

CHAPTER-4

COST ACCOUNTING SYSTEMS: A CONCEPTUAL DISCUSSION

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CHAPTER-4COST ACCOUNTING SYSTEMS :A CONCEPTUAL DISCUSSION4.1 INTRODUCTION :

The primary purpose of accounting is to provide financial information relating to a business organisation.

The accounting function is concerned with measuring, recording and reporting financial information to various groups of users. The financial information is required by the management to plan and control the activities of a business; and also by outsiders who provide funds or who have other interests.

The accounting function can be broadly divided into two classes 1) Financial accounting; and 2) Cost or management accounting. Financial accounting is largely concerned with financial statements for external use by investors, creditors, labour unions, financial analysts, Governmental agencies & other interest groups. Cost or managerial accounting is primarily concerned with the accumulation and analysis of cost information for internal use by the managers for planning, decision making and controlling. The cost accounting, as it is known today, has developed almost entirely in these 90 years period of this century. In every business it is the important responsibility of management to ensure efficient working of the business and to achieve maximum utilisation of

resources available at its disposal. The cost accounting is a function to reach these goals.

4.2 MEANINGS OF THE COST CONCEPTS :

a) COST :

In common parlance, it is inferred as the amount or equivalent paid or charged for something. Normally it is understood as the price paid for purchasing anything.

It also means the outlay or the expenditure made to achieve an object or the loss incurred in gaining a thing.

According to economists, cost is sacrifice of alternatives foregone or the opportunities lost. Costs incurred in monetary form are not always necessarily the real costs of anything.

Among various meanings of the term cost, those which have relevance in production are also important.

Accordingly the cost of producing a certain output of a commodity is the sum total of all the payments made to factors of production engaged on production of the commodity. Thus in respect of a product the cost may be total of expenditures incurred on the material, wages and other expenses incurred for conversion of raw material into finished product. The cost is the benefits given up to acquire goods or services.

b) COST ACCOUNTING :

1. Meaning as per Webster's New Collegiate Dictionary

" The systematic recording and analysis of the costs of material, labour and overheads incident to production.

2) Meaning as per Kohler's Dictionary for Accountants

That branch of accounting dealing with the classification recording, allocation, summarization & reporting of current & prospective costs. Included in the field of cost accounting are the design and operation of cost systems & procedures; the methods of determining costs by departments, functions, responsibilities, activities, products, periods, territories and other units and of forecasted future costs and standard or desired costs as well as historical costs, the comparison of costs of different periods of actual with estimated, budgeted or standard costs and of alternative costs, the presentation & interpretation of cost data as an aid to management in controlling current & future operations."

3) Meaning as defined by I.C.M.A. (London)

" Cost Accounting is the process of accounting for cost. This process begins with the recording of income & expenditure and ends with preparation of statistical data. It can be referred to as the formal mechanism by means of which costs of products or services can be ascertained & controlled. It is also referred to as the art of determining the cost.

The primary objective of cost accounting include

(1)

controlling cost, stimulating cost consciousness, ascertaining product unit cost and determining the profitability of various products, services and inventory valuation."

In short the cost accounting is the accounting for expenses in relation to production of a thing or some specified service. The cost accounting procedure involves recording of expenditure its classification, allocation and apportionment in the appropriate cost units & cost centres. It is a device which enables to know cost of production of a thing or of rendering a service.

The cost accounting is done with a view to know the actual cost of production, to control the costs, to stimulate cost consciousness and for determining the profitability of the products.

C) COSTING :

Costing is the technique and process of ascertaining costs. The technique in costing consists of principles and rules which govern the procedure of ascertaining costs of products or services. This technique is however dynamic and changes with the change of time. The process of costing is the day-to-day routine of ascertaining costs, whatever the costs ascertained may be and by which means these costs are determined.

There are following types of costing. They are used considering the nature of industry & the other

relevant factors.

1) HISTORICAL COSTING :-

In this method the costs are ascertained after they have been incurred.

