenses incurred by the contractor. The demand for people sufficiently qualified to price such contracts virtually caused a great influx to the embryonic profession of cost accounting. In 1919 the Institute of Cost & Works Accounts, presently known as the Institute of Cost & Management Accounts, now known as the National Association of Accountants, was established in New York. Although these two institutions in two countries differ entirely in their constitution but each one of them, in its own way, has contributed in very large measure to the progress of cost accounting profession.

The concentrated advancement of cost accounting during this period was influenced by the growth of scientific management & a shift of emphasis from cost ascertainment to cost control. In the 1920's the standard costs were developed in England & the leading cost accountants in Great Britain recognized this as a solid & progressive addition to their costing techniques. Budgetary control also followed. Cost accounting was integrated with the general accounts & standard costs being initiated to measure performance. In 1936, the National Association of Cost Accountants published a bulletin written by Jonathan N. Harr which gave the gist of direct costing (known as marginal costing in U.K.) but it is not true that direct costing was never used before. In fact, as early as in 1908 a few firms had been found to have used direct costing. But the first published version of the system was available in 1936 through the National Association of Cost Accountants. After the publication of Harring's article numerous articles appeared on the subject. At first the disagreement was many. But in the 1950's & 1960's many of those disagreements have been resolved.

Thus, the gradual evolution of cost accounting up to mid 1950's can be traced to the following stages.

Stage -I: Cost accounting was developed for cost ascertainment (including inventory valuation) & profit measurement. This was done in at the early stage of development. Accordingly, the need for separate classification & treatment of fixed & variable costs was not even appreciated or developed. (Benerje, 1988: 12)

Sage - II: The emphasis was on cost control. The development of flexible budgets & standard costing techniques forced recognition of the essential difference between fixed & Variable costs.

Stage- III: Cost analysis stage. The essential difference in the two types of costs (variables & fixed) can be utilized to provide better cost information not only for management policy determination but for all purpose for which costs data are used. (Edwards)

The current controversy rests on only one issue of direct costing for management use in decision making has long been accepted. It is the question of using direct costing for external reporting that continues to raise controversy both in academic & professional circles. (Horngren & Sorter)

A study of the development of cost accounting shows that the United States of America occupied a very predominant position in this respect followed by Great Britain .In the words of two English authors the Americans are much more inclined to put in to writing the result of their labors. Than we are & for every one book of other publication on costing in this country these must be twenty or thirty or more in the United States. (Lawrence & Humphreys)

2.4. Evolution of Accounting in Nepal

The history of account keeping in Nepal by government is very old. Mandev 1st king of Nepal in Lichhavi period had circulated first coin called "Manaka Coin" during the period 464-491 A.D. Similarly King Mahendra Malla had circulated the coin named "Mahndra Mally" in malla period of Nepal. This seems to be the main step to record the national transaction in a proper way and manner. It is said that a few number of financial transaction used to be performed in Lichhavi & Malla period. It proves these were certain form of cost accounting to record transactions. (Auditor general's office, 1962:1)

Written records of accounting have been traced back after 18th centuries in Nepal. After the unification of the nation in 1768 (1825 B.S.) by the great king Prithivi Narayan

Shah, the chief of the district level soldiers used to keep the accounts of the government office. (Giri, 1994:155)

In 1814 a book called, "Laldhadda" was created for recording things about land management (Kitab Byabastha) another book called "Mothdhadda" was used. These two records were important step in the history of accounting in Nepal. Again, after a long gap in 1868 (1925 B.S.) an office called "Kitab Khana" was established for recording the salaries paid to government personnel which is still in use. In the process of development of accounting in 1879 (B.S. 1936) Kharidar Bunawanta a senior official that time propounded "Syaha Srestha Pranali" which was an advanced form of accounting & used up to 1965-66 fiscal year. A "Faram Srestha Pranali" was introduced in 1911 (1968 B.S.) especially to use in Tarai region. (Thapa, 1994:71)

After the overthrow of Rana Regime, the first budget system was started in Nepal in 1951 (21st Magh 2008 B.S.). The auditor general's office was established in 1959. Before it, there was a Kumari Chowk, office to do the audit job in 1960 (2017 B.S.) the "Bhuktani Sresta Pranali" was adapted which was little bit based on the double entry book-keeping system. In 1960 (20th Magh 2017 B.S.) account committee was formed to study & analyze the problem of accounting in Nepal. After detailed study of 288 days the committee made report to introduce a new accounting system. His Majesty the king Mahendra recognized it in 1961 (on 2nd Chaitra 2018 B.S.) it became a new accounting system of H.M.G. of Nepal. But it was put in to practice only from the fiscal year 1962/63 for the budget appropriation & from 1974/75 for the revenue it is used.

Currently financial accounting based on double entry book keeping followed recording transaction in government ministries, department, & offices, government accounting is followed. It is also based on double entry book keeping system. (Thapa, 1994: 71).

Besides, controlled accounting seemed to be used through the implementation of budgetary system since 2008 in Nepal. Budgeting practice is nothing but implementation of accounting technique to plan revenue & control expenditure. Since 2008 faint practice of accounting seemed in Nepal.

2.5 Concept of Cost

According to W. M. Haorper "A cost is the value of economic resources used as a result of producing or doing the thing coasted."

The Committee on Cost Concept and Standard of the American Accounting Association wrote:" cost is foregoing, measured in monetary terms incurred or potentially to be incurred to achieve a specific objective".

For gone to achieve a specific objective, such a acquiring a goods or service. However the term must be defined more precisely before 'the cost' can be determined. You will find that the word cost is rarely used without a preceding, adjective to specify the type of cost being considered.(Drury, 2000)

Institute of cost and works accountants of England ' cost is the amount of expenditure (actual or notional) incurred on or attributable to given things.

Cost may be defined as the sacrifice of living up of resources for a particular purpose. Cost is frequently measured by monetary units that must be paid for goods & services. Cost are initially recorded in elementary from than those costs are grouped in different ways to help managers make decisions such as evaluating subordinates & sub units of the organization expending or deleting equipments to aid decisions managers want the cost of something. This something is called a cost objective or cost object which may be define as any activity for which a separate measurement of cost is desired. (Horngeren, 1991:64)

Accountants, Economists, engineers & other facing cost problems have development cost concepts & cost terminologies according to their needs. Basically, a concept should be stated in the terms in which it has become generally familiar. It is not easy to define or explain the term "cost leaving no doubt concerning its meaning the committee on cost concept & standards of the American Accounting Association wrote: "Cost is a foregoing, measured in monetary terms, incurred or potentially to be incurred to achieve specific objective." In tentative set of board accounting price, a forgoing, a

sacrifice made to secure benefit. In financial accounting, the foregoing or sacrifice at date of acquisition is represented by a current or future diminution in cash or other assets." (Mats usry. 1977:42)

When the term "cost is used specifically it should be modified with reference to the object costed by such description on direct, prime, conversion, indirect, fixed, variable, controllable, product, period, joint, estimated, standard, future, replacement, opportunity, impute, sunk, differential & out of packed each modification implies a certain attribute which is service the management levels in achieving the basic objectives of planning & control. (Matz usry. 1977:42)

2.5 .i. Cost Centre

Cost center may be department, a division, a branch, a unit, a product, a segment or a person that is authorized and responsible for an expense. A cost center is that segment of responsibility accounting, which records only the cost incurred in the unit or division. In cost center inputs, but no outputs, are measured in monetary terms. The manager of a cost center is responsible for the controllable incurred in the sub unit but is not responsible, in a financial sense for profit or investment in the center. Cost center has significant role in cost and management accounting because the center supplies the data relating to the divisions.

Cost centre is used to describe a responsibility centre in a functional organization structure where a manager is responsible for costs but not profits. (Drury 2000:794)

Cost center is a location, person or equipment in respect of which costs may be ascertained & related to cost units for control purpose. Broadly speaking, a cost centre may be of two types:

Personal cost centre which consists of a person or group of persons; impersonal cost centre which consist of a location or item of equipment from the standpoint of functions, a cost centre may be of two types: production cost centre, i.e., a cost centre on which production is carried on this may embrace one specific operation, e.g. Machining, of a continuous process, e.g. distillation is service cost centre, i.e. a cost centre which renders

services to the production cost centers. When the output of an organization is a service, rather than goods, it is usual to use same alternative term such as support cost centre or utility cost centre for supporting services. (ICMA Terminology, 1984:20)

If machine &/or persons carrying out similar operations are brought together, a cost is known as cooperation cost centre, Again, when machines persons are grouped according to a specific process or a continuous sequence of operations, a cost centre is termed as process or a continuous sequence of operations, a cost centre is termed as process cost centre.

Decision of production, administration, selling and distribution and other functions into cost centers is necessary for two purposes: (i) cost ascertainment and (ii) cost control. Costs are ascertained by cost centers or cost units or by both. Cost control is facilitated by pinpointing responsibility through cost centers. In other words different persons are allotted different cost centers and a person is held responsible for the control of cost of the cost centre or centre running under him only. It is in this sense that cost centers are also tested as responsibility centers: (Banerjee, 1988:27)

2.5. ii Profit Centre

When a manager cannot control the investment and is responsible only for the profits abstained from operating the fixed assets assigned to him or her by corporate headquarters, the segment is referred to as a profit centre. (Drury 2000:794)

Profit is the different between revenues and costs therefore, a profit centre represents segment of a business that is responsible for both revenue and costs this may also be called a business centre, business unit, or strategic business unit. (ICMA terminology, 1984:19)

A profit centre is that segment or activity of a business, which is responsible for both revenue and expenses and discloses the profit of a particular segment of activity. Profit centers are created to delegate responsibility to individuals and measure their performance. (Jain and Narang, 1990:144)

2.5. iii Cost Object & Cost Unit

A cost object is any activity for which a separate measurement of cost is desired. In other words, if the users of accounting information want to know the cost of something, this something is called a cost object. Example of costs objects include the cost of a product, the cost of rendering a service to a bank customer or hospital patient, the cost of operating a particular department or sales territory, or indeed anything for which one wants to measure the costs of resources used. (Drury, 2000)

A unit cost (also called an average cost) is computed by dividing some total cost by same number of units. Unit costs are found in all areas of the value chain. For example, there are unit costs for product design, sales cost, and customer Service cost. (Horngren, faster and Dater, 1997:32)

Cost unit is a quantitative unit of product or service in relation to which costs are ascertained for ascertainment of costs, it is necessary to express them in terms of physical measurement like number, weight, volume, area, length or any other convenient units. When single type unit does be used for the purpose of cost measurements. As for instance, in transport costing, ton-miles of passenger-miles are better measures than only tons or passengers as the latter do not take in to account distance carried or distance travelled. (Benerjee, 1988:27)

2.6 Methods of Costing

Cost may be ascertained by different methods. But the general principles are the same in every method, only methods of collecting and presenting the cost date will vary. The method to be used in collating and presenting cost data will vary. The method to be used in collecting and presenting costs will depend upon the type of output and nature of production.

2.6. i Job Order Costing Method

Job-order accounting is used in plants where production is best controlled by making the goods in batches, for example, a printing shop, a job or custom machine shop, or the like, or certain plants where a set number of lie units ore worked up on a group.

Under a job-order system of cost accounting, production is authorized by a job order, which states the product to be made, the number of units to be produced the material to be used, and the departments that are to do the work. The job-order form usually has space upon it to show at least the total cost of the material used on the job, the hours and dollars of direct labor spend there on and the portion of the indirect costs applicable to the particular job. (Lawrence, 1955:15)

Where a production process is on the basis of individual job order or if, the products are produced on batches, some type of job order system can be used. A job order cost system has following character laces

- 1) Each job is assigned a number or some other distinguishing symbol and separate accounting document is set-up for each job.
- 2) All direct material and direct labor put into process are assigned to a specific job and recorded on the job order card.
- 3) Overhead costs are allocated to each job, usually on the bases of the relative amount of direct labor.
- 4) The work in process inventory value is the sum of the costs on the job order cards for the incomplete jobs. (Bhattacharya/Deardpn, 1985:524)

2.6. ii Contract Costing

Contract costing is a system of job costing that is applied to relatively large costs units, which normally take a considerable length of time to complete. Building and construction work, civil engineering and shipbuilding are some examples of industries where large contract work is undertaken and where contract costing is appropriate. (Drury; 2000:112)

Contract costing is a form of job costing. Contract costs represent cost of carious operations which include the process of erecting or otherwise providing structures such as buildings, dams roadways etc. Contract costing is also known terminal costing.

The chief features of contract costing are:

- 1) Work is generally carried out at a site other than the contractor is own premises.

- 2) Many contracts required several years for completion in other words, they cover in many cases, more than one accounting period.
- 3) Most of the items of cost are directly chargeable to individual contracts. It, therefore, obviates the possibility of under or over absorption of many items of cost.
- 4) More after than not, each contract is dissimilar to the other. That is output from on job quit different from the output from another job. (Benerjee, 1988:362)

2.6. iii Unit or Single Output Costing Method

Unit costing is a method of costing used in those industries which are engaged in manufacturing exclusively one homogeneous production or a few grades of the same product. It is also referred to as single output costing. The examples of industries in which this type of costing is applicable are cement, paper, sugar, steel, quarries, brick works, for breweries etc. The unit cost is the average cost that is the total cost vided by the number of units produced. The cost units may be expressed in forms of number, weight, volume and time etc. (Khan and Jain, 1999:300)

This is used when manufacture is continuous and the units are identical or may be made so be made so by meaner of rations. The total production cost is divided by the number of units produced to get unit or single output cost. This method is generally used in steel works, breweries, brick fields, mine and collieries, flour mills, paper mills etc. (Benarjee, 1988:101)

2.6. iv Process Costing Methods

Process costing is costing system in which the cost of a product or service is obtained by assigning costs to masses of like or similar units. Units costs are then computed on an average basis process costing system are user in industries that cost like or similar units or products, pro which are often mass produced. In these industries, relatively homogeneous products are processed in a very similar manner and are hence assumed to receive the same amount of direct material, direct manufacturing labor cost and manufacturing overhead cost. Industries using process costing in their manufacturing area include chemical processing oil refining, pharmaceuticals, plastics, brick and tile

manufacturing, semiconductor chips, beverages and breakfast cereals. (Horgren, faster and Dater, 1997:612)

2.6. V Multiple Costing Methods

It represents the application of more than one method of costing in respect of the same product. This is suitable for industries where a number of component parts are separately produced and subsequently assembled into a final product, in such industries each component differs from others as to price, material used and process of manufacture undergone. So it will be necessary to ascertain the cost of each component. For this purpose, process costing may be applied. To ascertain the cost of the final product batch costing may be applied. This method is used in factories manufacturing cycles, automobiles, engines, radios, typewriters airplanes and other complex products. (Jain and Narang, 1993:1022)

2.6 vi Batch/Operating Costing

It is not always possible to classify cost accumulation systems into job costing and process costing systems. Where manufactured goods have some common characteristics and also some individual characteristics. The cost accumulation system may be a combination of both the job costing and process costing system may be a combination of both the job costing and process costing systems, for example, the production of footwear clothing and furniture often involves the production of batches, which are variations of a single design and require a sequence of standardized operations. Let us consider a company that makes kitchen units. Each unit may have the same basis frame and require the same operating, but the remaining operations may be different types of doors be fitted to each unit some may be low quality doors while others may be of a higher quality. The cost of a kitchen unit will therefore consist of the basis frame plus the conversion costs of the appropriate operations. (Drury, 2000:150)

The cost of each product consists of the cost of operation plus a combination of the conversion cost for operations, plus the specific cost of the final unique operation. The cost of the product using job costing system. The final product cost therefore consists

of a combination of process costing is referred to as operating costing or batch costing. (Drury, 2000:151).

2.6. VII Service Costing Methods

The terminology replaces operating costing by service function costing and defines it as:

The costing of specific services or functions, e.g. canteens maintenance, personnel. These may be referred to as service centers, departments or functions.

Service or operating costs are therefore the cost of providing and operating a service. Service or function costing is usually applied to transport service, utility services like hospitals, canteens etc. and distribution services like supply or electricity, gas and the like. In short, it is adopted generally by industries rendering services instead of producing goods. Again, such services may be internally used, such as, in a manufacturing unit certain section may provide ancillary services to production department, e.g. canteen, boiler house, etc. or, services may be rendered to the public as is done by state transport corporation, hospitals, electricity/gas companies, etc. In both the cases, service costs required to be ascertained. The method of classification, collection and allocation of service costs to cost units are different from those adopted in manufacturing industries. (Banerjee, 1988:462)

2.6. vii Departmental Cost

After the elements of cost have been classified as direct and indirect costs, the indirect costs can be further reclassified into departmental costs. Manufacturing establishments as indeed any business enterprise can readily be visualized as consisting of a number of separate operating departments each of which has certain characteristics that set it apart from other departments. The indirect costs are incurred in connection with the operation of these departments. It follows that the indirect costs can be classified according to the department for which they are incurred. When this has been done, the result when combined with departmental direct labor is the cost of operating each department. The principle of departmental costs is one of the distinctive features of cost

accounting and markup possible the allocation of indirect costs to the different products that are manufactured. (Lawrence, 1955:4)

2.6. ix Operation Costing

Operation costing is a hybrid costing system applied to batches of similar products. Each batch of products is attend a variation of a single design and proceeds through a sequence of selected activities or operations. Within each operation all products unite are traded exactly alike, using identical amount of the operations resources. Batches are also termed production rune. (Horngren, foster and Dator, 1997:719)

Consider a business that makes suite, management may select a single basic design for every suit that the company manufactures. Depending on specifications, batches of suits vary from each other. One batch may use wool, batch cotton. One batch may require special hand stitching another batch, machine stitching. Other products that are often manufactured in batches are semi conducting entices and shoes. (Horngren, Foster and Datar, 1997:719)

2.6. x Form Costing

The main work of a farm is carried out in one or more fields. Natural agents like the earth, water, air and the sun do also a considerable portion of the farms work for which no or little machine or human labor is required. All these necessitate the application of a costing method different from that applied in the case of industry.

However, there is no denying the fact that the field takes the place of the factory and the term cost of production also applies to the cost of produce brought out of the field for the purpose of consumption or sale. (Banerjee, 1988:10)

2.7 Types of Costing

In each of the costing method various techniques may be used in ascertaining costs. These techniques may be grouped may be grouped according to their approaches as follows.

2.7. I Standard Costing

Standard cost is a predetermine cost which is calculated cost which is calculated from managements standards of efficient operation and the relevant necessary expenditure. It may be used as basis for price fixing and for cost control through variance analysis. (ICMA) standard is a predetermine set of objects based on usual, normal, ideal or technical parameters. A standard is always futuristic.

Standard costing is the process of the preparation and the use of standard cost their comparison with actual costs and the analysis of variance to their causes and points of incidence. (ICMA)

A standard cost is a measure of acceptable performance, established by management as a guide to certain economic decisions. It is in short a reflection of what management thinks a cost ought to be. (Lynch, 1993)

Standard costing method that tracks direct costs to a cost object by multiplying the standard price is rate times the standard inputs allowed for actual output achieved and allocates indirect costs on the basis of the standard indirect rates times the standard inputs allowed for the actual output achieved. (Horgrem, Foster and Dater; 1997:269)

2.7. ii Variable Costing

Variable costing is a method of inventory costing in which all variable manufacturing costs are included as inventor able costs. All fixed manufacturing costs are included as inventor able costs. All fixed manufacturing costs are excluded from inventories costs. They are costs of the period in which they are incurred also called direct costing. (Horgren, Foster Dater, 298)

A method of product costing that charges only the variable costs of manufacturing to the product is known as variable costing. It is also known as direct costing and marginal costing. It is merely a technique. It cannot be adopted as a system. The fined costs are treated as period costs which will be incurred during the period regard less of the volume of output.

Those costs which increase directly and proportionately with the level of activity are called variable costs. A variable cost is one that varies in total amount directly with production or sales units; the variable cost per unit will remain constant, if other things remaining the same. (Dangol, 2058:12-13)

2.7. iii Uniform Costing

It is neither a separate method of cost accounting like specific order costing and operating costing nor a separate technique of costing like marginal costing, standard costing but is only a particular system of costing which takes the help of both methods' and techniques of costing. The most important characteristics of a uniform costing is that whatever may be the method of ascertaining cost, it is adopted uniformly in a number of undertakings in the same industry or even in different industries. This enables the member undertakings to compile the cost and accounting data on a comparable basis, which ultimately may be so useful to the management for taking crucial, decisions. (Jain and Narang, 1993:318)

2.7. iv Marginal Costing

According to CIMA Terminology marginal costing is the ascertainment of marginal costs of the effect on profit of changes in volume or types of output by differentiating between fixed costs and variable costs. In this technique of costing only variable costs are charged to operations, processes or products, leaving all indirect costs to be written off against profit in the period in which they arise. (Jain and Narang, 1993:A-31)

2.7. v Historical Costing

It is ascertainment of costs after they have been incurred. It aims at ascertaining costs actually incurred on work done on the part. It has a limited utility, though comparison of costs over different periods may yield good results.