2) STANDARD COSTING :

In this type there are predetermined costs (called standard costs) and a constant comparison is made between actual & predetermined cost. Analysis of variances is made and reported to management, accordingly.

3) MARGINAL COSTING :

In this type marginal costs are determined and differentiation is made between fixed and variable costs to study the effect of change in volume or type of output on profit.

In this type only variable costs are considered and fixed costs are directly charged to profit & Loss Account.

4) DIRECT COSTING :

In this type only direct costs are charged to production and all indirect costs are transferred to profit & loss account.

5) ABSORPTION COSTING :

The practice of charging all costs both fixed & variable to processes, production & operations.

6) UNIFORM COSTING :

The use of same costing principles and/or practices by several undertakings in the same business.

4.3 FUNCTIONAL ACTIVITIES IN COST ACCOUNTING

The following are the general functional activities included under the term cost accounting.

1) Cost Book Keeping :

It involves the recording of costs according to pre arranged classification.

ii) COST CONTROL :

The determination whether current costs represent the satisfactory cost performance.

iii) COST ANALYSIS :

It involves determination of why costs are out of line and fixation of the responsibility for the same.

iv) COST COMPARISON :

Comparison of the cost of alternative products, activities, methods or areas in the field of production or distribution.

v) COST REPORTING :

Communication of cost data to various interested parties, groups or departments.

vi) COST PLANNING :

Cost system or procedure involved in planning of cost.

vii) COST FINDING :

Measurement/estimation of the individual products,

departments or other segments of the firm's operations.

4.4 COST ACCOUNTING SYSTEM

It is an organised or established procedure carrying out the function of classification, recording, allocation, summarisation and reporting of cost data to the management.

It is process of operating, testing & accumulating information under such a system. The system includes the work relating to documentation, filing, reporting etc. also. It is a regular routine work.

Cost accounting system is much useful to management as it guides management in taking various tactical decisions. Especially in increasing profitability, selecting proper product mix, increasing efficiency, implementation of cost control plan, inter firm comparison, searching out weaknesses etc. are some of the areas where cost accounting focusses the right path.

The cost accounting system in any industry depends upon the nature of the product, nature of manufacturing process, size of industry, volume of production, nature of raw material used; etc.

The essence of cost accounting system is that it must supply the management the information needed by it in full details. Prescribed forms are used for it & accordingly reports are sent to management at regular intervals e.g. a week, a month, a quarter etc.

As a result of modern complex business world,

the markets being consumer oriented, the competition among producers becoming intense, the cost consciousness among management authorities is growing and as such they are gradually marching towards adoption of cost accounting systems.

Another thing is that the cost accounting systems are always efficiency oriented. Hence it gives only benefits.

INSTALLATION OF COST ACCOUNTING SYSTEM

As the modern business world is growing complex, competition becoming intense, there is always a threat of uncertainty among businessmen. As they have no price control in the consumer oriented markets, the only way to maintain or increase the profits is the cost control or cost saving.

As the nature of transactions is different in different industries, there is no uniform system which is suitable to all types of business undertakings. Each business has to develop & devise a cost accounting system in such a way that it satisfies the management requirements. For this it is necessary that management's expectations from this system should be clear. Before installation of the system, a preliminary investigation of the organisation should be made to point out weaknesses and inefficiencies. Further, the cost of the costing system should be comparatively less than the benefits arrived through its installation. In installing cost accounting system, careful consideration

should be given to the following matters -

- a) Requirements of the management
- b) Factory layout and the production sequence
- c) Degree of control exercised over production
- d) Nature of raw materials used
- e) Problem of deployment of workers
- f) Winning confidence of key personnel & the office staff
- g) Relative size of the cost items
- h) Need for uniformity
- i) Impact of Electronic Data Processing &
- j) Other practical considerations.