It is measured by actual cash payment or their equivalent at the time of outlay for acquiring assets, of goods and services. (Banerjee:1988:2)

2.7. vi Direct Costing

The terms direct costing and marginal costing are also frequently used. This is unfortunate, since neither direct costs nor marginal costs are quite the same as variable costs. Direct costs are those that can be specifically identified with a product; they include direct labor & material but in many situations direct labors may not vary in the short term with changes in output. So to use the term direct costing when it specifically includes a non variable item (that is, direct labor) is not at all appropriate. (Drury, 2000:201)

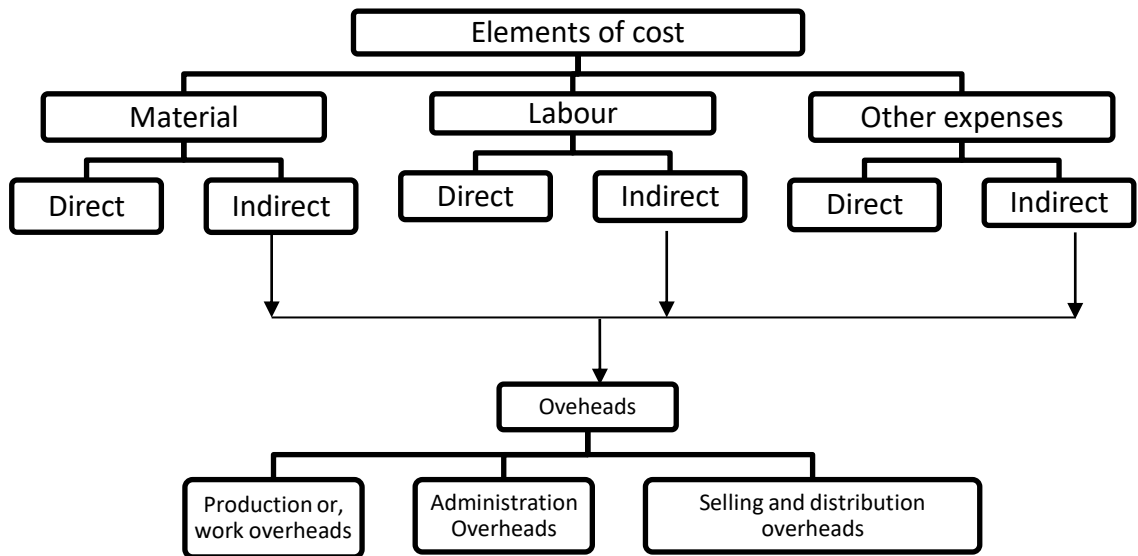
2.7. vii Full or Absorption Costing

A method of product costing for purpose of external reporting is known as absorption costing: under this technique product cost include both direct and indirect cost of production. Fixed overhead costs are absorbed by the product and are part of cost of goods sold and ending inventories. The basic differences between absorption costing and variable costing are as follows:

- 1) Absorption costing is the total cost technique, under which product cost include both fixed and variable costs. Whereas under variable costing, only variable cost are treated as product cost.
- 2) Absorption costing values the stock of finished goods and work in progress at total cost which includes both fixed and variable. But variable costing always values at marginal cost. As a result, valuation of stock under absorption costing is always higher than variable costing.
- 3) Marginal costing excludes fixed costs and the question of under or over absorption of fixed cost does not arise. On the other hand absorption costing includes fixed cost and over or under absorption of fixed costs arises under absorption costing.
- 4) The management decision making is based on net income under absorption costing. But it is the contribution, which plays vital role for the management decision under variable costing. (Dangol, 2054:52)

2.8 Elements of Cost

Mere knowledge of total cost cannot satisfy the needs of management for proper control and managerial decision, management is to provided with necessary data to analysis and classify costs for this purpose, the total costs is analyzed by elements of cost i.e. by the nature of expenses. These elements of cost are further analyzed in to different elements as illustrated in the following chart.



By grouping the above elements of cost the following decision of cost are obtained.

1. Work or factory cost = Prime cost + works and factory overhead.
2. Cost of production + work cost + Administration overhead.
3. Total cost or cost of sales + cost of production + selling and distribution overheads.

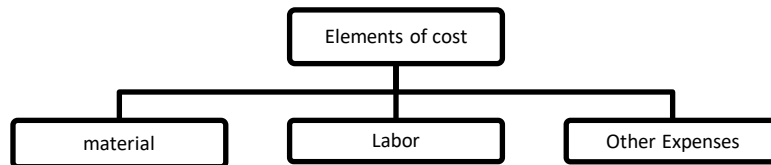
The difference between the cost of sales and selling price presents profit or loss.
(Jain and Narang, 1995;1.23)

2.9 Classification of Cost

- 1) According to nature or elements of cost.
- 2) According to function.
- 3) According to variability or behavior.
- 4) According to control.
- 5) According to managerial decision. (Munankarmi, 2001:27)

2.9.1 According to Nature or Elements of Costs

According to this classification, the cost are divided into three categorized i.e. material, labor and expenses. There can be further sub classification of each element for Exp. Material into raw material components, spare parts, consumable stores, packing material etc. This classification is important as it helps to find out the total cost. How such total is constituted and valuation of work-in-progress.



2.9.i. a Materials Costs

The materials includes both direct and indirect materials. Direct and Indirect material are both treated as store items. Whereas stock of finished goods is not treated as a store item. Direct and Indirect materials purchased for stock purpose to be issued to different jobs, work order or departments as and when required are known as stores. Materials which form part of a finished product are known as direct materials. In other words direct material can be conveniently and accurately allocated to a particular unit of cost example, leather use in the making of shoes and yarn. Required for a meter of cloth are direct materials indirect materials, on the other hand, cannot be conveniently and accurately allocated to a particular unit of product. Examples of such materials can be nails used in the making of shoes, cotton waste and lubrication oil required for the

maintenance of machines, bottoms and threads used in a suit etc. (Jain and narang; 1995:2.2)

2.9.i.b Labour Costs

Materials alone will not make the production complete. Manpower is needed to produce the finished goods. Labor cost, representing the human contribution to production, is an important cost factor requiring constant measurement, control and analysis. Labor cost include all expenditures for employees : top executives, middle management personnel, staff officers, supervisors and skilled and unskilled employees to plan and control labor costs must be separately considered. (Wilsch/Hicton and gorden, 1992:280)

Just like materials, labor generally is classified as direct or indirect.

Direct Labour Cost

Direct labor cost consist of those salaries and wages directly applicable to the total contract on a total cost settlement proposal or directly applicable to terminated portion of the contract if an inventory basis settlement proposal is being used. Such compensation should be charged at actual rates and should bear its portion of bonuses and shift premiums that are normally considered by the contractor as direct labor. It the contractors consistent practice is to use average rates for payroll distribution to contracts, such application will normally be acceptable if the averaging procedure appears to be equitable. If for audit purpose substantiating top runs. Time tickets, clock cards, payroll sheets etc, together with the detailed supporting working papers, should be readily available to support this element of cost. (Paul, June 1970:61, Journal.)

Indirect labour

Indirect labor is that labor which is not directly engaged in the production of goods and services out which indirectly helps the direct labor engaged in production. The example of indirect labor are mechanizes, supervisions, chowkidars, sweepers, Forman, watchman, time keeper, cleaners, repairers etc. The cost of indirect labor cannot be

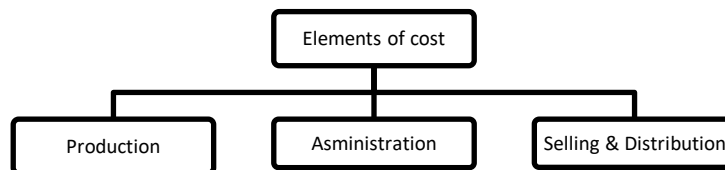
conveniently allocated to a particular job, order process or article (jain and narang, 1995:2.1.6)

2.9. i. c Other Expenses or Costs

Other items that may be considered as direct costs are starting load, preparatory training and other non curing costs. On a total cost basis submission, as started above, these costs are normally included in the total costs of the job and do not therefore present a costing problem. However, on the much used inventory type basis for submittal, such costs can easily be over looked since units completed since they may have been charged off in total to the early units completed and delivered. With this as a background when using inventory basis, the as a background when using as inventory basis, the contractor should give careful attention to isolation the fore going onetime costs and others in a similar area. After this has been accomplished, they should be propated to the for completed and terminated portion of the contract. In this instance also the total units under the contract can be used as in acceptable basis for allocation.

2.9. ii According to Function

According to this classification, the costs are divided in the light of the different as pacts of basis managerial activities involved in the operation of a business undertaking. It leads to grouping of cost according to the board divisions or function of a business undertaking i.e. production administration, selling and distribution.



2.9. ii.a Production

This is the cost of the sequence of operations which begins with supplying materials. Labors and services and ends with primary packing of the product. Therefore, production cost represents prime cost plus absorbed production overhead. White prime

cost means the total cost of direct materials, direct labor and direct expenses, absorbed production overhead refers to the production overhead which, by means of absorption rates, is included in cost of specific products or saleable services, in a given period of time. (Banerjee, 1980:23)

2.9. ii.b Administration Cost

It refers to the cost of management and of secretarial, accounting and administrative services, which cannot be directly related to production, marketing, and research or development function of the enterprise. On short, administration expenses are in the nature of indirect expenses and include the following:-

- Salaries of office staff, accountants, directors.
- Rent, rates and depreciation of office building
- Postage, stationery, telephone
- Office supplies and expenses.
- General administration expenses (Banerjee, 1988:23)

Administration cost includes expenses incurred in the direction control and administration of the company same of these items, such as executive salaries, are often allocated to production and selling and included in factory and selling cost. (maz/curry, 1972:44)

2.9.ii.c Selling Cost & Distribution Cost

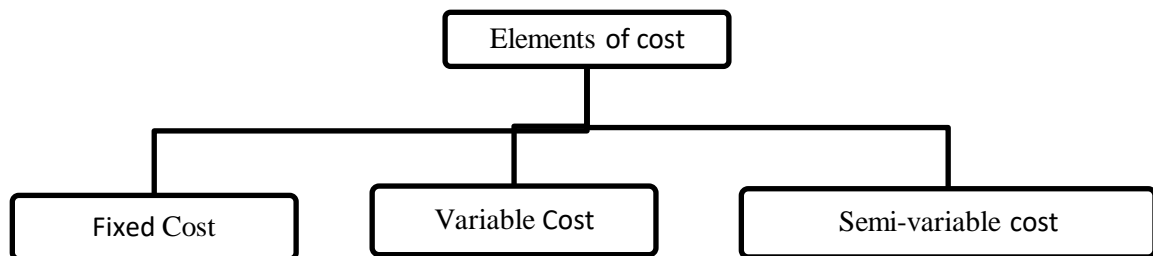
It refers to the cost incurred in securing orders, usually including salesman's salaries, commissions and travelling expenses. Other examples are rent of sales rooms and offices, training of sales man and sales staff, cost of preparing tenders for special sales. cost of after- sales service. (Banerjee 1988:23)

Distribution costs are those cost which are included to perform the marketing functions. Distribution costs are also called marketing cost or selling cost. Two major categories to distribution cost are: order-getting cost and order-filling cost. Order-getting cost is incurred to affect sales of production. Cost spends on publicity and advertising, salesmen's salaries and commission, sales executives, salaries and soon is examples of

order getting cost. Cost incurred on delivering products and other related activities are called order felling cost. These costs, also known as logistic cost, include transporting cost, billing cost, record-keeping cost and so. (Lawrence, 1995:364)

2.9.iii According to Variable

According to variability cost can be classified into fined cost, variable cost and semi-variable cost.



2.9.iii.a Fixed Cost

Fixed costs are costs associated with those inputs which don't vary with changes in volume of output or activity within a specified range of activity or output relevant ranges. Fixed cost thus remains constant whether activity increases or decreases within a relevant range. Like other cost, fixed cost is subject to change over a period of time. As fixed costs are unaffected by volume changes any increase in volume implies that the costs will be allocated to greater number of units consequently fixed cost per unit will become progressively smaller as volume increases and vice versa. (Kaplan and atkinson , 1998:13)

A cost which does not change in total over the life of the model but become progressively smaller on a per unit base as production increase. Fixed costs are those that will not change in total over wide range of volume. Examples include property taxes, insurance, executive salaries rent, and depreciation.

2.9. iii. b Variable Costs

Variable costs are the cost that tends to vary in direct proportion or in one to one relation ship to changes in production activity. Sales activity or some other reassures of

volume or cost driver. The cost of these inputs increase/decrease in proportion to increase/decrease in volume or cost driver. (Horngreen, foster and dastar, 1999:29)

2.9. iii. c Semi Variable Cost/Mixed Cost

All cost which are neither perfectly variable nor absolutely fixed in relation to volume changes are semi variable cost. Semi-variable cost is also known as mixed cost as they consist both of fixed cost and variable cost: the fixed component of mixed cost consist the cost of providing capacity, where as variable components is caused by using the capacity. The first part won't be affected by the changes in the volume activity. But the later part will be affected by the changes in the activity. Ideally, semi-variable costs should be bifurcated into fixed and variable cost as the functions of profit planning, cost control and decision, making assume that cost are either variable or fixed. (Khan and Jain, 1993;151-152)

2.9. IV According to Control

According to control cost can be divided into controllable and uncontrollable cost.

Controllable costs are those, which may be directly regulated at a given level of managerial authority. Put another way, controllable costs are those that are directly influenced by a manager with in given time of period. Too often, people assumed that variable costs are controllable and fixed costs are uncontrollable, such thinking may lead to erroneous conclusions. For example rent is uncontrollable by the assembly foreman, but it may be controllable by the executive vice president, who may be assigned the responsibility of choosing plant facility and of deciding whether to own or rent. Moreover, managers frequently have the option of trading off variable for fixed costs example, by purchasing laborsaving devices.

2.9 V According to Managerial Decision

On the basis, costs may be classified into the following cost.

i. Relevant and irrelevant cost

Cost which is influenced by a decision is a relevant cost and hence is important for decision makers cost which is not affected by a decision is irrelevant cost. Such a cost is of no relevance to decision makers. These costs should be ignored while making decision makers. These costs should be ignored while making decisions. Committed fixed cost is irrelevant that of additional fixed cost are of relevant. Relevant cost in true sense is incremental cost. Most of the variable cost is relevant cost for decision maker. (Khan and jain, 1993:162)

ii) Differential cost (Incremental/Decremental cost)

Any cost that is present under one alternative but is absent in whole or in part under another alternative is known as differential cost. Differential cost is also known as incremental cost. Any cost which increases between the alternative are incremental cost while which decreases is detrimental cost. Both incremental and decremental cost is relevant in decision making purpose. (Garrison, 1985:43)

iii) Out of pocket cost and sunk cost

Cost which requires current or future cash expenditure as a result of a decision is labeled as an out of pocket cost. In contrast those cost which already been incurred in the past and will not require any current cash expenditure is sunk cost. Sunk cost is the result of the past commitment. They should be ignored while making decision while out of pocket cost is relevant for decision-making purpose. Mostly sunk cost deserves fixed behavior while out of pocket cost deserves the variable behavior while out of pocket cost deserves the variable behaviors. But in some situations, sometimes-sunk cost might be of variable while out of pocket cost bear to be fixed. (Decoster, 1979:10)

iv) Opportunity cost and imputed cost

An opportunity cost can be defined as the potential benefit that is cost or sacrificed when the choice of one course of action requires the going up of an alternative course of action. Opportunity cost is not usually entered on the books of organization but it is a cost that must be expertly considered in every decision that a manager makes has some opportunity cost attached to it. In short, every alternative course of action facing a manager has a mixture of good and bad features. In rejecting a course of action, the good features must be given up along with the bad. The net good features of a rejected alternative become the opportunity costs of the alternative that is selected. (Garrison, 1985:44)

v) Avoidable and unavoidable cost

Avoidable costs are those, which can be eliminated if a particular product or department, with which they are directly related, is discontinued. For example salary of the clerk's employer in a particular department can be eliminated, if the department is discontinued. Unavoidable cost is that cost which will not be eliminated with the discontinuation of a product or department, for example, salary of factory manager or factory rent cannot be eliminated even if a product is eliminated. (Jain and Narang, 1990:1.53)

Some time the terms avoidable and unavoidable cost are used instead of relevant and irrelevant cost. Avoidable costs are those costs that may be saved by not adopting a given alternative, where as unavoidable costs cannot be saved. Therefore, only avoidable costs are relevant for decision-making purposes.(Drury, 2000:30)

vi) Marginal cost

Marginal cost is the term which economists use for differential cost. In economics, when output changes (Increases or decreases) by one unit. The corresponding change (Increases or decreases) in total cost is referred to as marginal cost. The change total cost may comprise change in both fixed and variable costs, or in any of the two. When the accountant uses the term marginal cost, he uses it in the restricted sense of

variable cost only. Thus, in management accounting system, marginal costing is a technique of charging only variable costs to products while fixed costs are written off as period costs. This system of charging only marginal costs to products is an important analytical and decision-making tool. (Pandey, 1994:207)

vii) Replacement cost

Replacement cost is the amount that the firm would have to spend if it were to replace its assets on the current condition. (Pandey, 1994:209)

2.10 Cost Relating to Profit Planning

Profit planning is quite concerned with decision making; planning deals with the future, future cost are relevant cost in profit planning. The relevant cost concept is fixed cost, variable cost, mixed cost, future cost and Budgeted cost. Here future cost and Budgeted cost only present.

i. Future costs.

Future costs are relevant costs in profit planning function of management. Those costs which are reasonably expected to be incurred at some future date as a result of a current decision are called future costs. As they deal with a future period, they are estimated costs bases on expectation. Future cost is controllable within a management. Future cost can be planned for and planned to be reduced if they are too high. This is not possible with his topical cost. (Khan and Jain, 1993:158-159)

ii. Budgeted cost

When an operating plan involving future cost is accepted and incorporated formally in the budget for a specific period, such costs get converted to what may be referred to as budgeted costs. Budgeted costs are important elements in that they provide the basis for measuring the actual performance of different cost centre and therefore constitute an important input of responsibility accounting. (Khan and Jain, 1992:159)

2.11 Cost-Volume-Profit Analysis

Examines the behavior of total revenues, total costs, and operating income as changes occur in the output level, selling price, variable costs, or fixed costs; a single revenue driver and a single cost driver are used in this analysis. (Horngren, Foster and Datar, 1997:60)

Cost-volume-profit analysis is a management accounting tool to show the relationship between the ingredients of profit planning. Profit planning is the functions of the selling price of unit sold of product unit's sold. The entire gamut of profit planning is associated with CVP inter-relationships. A widely used technique to study CVP relationship is break even analysis. Break even analysis is concerned with the study of revenues and costs in relation of sales at which the firm's revenues and costs will be exactly equal. Thus the break-even-point may be defined as a point at which the firm's total revenues are exactly equal to total costs yielding zero income. The "No profit no loss" point is a breakeven point or a point at which losses cease and profits begin. (Khan and Jain 1996:494)

The breakeven point is frequently one point of interest in this analysis. Managers wish to avoid the stigma of making loss. The total costs are equal, that is, where the operating income is zero.

Using the information in the following example this section examines three methods for determining the break even point. The equations method the contribution margin method and the graph method. (Horngren, Foster Datar, 1997:62)

i. Equation Method

The first approach for computing the breakeven point is the equation method using the terminology in this chapter, the income statement can be expressed in equation form as follows.

$$\text{Revenues} - \text{variable costs} - \text{fixed cost} = \text{operating income} \quad (\text{uspxq}) - (\text{uvcxq}) - \text{fc} = \text{oI}$$

This equation provides the most general and easy to remember approach to any CVP situation.

ii. Contribution Margin Method

A second approach is the contribution margin method, which is simply an algebraic manipulation of the equation method. Contribution margin is equal to revenues minus all costs of the output (a product or service) that vary with respect to the units of output. This method uses the fact that

$$(USP \times Q) - (UVC \times Q) - FC = OI$$

$$(USP - UVC) \times Q = FC + OI$$

$$UCM \times Q = FC + OI$$

$$Q = \frac{FC + OI}{UCM}$$

At the breakeven point, operating income is, by definition, zero. Setting $OI=0$

$$\text{Breakeven Number of unit} = \frac{\text{Fixed cost}}{\text{Unit contribution Margin}}$$

$$= \frac{FC}{UCM}$$

The calculation in the equation method and the contribution margin method appear similar because one is merely a restatement of the other.

iii. Graph Method

In the graph method, we plot the total costs line and the total revenues line. Their point of intersection is the breakeven point. We need only two points to plot each line if each is assumed to be linear. Total costs line, this line is the sum of the fixed costs and the variable costs total revenues line one convenient starting point is zero revenue at the zero output level. The breakeven point where the total revenues line and the total costs

lenient erects. At this point, total revenues equal total costs. (Horgen, Foster and Dater, 1997:62-63)

2.12 A Brief Review of Previous Research

The researches in the area of cost structure of Nepalese public enterprises, only few research have been done. The many researches have been made in the other area as like profit planning and control in Nepalese content. The profit planning and other topic have not cover the cost structure.

The cost structure of any enterprises is one of the most important point to run business usually on cost structure have been neglected. The proper planning cost structure has helped ho develop the Nepalese economy.

2.12. i The findings by the some research are as follows.

Nakarmi Gopal Kumar (1997) had conducted a research in the topic "cost structure of Balaju katha karyalaya company" submitted to Tribhuvan University for the partial fulfillment of MBA. Overall objective of his report was to justify whether the cost structure of BKK is competitive in furniture maker or not, a comparative study of material cost as well as overhead expenses to total cost mode between the firm and Biswa Karma Silpakala Pvt. Ltd. In this studied Mr. Nakarmi has pointed out various finding and recommendation, some remarkable finding were as follows.

His major finding is

- The cost structure of BKK comprises of 40% of timber to total material cost. A timbers are imported form India, which is the cause of an extra cost in purchase price.
- The total material cost is an average of 57% to total cost of which timber being 40% and rest of the materials are 60%. The firm has to pay extra cost due to the irregular supply of the timber from TCN.
- The cost structure of BKK is comparatively lower than that of BKK, either due to inefficient procurement or the unsystematic issue of material by store.

- Neither FIFO nor LIFO system nor sales have been considered for material issue and physical valuation.
- The percentage of material cost to total cost is fluctuating. It shows no proper plan made to control the material cost.
- Job cost cards have been maintained but no summarization has been made to find out the total while year.
- The trend as total overhead in BKK is in increasing amount each year with the amount and production but there is wide fluctuation in its percentage.