Though the cost accounting systems are advantageous on the part of management, still sometimes following difficulties are experienced on its installation.

a) LACK OF SUPPORT FROM DEPARTMENTAL HEADS :

To overcome this, the executives should be taken into confidence. Before introducing the scheme, its details should be discussed with them.

b) The expense of installation and operation. In any case, the installation is justified only when the benefits arrived through its installation exceed the cost incurred on it.

c) The cost system may not be suitable for the business. To overcome this, the system should be properly designed and periodically revised.

d) Employees resistance to the installation of system. Such resistance arises as a result of ignorance & suspicion. Proper education and necessary training have to be provided to gain their confidence.

4.5 COST CENTRES & COST UNITS :

A cost accountant has to ascertain the costs of two items, 1) cost units, and 2) cost centres

1) COST UNIT :-

It is a unit of product, service or time in relation to which costs may be ascertained or expressed.

Considerable thought must be given to selection of cost units. Since costing is measuring, the unit of measuring must be clearly defined and selected before the cost finding process starts. The unit selected must be one with which the expenditure can be most readily associated and is generally a unit appropriate to the business. The rice miller relates his expenditure per bag of of rice and a printer to each job or order.

In non manufacturing business operations it is difficult to decide a suitable cost unit. A transport operator may decide to relate his costs to weight carried e.g. per tonne, but since it does not consider the factor distance, it is not logically acceptable. A more appropriate and accurate unit would, therefore be tonne mile considering weight as well as distance.

2) COST CENTRE :

It is a location, person or item of equipment (or group of these) for which costs may be ascertained and used for the purpose of cost control.

The determination of a suitable cost centre and analysis of costs under cost centres is very useful for periodical comparison and control of costs. In order to obtain the cost of a product or service, the expenses should be suitably segregated to cost centres. The manager of a cost centre is held responsible for control of cost of his cost centre.

The selection of suitable cost centres or cost units for which costs are to be ascertained in an undertaking depends upon a number of factors. In a factory cost centres may be production cost centres and service cost centres. A centre may be a particular work-bench or machine or group of machines or an activity. Cost centres may include persons like departmental heads, foreman, salesman, customers etc. Similarly cost centres may include items of equipment such as machines, vehicles etc.

4.6 PROCESS COSTING SYSTEM :

It is the type of costing where there is a continuous or mass production. The necessity for compilation of the costs of a process or department for a given period, as distinct from the costs of a whole job or specific batch

of production units has given rise to the concept of process cost accounting. There are many industries where there is continuous processing in which the end products are the results of a number operations performed in sequence.

In such industries it is necessary to apply process costing system.

Following are the principles of process cost accounting.

- 1) First of all the cost accountant should get himself familiarised with the complete layout or the flow chart of the production process.
- 2) Then he should fix suitable cost centres for the purpose of determining of the process costs.
- 3) Costs are classified into labour, material and overheads & are collected for each cost centre for each accounting period.
- 4) The period is determined by the length of production cycle or by the extent of control to be exercised.
- 5) The output of the process or department i.e. cost centre is determined in terms of physical units like numbers, tonnes, kgs. etc.
- 6) The total cost for the period is divided by the units of production for the period, taking into consideration work in progress, normal and abnormal wastage etc.

4.7 COST ACCOUNTING SYSTEM IN SPINNING INDUSTRY :

The cotton spinning industry covers the manufacture of various counts of yarn using several varieties of cotton.

Looking to the very nature of the manufacturing process involved basically the system of costing applicable to this industry is " Process costing ".

Cotton is the main raw material for the manufacture of yarn. The process of conversion of raw cotton into yarn involves the following processes serially.