2.12.ii Subba preeti (2002) had conducted a research entitled "cost structure analysis of Nepal public enterprises with reference to dairy development corporation" this research of miss subba was mainly centered with to the proposition of different cost elements in total cost and managerial involvement to wards cost accounting system of DDC.

The time period covered by this research was five year from fy 2052/053 to 2056/057. The data and other necessary information's were collected by using secondary as well as primery sources of data. In this research Miss Subba has pointed out various findings and recommendations. Sone remarkeble findings were as follows.

Her Major Findings

- DDC was able to acquire profit in the fy 2052/053 but from the last four year it is suffering form loss.
- Their expenses of D.D.C are in increasing trend except in fy 2056/054 where the company has been able to decrease its total expenses slightly.
- DDC has no pre-estimation of cost and probable cost.
- It has no separate costing departments.
- Material cost cover the larger part of total cost.
- Processing expenses comprise the cost part and the collection expenses comprise the smallest part of the total overhead cost of D.D.C
- Material and overhead costs of DDC are in increasing trend and have increased to 24% and 30% respectively from fy 2052/053 where as the labor cost of DDC has increased by more than 50% in the recent year.

- Both fixed and variable cost of DDC is in increasing trend.
- Variable cost of DDC comprises the greater part of the total cost.
- Collection expenses cover the largest part of the total variable cost.
- Production and administration costs have increased in the post five years and it seems that the company has no plan to control these costs. Selling and distribution cost has decreased in the post five years.
- Production cost occupies the most part of the total costs of DDC.
- DDC has no separate production cost department and it has no pre estimation of the cost as most of the components of production cost are in fluctuating trend.
- The company has neither analyzed the Break even point properly nor has taken seriously taken any measure to reduce the BEP volume. BEP in the past five years is always higher. The company has not been able to cross its BEP point, where variable cost ratio is 91.07% and PV ratio is 8.93%.

2.12.iii Aryal Sudeep Kumar (2008) has conducted a research entitled "The cost analysis of Nepal Food Corporation (NFC). The research has mainly centered with the proposition of different cost elements in total cost.

The time period covered by this research was five year from Fy 2058/059 to 2062/063. The data and other necessary information's were collected by using secondary as well as primary sources of data. Research has pointed out various findings and recommendations. Some remarkable findings were as follows:

- 1) NFC has suffered from loss in first, second, third and fifth year. Fourth year is the only profit year.
- 2) NFC has not adopted the accounting system for scientific classification of costs.
- 3) It has not practical break even analysis.
- 4) Material cost covers 43.25% of total cost in average.
- 5) Labor cost which is the wages paid to direct labors covers a least proportion which is always less than 0.1%.
- 6) Overhead cost has the greatest proportion of 56.69% in average.

- 7) Material cost to sales has average ratio of 0.685 labour to sales has average ratio of 0.893.
- 8) The greatest fluctuation is found in material to sales ratio with a CV of 16.055 and less fluctuation on overhead to sales ratio with a CV of 9.22%.
- 9) Correlation coefficient of material and labor insignificant when evaluating through P.E.
- 10) Multiple correlation coefficients of elements wise cost show a high positive relation between dependent variable and independent variable.
- 11) Procurement cost, element wise cost and selling and distribution cost cover 42.34% 24% and 33.6% respectively in an average.
- 12) There is highest dispersion on procurement cost to sales ratio with a mean of 0.672 and a highest CV or 28.02% showing the least consistency of this ratio.
- 13) Administration cost and selling distribution cost to sales ratios have mean of 0.365 and 0.517 respectively.
- 14) Simple correlation coefficient of function wise cost shows low positive relation among them but test of significance through P.E. shows that the value of r is insignificant in each case.
- 15) Both fixed covers 78% of total cost in average and fixed covers only 22% in average.
- 16) Variable cost covers 78% of total cost in average and fixed cpst covers only 22% in average.
- 17) Simple correlation coefficient of fixed cost variable cost and sales shows a highly positive relationship.

2.12. iv Poudel Shiva Prasad (2004) had conducted a research entitled "Cots structure analysis of Lumbini Sugar Mill. In this research Mr. Poudel was mainly centered with to the proportion of different cost element in total cost.

The time period covered by this research was seven years from 2053/054 to 2059/060.

The data and other necessary information were collected by using secondary data as well as primary sources of data. In this research Mr. Shiva has pointed various findings and recommendation. Some remarkable findings are as follows:

- LSM is a seasonal base industry.
- LSM has not adopted the scientific classification system of cost.
- Cost separation from the joint product is not practiced.
- The LSM has applied the market base pricing method, has not applied cost base pricing.
- The sales have not covered the total cost.
- The company has neither analyzed the BEP properly nor has taken seriously taken any measure to reduce the BEP volume.
- The company has been able to cross the BEp point, where variable cost ratio is, 0.7819 or 78.99% and PV ratio is 21.82% according to Fy 2057/058.
- The amount of total expenses has been fluctuating trend.
- Material cost covers the large part of total cost LSM.
- Labour cost is slightly increasing trend its cover average 15% total cost.
- The material cost and overhead cost cover average 46% and 39% of total cost.
- Material cost highest Mean and highest S.D and CV than labour cost and overhead cost. It means that more CV is less consistent.
- LSM has not proper practice of segregation of total cost into fixed and variable cost.
- The variable cost ha covered average 79% of total cost and fixed cost cover only 21%.
- The variable cost has highest ARPC by 59.28% on Fy 2059/060 than fixed cost.
- The probable error is 0.2442 is insignificant.
- All the production, administration cost and selling and distribution cost have fluctuating trend.
- The production cost cover average 75% and administration and selling and distribution cover 18% and 7% respectively of total cost.

- The production cost has highest mean and S.D. but its CV have lowest than administration cost and selling and distribution cost. It indicates that there is more consistency.
- The Company has no control over the administration cost.

2.13 Research Gap

Only few researchers have done research in the area of cost structure of Nepalese public Enterprises. Though cost structure of any enterprises is one of the focal point to run business, the study on cost structure has been neglected upon . Researchers have found to research in cvp, Profit planning, budgeting, capital structure of STCL but researchers have found no more study done in the Cost Structure Analysis of STCL. So this study has been undertaken analytically and intensively to analyzed the cost structure of STCL.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the way to solve systematically about the research problem. In this section efforts have been made to present and explain the specific research design for the sake of attaining the research objectives. This study attempts to analyze the cost structure of STCL and forward some measures to improve the situation of STCL. The research, methodology includes research design, nature of data gathering procedure population and sample data processing procedures and the statistical tools used in the analysis.

3.2 Research Design

P.V. Young "A research design is the logical and systematic planning and direction of a piece of research.

A research design is a plan for the collection and analysis of data. The research design is the plan structure and strategy of investigation conceived as to obtain answers to research questions and to control variance. The plan is the overall scheme or program of research.

As per the nature of study case study method of research design has been employed. It will concentrate to analyzing the cost separately as element wise and. Function wise and variable wise. The study will also focus on the qualitative aspects of effectiveness of cost structure of STCL.

3.3 Population and Sample

This aims at studying cost structure analysis of STCL, it is a single corporation and data will be analyzed for five tears of its operations. It is not concerned with any product. There is not any difference in the population and sample terms for this study.

3.4 Sources of Data

The data have mainly collected from secondary sources. The secondary data have been collected from 2063/064 to 2067/068 have been taken. The published accounting and financial statement of STCL and other necessary data collected from various related documents.

3.5 Data Gathering Procedure

As the study have been based on secondary data. This research concentrates on short-term period. Only the data information of five years. From Fy 2063/064 to 2067/068 has been taken and analyzed.

The sources of secondary data are as balance sheet, profit and loss a/c office books of STCL. Published and un-published material and related books and journal etc.

3.6 Data Processing Procedure

Data collection from various sources was classified tabulated and presented in proper and systematic in the required formats. Simple arithmetical percentage tools were used for analysis. Statistical tools like mean, standard deviation coefficient of variation, correlation etc have been used.

3.7 Research Variable

Major cost accountancy tools such as fixed cost, material cost, administration cost, overhead cost, labor cost, selling and distribution cost and cost volume profit analysis techniques were the major research variables.

3.8 Statistical Tools

To analyzing the data were categorized into three groups like element wise variable wise and function wise.

i) Arithmetic Mean

The arithmetic mean is a set of observation is the sum of all the observations divided by number observation.

The formulas:

$$\bar{X} = \frac{X_1 + X_2 + \dots + \sum X_n}{n}$$

ii) Standard Deviation

A standard deviation is the positive square root of average sum of squares of deviations of observation from the arithmetic mean of the distribution. The square of standard deviation is called variance.

$$\text{Formulas of standard deviation (SD)} = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

It is an improvement over the mean deviation and is free from the different of other measure of dispersion.

iii) Co-efficient of Variation

The percentage measure of coefficient of standard of deviation is called co-efficient of variation (C.V)

$$CV = \frac{\sigma}{\bar{X}} \times 100$$

The C.V. is used for comparing the homogeneity, uniformity, consistency and variability of two or more distributions.

Less the C.V.,.....more will be the uniformity, consistency, etc.

iv) Correlation

Correlation is the measure of relationship between two or more characteristics of population or a sample. Is simply measures the change between the phenomenon's. One of the widely used mathematical methods of evaluating

the correlation co-efficient between two variable is karl Pearson's correlation.

It is denoted by r_{xy} or simple r and is defined by:

$$r = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}}, \text{ where } X = X - \bar{X}, \quad Y = Y - \bar{Y}$$

Multiple correlations is the study of three or more variable at a time. In case of multiple correlations the effect of all the independent variables on a dependent is studied.

The multiple correlation coefficients are computed by using the following formula.

X_1 on X_2 and X_3

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2r_{12}r_{23}}{1 - r_{23}^2}}$$

X_2 on X_1 and X_3

$$R_{2.13} = \sqrt{\frac{r_{12}^2 + r_{23}^2 - 2r_{12}r_{13}r_{23}}{1 - r_{13}^2}}$$

X_3 on X_1 and X_2

$$R_{3.12} = \sqrt{\frac{r_{13}^2 + r_{23}^2 - 2r_{12}r_{13}r_{23}}{1 - r_{12}^2}}$$

CHAPTER - FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The basic objective of this study is to examine and analyze the cost and its structure of STCL. To accomplish this objective of the study the total cost of STCL is segregated into different basis and hence their relationship is analyzed.

4.2 Cost Structure of STCL

In any organization cost is a most important factor which is so much affected from each and every decision taken by management in working process. Every public enterprise or business institution has a purpose to generate profit so for this goal it is necessary to reduce the any types of cost. The cost should not account on the basis of estimation and it should be recorded at the exact time when it occurs.

STCL has no separate costing department and has followed the historical or traditional system of costing. It has no pre-estimation of cost and probable cost. Scientific classification or modern classification of cost such as direct and indirect cost overhead cost material cost, fixed cost, variable cost, semi-variable cost controllable cost, etc are not used by STCL. Hence the cost data is not serving the purpose what they ought to do as the costing information is compiled with a view to know the total cost by analyzing the cost system of STCL, it is clearly seen that STCL has not adopted the scientific classification system of cost.

4.3 Classification of Cost

Since STCL has followed only the traditional method of costing system. The total cost of STCL are segregated into sales cost material cost, administration expenses depreciation interest on loan etc. This research attempts to classify the cost of STCL as element wise, function wise and variable wise.

(i) **According to element wise**

All the costs can be classified into three distinct elements.

- a) Material
- b) Labour
- c) Overhead

Material cost = Opening cost + Purchase - Closing stock

Material is rated as the first element of cost because without material production and distribution is not possible. In case of STCL, edibles, lubricants, coal, cement, tractor etc for the material cost. And second element of cost is labour cost i.e., salary for staff. While overhead includes all the costs the than material and labour. Overhead is also one of the important element cost since without it material cannot be worked upon by labour. Cost availed by STCL are thus classified into three elements for the purpose of research study. Following table represents the summary of cost classification according to elements for 5 years.

Table No: 1

Pattern of Material Cost

Year	Material (Million)	Index	ARPC	% of Material Cost in TC
2063/064	1170	100	-	82.06
2064/065	1418	121.19	21.19	83.88
2065/066	2151	183.85	82.69	86.11
2066/067	2013	172.91	(5.9)	81.43
2067/068	2616	223.59	50.68	82.61

Table No.1 shows that the pattern of material cost with its index, ARPC and percentage of material cost in total cost. Diagram No.1 shows comparative cost structure of all elements for each year.

Material cost is most important cost of STCL. It is in increasing order and highest is last year of study periods. It covers above calculated assuming the cost.

Index is calculated assuming the first year as base year. ARPC of material cost is increasing trend but it decrease in Fy 2067/068 by (0.06%). But in the Fy 2067/068 which is the last year of study period, the index reaches 223.59 from 172.91 with an increase of 50.68%.

Table No. 2
Pattern of Labour cost

Year	Labour (Million)	Index	ARPC	% of Labour Cost in TC
2063/064	44	100	-	3.12
2064/065	63	143.18	43.18	3.77
2065/066	72	163.64	14.28	2.89
2066/067	98	222.73	36.11	3.95
2067/068	148	333.36	51	4.67

Table No. 2 shows the pattern of labour cost with its index, ARPC and percentage of labour cost in total cost. Index is calculated assuming the first year as base year.

Labour cost comprises relatively small amount. But there is no negative ARPC during study period. Labour cost covers above 3.68% of total cost. It is also in increasing trend. In the Fy 2067/068 the index reaches 336.36 from 222.73 with an ARPC 51%. It shows that the increasing trend is highest in Fy 2067/068, which is the last year of study period. Thus STCL should control the labour cost and increase material cost.

Table No. 3
Pattern of Overhead Cost

Year	Overhead(Million)	Index	ARPC	% of Overhead cost in TC
2063/064	211	100	-	14.82
2064/065	208	98.58	(1.42)	12.35
2065/066	274	129.85	31.73	10.99
2066/067	363	172.03	32.4	14.62
2067/068	401	190.05	10.46	12.69

Table No. 3 shows the pattern of overhead cost with its index, ARPC and percentage of overhead cost in total cost. Index is assuming the first year as base year.

Overhead cost is also important cost of STCL. It covers above 12% of total cost. ARPC of overhead cost was negative in Fy 2064/065 by (1.42%). Then after it has began in positive. The index of overhead cost was decreasing in Fy 2067/068 the index reaches 190.05 from 172.03 with an ARPC of 10.46%. ARPC of overhead cost is in fluctuating trend.

(ii) According to Function Wise

According to function cost is divided according to the purpose of with they are incurred. STCL is a trading company so there is not production cost. Costs are divided into administration and selling and distribution cost. Administration cost includes all expenses incurred in the direction control, office operation, and administration of company. Selling and distribution cost covers all the expenses related with sales and delivering products.

Table No. 4

Pattern of Administration Cost

Year	Administration (Million)	Index	ARPC	% of Administration cost in TC
2063/064	90	100	-	5.2
2064/065	114	126.67	26.67	5.86
2065/066	142	157.78	24.56	4.82
2066/067	193	214.44	35.92	6.36
2067/068	248	275.56	28.49	7.16

Table No. 4 shows the pattern of administration cost with its Index, ARPC and percentage of administration cost in total cost. Index is assuming the first year as base year.

Administration cost covers above 5% of total cost. It is also in increasing trend, (i.e. 26.67, 24.56%, 35.92%, and 28.49%, respectively. In the last year of study period index reaches to 275.56 meaning that it is increase by 175.56% from the base year.

Table No. 5

Pattern of Selling and Distribution Cost

Year	Selling and Distribution (Million)	Index	ARPC	% of Selling and Distribution cost in TC
2063/064	1644	100	-	94.79
2064/065	1837	111.74	11.74	94.14
2065/066	2813	171.11	53.13	95.18
2066/067	2847	173.18	1.2	93.64
2067/068	3223	196.05	13.2	92.84

Table No. 5 shows the pattern of selling and distribution cost, with its index, ARPC and percentage of selling and distribution cost in total cost.

Selling and distribution cost covers above 93% of total cost. The index shows that the selling and distribution cost of STCL is in increasing trend. Cost of STCL is in increasing trend. In Fy 2066/067 ARPC of selling and distribution cost is lowest, that means cost of selling and distribution has increased by small amount. In the last year of study period index reaches 196.05 meaning that it is increase by 96.05 from base year.

iii) According to Variability Wise

On the basis of variability, total cost of STCL is classified into fixed cost and variable cost. Fixed cost of STCL includes cost like executive salaries, rent, depreciation, property taxes, insurance etc. Variable cost includes most material and parts, many type of assembly, certain supplies and sales commission.

Table No. 6
Pattern of Fixed Cost

Year	Fixed Cost (Million)	Index	ARPC	% of Fixed cost in TC
2063/064	219	100	-	11.54
2064/065	234	106.84	6.84	11.12
2065/066	295	134.70	26.07	9.34
2066/067	286	176.25	30.84	11.68
2067/068	473	215.98	22.53	12.54

Table No.6 shows the pattern of fixed cost with its index, ARPC and percentage of fixed cost in total cost.

Fixed cost covers above 11% of total cost. In Fy 2065/066, it covers only 9.34% of total cost. ARPC of fixed cost is lowest in Fy 2065/066 and highest in Fy 2066/067.

The last year of study period index reaches to 215.98 that is increase by 115.98% from base year, with ARPC 22.53%.

STCL is not a manufacturing organization. It collects material and distributes them. For short term less fixed cost will have positive impact on profitability but the long term control of fixed cost may be adversely affect the profitability.

Table No. 7

Pattern of Variable Cost

Year	Variable Cost (Million)	Index	ARPC	% of Variable cost in TC
2063/064	1681	100	-	88.46
2064/065	1875	111.54	11.54	88.88
2065/066	2865	170.43	52.8	90.66
2066/067	2922	173.82	1.98	88.32
2067/068	3301	196.37	12.97	87.46

Table No. 6 shows the pattern of variable cost with its index, ARPC and percentage of variable cost in total cost.

Variable cost is most important element of total cost. It is in increasing trend but ARPC is fluctuating every year. ARPC of fixed cost is also lowest in 2066/067. It means the total cost was increased by small amount. In Fy year 2064/065, ARPC was highest.

In the last year of study period index reaches 196.37 which are similar to selling and distribution cost.

4.4 Net Profit (Loss) for the Five Years

Table No. 8

Pattern of Net Profit of STCL

Year	Net Profit (Million)	Index	ARPC
2063/064	(103)	-	-
2064/065	13	100	-
2065/066	11	84.6	(15.4)
2066/067	37	284.6	236.36
2067/068	60	461.5	62.16

Table No. 7 shows the pattern of net profit (Loss) with its index, and ARPC.

Fy 2063/064, STCL was in loss so index is assuming the second year as base year.

STCL has been increasing profit each year but in Fy 2065/066 it was decreased by (15.4%). In Fy 2066/067 index 286.4 meaning that it is increased by 200% from Fy 2065/066. In the cost year of the study period index reaches 461.5 meaning that it is increase by 361.5 from the base year.

4.5 Sales for Five Years

Table No. 9

Pattern of Sales of STCL

Year	Sales	Index	ARPC
2063/064	1916	100	-
2064/065	2138	111.58	11.58
2065/066	3190	166.49	49.20
2066/067	3366	175.67	5.5
2067/068	3874	202.19	15.27

Table No. 9 shows the pattern of sales with index and ARPC. Index is assuming the first year as base year.

There is no negative ARPC in the study period. In the last year of study period index reaches 202.19 meaning that it is increase by 102.19 from base year.

4.6 Cost analysis on the basis of ratios

Cost analysis on the basis of ratios can be effective tool mainly when comparison of costs of different periods and comparison with standard is needed. Here, it has been attempted to analyze the cost of STCL with the help of cost to sales and cost to profit ratios.

Table No. 10

Cost to sales Ratios of STCL

Ratio	2063/064	2064/065	2065/066	2066/06 7	2067/06 8	Total	Mean	S.D	C.V
Element wise cost to profit									
Material: Sales	0.61	0.67	0.69	0.6	0.67	3.24	0.648	0.28	43.67
Labour: Sales	0.02	0.03	0.02	0.03	0.04	0.34	0.028	0.008	29.97
overhead: Sales	0.1	0.09	0.09	0.1	0.1	0.48	0.096	0.005	5.10
Total									
Variable wise cost to Sales									
Fixed: Sales	0.11	0.11	0.09	0.11	0.12	0.54	0.108	0.009	9.07
Variable: Sales	0.88	0.88	0.9	0.87	0.85	4.38	0.876	0.016	1.85
Total									
Function wise cost to Sales									
Administration: profit	0.05	0.05	0.04	0.06	0.06	0.26	0.052	0.007	14.39
Selling and Distribution: Sales	0.86	0.86	0.88	0.85	0.83	4.28	0.856	0.016	1.90
Total									

In the table No. 10 cost to sales ratios of STCL are shown. Element wise cost to sales ratios are in erratic order during the five years. Material cost to sales ratio has highest S.D. and C.V. It means that material cost to sales ratio from its sales ratio are more dispersed from its mean value and less consistency in the ratios during the past five years.

In variable wise cost to sales, fixed sales has highest C.V. coefficient of variation enlightens that FC: sales ratios are less consistent than VC: sales ratios variable costs: sales ratios has highest S.D. It shows that the ratios more dispersed from the mean in VC: sales ratios in the past five years.

In function wise costs to sales, all, ratios are in fluctuating tend. Administration cost: sales ratio has highest C.V., it means administration cost: sales ratios are less consistent than selling and distribution: sales ratio. But selling and distribution: sales ratio has highest S.D. it shows that the ratios are more dispersed from the mean in selling and distribution: sales ratios in the past five years.

Table No. 11

Cost to Net profit ratios of STCL

Ratio	2063/064	2064/065	2065/066	2066/06 7	2067/06 8	Total	Mean	S.D	C.V
Element wise cost to profit									
Material: Profit	(11.29)	108.89	186.17	54.47	43.60	404.42	76.37	61.32	75.85
Labour: Profit	(4.3)	4.89	6.25	2.65	2.48	20.57	4.11	1.41	34.30
overhead: Profit	(2.04)	16.03	23.76	9.78	6.7	58.31	11.66	7.56	64.83
Total									
Variable wise cost to Profit									
Fixed: Profit	(2.12)	18.01	25.54	10.41	7.9	63.98	12.79	8.16	63.79
Variable: Profit	(16.2)	143.96	247.95	78.61	55.01	541.8	108.36	81.19	74.93
Total									
Function wise cost to profit									
Administration: profit	(9.73)	9.78	12.33	5.21	4.15	41.19	8.23	3.075	37.36
Selling and Distribution: profit	(9.65)	141.06	243.49	76.66	53.72	524.58	104.91	81.24	77.40
Total									

Table No.11 represents the cost to net profit ratios of STCL. In the Fy 2063/064 company was in loss, than after the company is running on profit. In Fy 2063/064 company was in loss, so the ratios are in negative in that year.

In element wise cost to profit ratio, material cost to profit ratio has highest mean, S.D. and C.V. It means that material cost: profit ratios are more dispersed from the mean, and it is less consistent than other element wise cost to profit ratio.

In variable wise cost to profit ratio, variable cost to profit ratio has highest S.D. and C.V. It means that variable cost: profit ratios are more dispersed from the mean in variable cost: profit ratios and it is less consistent than fixed cost: profit ratio.

In function, wise cost to profit ratio. S.D. of selling cost: profit ratio has highest C.V. is also highest in this ratio.

4.7 Cost Volume and Profit Analysis

Cost, volume and profit analysis is also known as CVP analysis or break even or contribution analysis, involves a series of analytical techniques used to determine and evaluate the effect of changes in sales volume, sales price, fixed costs and variable costs on profit. It focuses on contribution margin which is sales revenue minus total variable costs.

Companies that separately identify and measure the fixed and variable cost often use a contribution margin approach on their periodic income statement prepared for internal management uses. These income statements provide financial data that are uniquely useful for management planning purposed because of the emphasis on fixed and variable costs. Most of the management decision that relate to operations (either directly or indirectly) are based in some way on knowledge of the fixed as variable components of cost.

STCL has not adopted the systematic costing and classification of cost according to variability. STCL still follows the traditional cost classification. Thus it is difficult to exercise the BEP analysis. For the convenience of the study following factors have been assumed.

- a) Only the analysis of Fy 2063/064 to 2067/068 has been done.
- b) Activity base is selected in terms of sales revenues.
- c) Fixed cost and variable costs are used as per segregation.
- d) Selling price fixed cost and variable cost are assumed to remain constant.

Table No. 12

BEP sales for the Five years (Sales, costs and profit are in Millions)

Description	2063/064	2064/065	2065/066	2066/067	2067/068
Sales	1916	2138	3190	3366	3874
less, Variable cots	1681	1875	2865	2922	3301
Contribution Margin	235	263	325	444	573
$\frac{P}{V}$ ratio = $\frac{c.m}{sales}$	0.12	0.12	0.10	0.13	0.15
Variable cost ratio ($1 - \frac{P}{V}$ ratio)	0.88	0.88	0.9	0.87	0.85
Fc	219	234	295	286	473
BEP in (Rs) $\frac{FC}{\frac{P}{V} ratio}$	1825	1950	2950	2200	3153.3
Profit (Loss)	(103)	13	11	37	60
Margin safety (Rs) $\frac{Pr ofit}{\frac{P}{V} ratio}$	(858.33)	108.33	110	284.61	400
operating Profit	41	54	58	103	150
Degree of Operating Leverage (DOL) $\frac{CM}{operating Pr ofit}$	5.73	4.8	5.6	4.3	3.82

Above table shows the contribution margin is always positive. It means sales revenue always covers the variable cost in the study period. In Fy 2063/064 it was in loss, in that year variable cost ratio is 0.88; it means variable cost cover 88% of total cost. In that year profit of STCL was also decreased. In Fy 2066/067 variable cost ratio is reduced by 3% in that year profit of STCL was increased from 11 to 37 million. It means variable cost is directly affected on profit. In Fy 2067/068. Variable cost ratio is 85% which is less than Fy 2066/067, and profit of Fy 2067/068 is also high.

Above table shows if variable cost ratio is low, then profit will be high. BEP sales of STCL are always less than sales. In Fy 2066/067 difference between sales and BEP sales is high. In that year profit was also high. Margin of safety has been increasing trend. It means higher the margin of safety, the safer is the business. BEP and DOL are the risk indicators. Above table show that a high fixed cost of company is said to be higher degree of operating Leverage and also required high volume of sales to be in breakeven point. Therefore DOL and BEP both go in the same direction in Fy year 2067/068 STCL has low risk in that year STCL earn Maximum profit.

4.8 Arithmetic Mean, Standard Deviation and Coefficient of Variation

The arithmetic mean, standard deviation and coefficient of variations of different costs for the five years from 2063/.64 to 2067/068 have been calculated and summarized in the following table.

Table No. 13

Showing the Mean, Standard Deviation and CV of element wise cost

	Material (Million)	Labour (Million)	Overhead (Million)
Mean	1876.02	85.48	292
S.D	520.2	36.0	78.6
C.V	27.73	42.12	26.91

S.D of material is highest it means material costs are more dispersed form its mean value C.V of labour is highest it means labour are less consistency it means there is more variability in labour cost of individual year.

Table No. 14

Showing the Mean, Standard Deviation and CV of Variable wise cost

	Fixed (Million)	Variable cost (Million)
Mean	321.7	2529.18
S.D	95.9	634
C.V	29.81	25.07

S.D of variable cost is highest it means V.C. are more dispersed from its mean value. C.V of fixed costs are highest it means labour are less consistency.

Table No. 15

Showing the Mean, Standard Deviation and CV of Function wise cost

	Selling (Million)	Administration (Million)
Mean	2473.3	157.98
S.D	618.2	56.9
C.V	24.99	36.06

4.9 Correlation between the Costs

Correlation is the degree of relationship between two or more variable. Two variables are said to be correlated when the change in the value of one causes the change in the value of another variable. It may be positive, negative or zero which is determined according to its coefficient.

Different variable related to the cost of STCL and analyzed through the study. Thorough the correlation analysis relation interdependence and causes of variation between the arteries to be analyzed in this section.

Above table shows the correlation between one cost as dependent variable and remaining two costs as independent variable through the calculation of coefficient of multiple correlations. All the multiple correlation coefficients have highly positive value thus lie between 0 and 1. This means there is significant positive variables on dependent variables.

i) Correlation of Element wise Costs

Simple correlation of material, labour and overhead costs. The reliability and significant or 'r' is measured using probable error (P.E).

Table No. 16

Simple correlation coefficient of element wise cost

Correlation Between	Simple Correlation	P.E	$6 \times PE$
Material and overhead	0.99	0.0059	0.0354
Labour and overhead	0.93	0.040	0.378
Material and overhead	0.89	0.063	0.24

Above table shows that there is positive relationship between element wise cost material and labour costs have relatively high degree of positive relationship while material and overhead costs have relatively low degree of positive relationship. In case of labour and overhead and material overhead and material overhead $r > 6 \times PE$ meaning that the simple correlation coefficient calculated for those costs significant.

Table No. 17

Multiple correlation coefficient of Element wise cost

Multiple Correlation	Coefficient of Multiple Correlation	Coefficient of Multiple Determination
Material on labour and overhead	$R_{1.23} = 0.99$	$R_{1.23}^2 = 0.9801$
Labour on material and overhead	$R_{2.13} = 0.99$	$R_{2.13}^2 = 0.9801$
Overhead on material and labour	$R_{3.12} = 0.95$	$R_{3.12}^2 = 0.9025$

The square of multiple correlation coefficients which is known as the coefficient of multiple determinations is used to interpret the value of multiple correlation coefficients.

It is that fraction which represents the proportion of total variation of dependent variable that is caused due to independent variables. Here, the coefficient of multiple determination of material costs on labour and overhead is 0.9804 which indicates that 98.04% of total variation in material cost is due to labour cost and overhead cost and remaining due to other factors. 98.01% of variation in labour cost is due to material and overhead cost and rest due to other factors. 90.25% of variation in overhead cost is caused due to material and labour cost and rest due to other factors.

ii) Correlation of Function wise Costs

Simple correlation coefficient (Zero order correlation coefficient) of function wise cost and their linear multiple correlation coefficients also the reliability and significance or 'r' is measured using P.E.

Table No. 18
Simple correlation of Function wise cost

Correlation Between	Simple Correlation	P.E	$6 \times PE$
Administration and Selling distribution	0.91	0.052	0.312

Above table shows that there is high positive correlation between function wise cost i.e. administration and selling and distribution cost. Test of significance through PE shows that $r > 6 PE$. This gives the meaning that calculated values of 'r' is significant.

iii) Multiple correlation coefficients of fixed cost variable cost and sales

Simple correlation coefficient (zero order correlation coefficient) of variability wise cost and sales reliability and significance of the above mentioned calculation is measured by using PE. Also linear multiple correlation coefficient and coefficient of multiple determination is calculated to measure the relation between dependent factor and independent factors.

Table No. 19

Simple correlation coefficient of variability costs and sales

Correlation Between	Simple Correlation	P.E	$6 \times PE$
Fixed cost \times VC	0.91	0.052	0.312
VC \times sales	0.96	0.023	0.138
Fixed cost \times sales	0.98	0.006	0.36

Simple correlation coefficient between fixed cost, variable cost and sales shows a high positive correlation. High degree of positive correlation shows that changes in any of the variable causes increase in sales and vice-versa. Test of significance through PE shows that $r > 6 PE$ in each relation of given variable this value of 'r' is significant and shows that there is an evidence of relation between the variables.

Table No. 20

Multiple correlation coefficients of fixed cost, variable cost and sales

Multiple Correlation	Coefficient of Multiple Correlation	Coefficient of Multiple Determination
Fixed cost on VC and sales	$R_{1,23} = 0.97$	$R_{1,23}^2 = 0.9409$
VC on fixed cost and sales	$R_{2,13} = 0.99$	$R_{2,13}^2 = 0.9801$
Sales on fixed cost and VC	$R_{3,12} = 0.99$	$R_{3,12}^2 = 0.9801$

The coefficient of linear multiple correlations lie between 0 and 1. Coefficient of multiple determination also have high fraction value is mainly that the variation in dependent value is mainly caused due to independent variables. For example $R_{1,23} = 0.9409$ gives the meaning 94.09% of the variation in fixed cost is caused due to the variable cost and sales and the rest due to other factors.

4.10 Major Findings

Cost analysis of STCL done through the segregation of the total on the basis of elements variability and functions. Cost to sales ration and cost to profit ratios have been presented for the comparative study. Effect of changes in sales, fixed study costs and

variable costs on profits has been evaluated through BEP analysis other tools, and techniques like index, ARPC, arithmetic mean standard deviation coefficient of variation correlation coefficient, coefficient of multiple determinations etc. are used for the effective analysis of cost of STCL.

The major findings of the research work are as follows:

- STCL has not adopted the accounting system for scientific classification of costs.
- It has not practiced Brede- even analysis.
- FY 2063/064 it was in loss. But from FY 2064/065 it has been on profit.

Major findings from element-wise classification of cost

- Material cost covers 84% of total cost in average.
- Labour cost covers 3% of total cost in average.
- Overhead cost covers 13%.
- Material cost to sales has average ratio of 0.648, labour to sales has average ratio of 0.028, and overhead to sales has average ratio of 0.096.
- The greatest fluctuation is found in material to sales ratio with a CV of 43.67% and less fluctuation on overhead to sales ratio with a CV of 5.1%.
- Material to profit, labour to profit and overhead to profit ratios have average value of 80.88, 4.00, and 11.66 respectively.
- The highest fluctuation is in material to profit ratio with a CV of 75.85 and least fluctuation in labour to profit ratio with CV of 64.83.
- Material cost has an average of about Rs 1876.02 million with standard deviation 520.2 million and CV of 27.73%.
- Labour cost has an average of Rs 85.48 million with standard deviation of 36 million and CV of 42.12% which is the highest among element wise, costs showing a greatest fluctuation in this cost.
- Overhead cost has an average Rs 292 million with standard deviation of Rs and CV of 26.91%.
- Material and labour costs have greatest correlation 0.99 while material and overhead costs have lowest correlation of 0.89 and shows a high positive relation among element wise costs.

- Multiple correlation coefficients of elements wise costs also show a high positive relation between dependent variable and independent variables.

Major Findings from Function Wise Cost classification

- Administration cost and selling and distribution cost cover 6% and 94% respectively.
- There is highest dispersion on selling and distribution cost to sales ration with a mean 0.856. There is highest CV on administration cost to sales ratio showing the least consistency of this ratio.
- Except in the first year, all other function wise cost to profit have positive due to profit on those years.
- Average of selling and distribution cost to profit ratio is 104.916 with the highest CV of 77.40% showing the least consistency.
- Average of administration to profit ratio is 8.23 with the lowest CV 37.36% showing more consistency.
- Administration cost has mean of Rs 157.98 million and standard deviation of Rs 56.9 million and the highest CV of 36.06% which shows that there is least consistency in administration costs of the study period.
- Selling and distribution cost has mean of Rs 2473.3 million and standard deviation of Rs 618.2 million and the lowest CV of 24.99% showing the least variability of the cost.
- Simple correlation coefficient of function wise cost shows high positive relation and test of significance through P.E. shows that the value of 'r' is significant.

Major Findings form Variability Wise Cost Classification

- STCL has not practiced the segregation method of fixed cost and variable cost.
- Both fixed cost and variable cost are in increasing order.
- Variable costs cover 89% of total cost in average and fixed cost covers only 11% in average.
- Fixed cost to sales ratios have Mean of 0.108 with CV 9.07 which is greater than that of CV to sales ratio showing less consistency.

- Variable cost to sales ratios has mean 0.876 and CV of 1.85.
- Fixed cost to profit ratios has mean of 12.79 and CV 63.79%.
- Variable cost to profit ratios have Mean of 108.36 with ratios have mean of 108.36 with the CV of 77.40 which shows relatively less consistency.
- Fixed cost has Mean of Rs 321.7 million and standard deviation of Rs 95.9 million with a CV of 29.81%.
- Variable cost has mean of Rs 2529.18 million and standard deviation of Rs 634 million with a CV of 25.07%.
- Simple correlation coefficient of fixed cost, variable cost and sales shows a highly positive relationship.
- Coefficient of multiple correlations shows the highly positive relationship between dependent variable and independent variables.
- Coefficient of multiple determinations also shows a great contribution of independent variable in the variation of dependent variables.

CHAPTER - FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Public Enterprises (PEs) should have a very important role in the economic development of least developed country like Nepal. Government of Nepal has also invested a huge amount of resources in PEs. But when analyzing the performance of that PEs, most of them are continuously suffering from huge loss every year. The reason behind such poor performance of PEs is neither the lack of resources nor the lack of market. Most of them are provided with excess of manpower and other resources are also enjoying fewer competitors in the market. Thus, reasons behind this performance of PEs are lack of effective utilization of the available resources, lack of managerial efficiency and more than that the lack of effective analysis and the control of different costs. Costs are always high in PEs but their output is not enough to mark them as good performance.

In the changing scenario and in the trend of globalization and privatization different problems are being seen to the PEs of Nepal. Government should play the role of guardian, facilitator, regulator and the monitor. But for the professionalism of PEs, the government interference should be totally stopped. The primary objective of the PEs is to provide services and goods to the people at reasonable price. For the long-term existence and for successful operation of PEs this objective should also be revised and profit-motive objectives should also be given the equal importance. Reasonable price should never mean the price less than the cost. But for this, high production cost of the PEs must be controlled otherwise most of the PEs would be liquidated or government would have to bear a heavy financial; burden for their continuity.

Salt trading Corporation (STCI) is one of the PEs of government of Nepal. It was established on 27th Bhadra 2020, and was listed in the securities Board on 2041. Since the time of formation the corporation has provided high quality at reasonable price and adequate supply of salt to the people. But now a days the corporation has managed in supplying salt, ghee, oil, sugar, Maida, flour, rice lubricants, coal, cement etc. The

corporation is supplying quality agro-based items such as chemicals, fertilizers various types of seeds to uplift the life structures of farmers.

As in the other private and public enterprises, cost is the major factor for the present performance of STCL. Now a day's STCL has been suffering from profit. Cost is the most important factor of any kind of company. If cost is control or decrease the profit will be high. The main objective of company is to maximize its profit, without controlling the cost profit will not be high. To analyze cost structure of STCL, it should be started from cost classification. It is not possible without knowing the nature of the cost. To know the nature of cost, they should be first classified under different bases. For this purpose, cost of STCL was classified as element wise cost, function wise cost and variability wise cost. After the classification, percentage, ARPC, Mean S.D., CV, are used for the analysis purpose.

5.2 Conclusion

Different types of cost accounting tools which are taught in the colleagues are not found applied by the STCL. It shows gap between the theory and practice. The following are the conclusions derived from the analysis of the cost structure of STCL.

- The STCL has been able to make profit from Fy 2064/065 to 2067/068.
- In most of the year sales of STCL cover variable cost.
- Calculation of Break-even-analysis shows that BEP sales STCL are less than present sales value.
- STCL still follows the traditional method of cost classification.
- No systematic plan is developed.
- There is problem of over staffing and extra cost burden.
- There is no proper classification of cost according to cost structure. So it creates problem to analyze data properly.
- STCL has been spending large amount in material expenses.
- Selling and distribution and labour cost are high.
- Lowest C.V. of overhead cost indicates more consistency than material and labour cost.

- Variable cost cover the major part of total it means that there is no control on such cost.
- Fixed cost is more consistency than variable cost.
- Selling and distribution cost has lowest C.V.
- In function wise cost there is positive relationship between cost.
- There is no practice of cost volume analysis using the statistical tool to analyzing the cost.
- There is not developing the any program and policies to analyzing the cost structure and cost control.
- Final auditing of tide financial reports takes almost more than one year. Due to this implementing the suggestions from auditor general report is almost impossible in the next year, further it also affects the cost analysis buy internal the external parties.
- Loss on a particular year is caused due to high costs on that year.
- There is positive correlation between function wise, element wise and variable wise sales. It mean when other costs are ignored due to increase in one cost, next cost will be increased and vice-versa.

5.3 Recommendation

STCL is a public Enterprise owned managed and controlled by the government. It should be responsible towards the people through the government. It should follow the directions given by the government. It should have the primary objectives of supplying edibles goods and other materials to the people. But from this analysis of cost structure of STCL, it is not found effective and efficient enough to cope with the competition of globalized and free market of Nepal. After the analysis and from the findings of this study following suggestions are recommended.

- 1) Cost of sales of STCL is very high relative to the sales volume. Thus STCL should take actions towards controlling cost of sales and increasing the sales volume.
- 2) Administration cost is also high. STCL should control these costs.

- 3) Overhead cost of STCL should be controlled after its classification into controllable cost and uncontrollable cost.
- 4) STCL should also focus on profit motive objective for its long-term existence.
- 5) STCL should practice BEP analysis to find the break-even sales and to take the future actions as per the break-even sales.
- 6) Interest expenses of STCL are very high. These expenses should be reduced by replacement of loan.
- 7) STCL is an autonomous body. It should be given independent in performing its regular business activities. Government should not interfere unnecessary in its management. It should be independent on financial decision making.
- 8) Short-term and long-term plans should be made by STCL for the control of costs.
- 9) It should search for the other profitable areas for a expanding its market and for proper utilization of its resources.
- 10) STCL should adopt itself with the modern technology.
- 11) Proper reward and punishment system for the staffs, their motivation and reducing the excess number of staffs created due to the closing of many branches and deposits in current years should be the efforts of STCL towards personnel management.
- 12) STCL should follow the managerial tools like for costing reduction, target costing, kiezen costing, just in time method, activity base costing or modern management tools.

APPENDIX

Statement of Profit and Loss Account 2063/064 to 2067/068

Description	2063/064	2064/065	2065/066	2066/067	2067/068
Sales income	1916218180	2138957724	3190432746	3366335450	3874061721
Less, cost of sales	1644540991	1837630785	2813514025	2847981343	3223898614
Gross profit	271677189	301326639	376918721	518354107	650163107
Add other income	26024744	25788804	28214940	47146529	51033585
Total	297701933	327115443	405133661	565500636	701196692
Administration expenditure	9047776	114353837	142464215	193593038	248785556
Interest	161188663	152956369	197195114	260201790	294577494
Depreciation	4275438	5169703	7064647	7719126	727132
Operating income	41759056	54635534	58409685	103986682	150546510
Profit (Loss) from sales of assets	96171	8996	2953	1286081	75632
Income before bonus and tax	41855227	54644530	58412638	105273763	150622142
Investment and Debtors Expenses	135000000	30000000	29810500	34944314	42258224
Income before bonus and tax	(93144773)	24644530	28602138	70329449	108363918
Bonus	-	2240412	2600194	6393586	9851265
Income before tax	(93144773)	22404118	26001944	63935863	98512653
Income tax	10511593	12364110	15276583	27753494	52324899

Deferred tax	-	(2987133)	(829720)	(968651)	(13815343)
Net Profit (Loss)	(103656366)	1302721	11555081	37151020	60003097