- 1) Blow room
- 2) Carding
- 3) Dawing
- 4) Fly Frames
- 5) Ring spinning

To cover the different production processes involved in the manufacture of yarn following cost centres are operated to classify, collect and determine the cost of the product

- 1) Mixing & Blow-room
- 2) Carding
- 3) Drawing
 - a) Pre-comb
 - b) Post-comb
- 4) Combers
- 5) Speed frames

- 6) Ring frames
- 7) Doubling frames
- 8) Reeling

ACCOUNTING INDIVIDUAL ELEMENTS OF COST :

A) MATERIAL COST :

In spinning industry cotton is the basic raw material. There are several varieties of cotton available in the market. Records relating to receipt, issue and balance have to be kept in respect of each variety. Different varieties of cotton have to be mixed at the blow-room stage to obtain yarn of various count groups. Normally average price method is followed for the valuation of issues.

B) LABOUR COST :

Normally in spinning mills the workers are paid on time-rate basis. Wage records of each category of employees are maintained for different departments. Wages paid being classified departmentwise, - its allocation to cost centres on that basis is done. Differentiation is made between direct & indirect wages paid. By adding amounts of requisite percentage for fringe benefits, total wage cost could be computed for each cost centre.

C) CONSUMABLE STORES & SPARES :

Records in respect of receipt, issues & balance

of each & every item of stores & spares is exercised at several mills by stock verification through perpetual inventory system. Issues are priced an average price.

D) FUEL & POWER :

Power is generally obtained from the electricity company of the area and when adequate power is not available or in case of power failure, power generated on generating sets is used. Charging of power to departments is mostly on the average cost of power purchased & power generated.

E) MANUFACTURING OVERHEADS :

These include all indirect expenses connected with the manufacturing process. These are as under :-

- a) Technical supervision/Factory Administration
- b) Materials Management
- c) Production planning & quality control.
- d) Personnel & Labour Welfare Departments
- e) Security Department etc.

Above expenses are collected & accumulated cost-centrewise. Suitable base is adopted for distribution of these overheads to production & service departments/cost centres.

F) DEPRECIATION :

Records of plant and machinery maintained should

be kept departmentwise. Depreciation is chargeable to various cost centres. The method of depreciation should be followed consistently.

After allocating the manufacturing overheads to the various production and service cost centres, the cost of each service cost centre is allocated to production cost centres. On the basis of service utilised by each production cost centre.

G) ADMINISTRATIVE OVERHEADS :

Various administrative overheads are incurred they are apportioned to production departments on the basis of production or conversion cost incurred at the respective production departments.

H) SELLING & DISTRIBUTION OVERHEADS :

These include salary of marketing staff, cost of free samples, sales promotion & advertisement expenses & other expenses for running marketing office of the mill. These overheads are charged to products on the basis of sales turnover of the products concerned.

4.8 ADVANTAGES OF COST ACCOUNTING SYSTEM.

The management of a business organisation is benefitted much through the installation of cost accounting system. The nature and the extent of advantages obtained depend upon the type, adequacy and the efficiency of the cost accounting system

installed. Following are the advantages achieved through the installation of a costing system.

- 1) A well devised cost accounting system reveals unprofitable activities, losses or inefficiencies occurring in any form.
- 2) Cost Accounting locates the exact causes for decrease or increase in the profit or loss of the business.
- 3) Cost accounting furnishes management suitable data & information to serve as guide in decision - making involving financial considerations.
- 4) Cost accounting is useful for price fixation purposes. It helps in filing tenders or quotations, preparing estimates, charging for internal services etc.
- 5) With the application of standard costing and budgetary control methods the optimum level of efficiency is obtained.
- 6) Cost accounting helps interfirm comparison which enables cost control.
- 7) The cost accounts reveal the cost of idle capacity to the management.
- 8) The cost accounting enables the introduction of cost reduction programmes.
- 9) The technique of marginal costing is much helpful to management in taking short - run management decisions.

- 10) As a result of the fixation of cost centres, responsibilities in organisation structure become quite clear & implementation of control systems becomes easier.
- 11) Cost accounting requires perpetual inventory control and facilitates preparation of periodical profit & loss A/c.
- 12) Costs of closing stocks of raw materials, work in progress etc. can be easily obtained from cost records.

4.9 COST ACCOUNTING SYSTEM IN THE UNITS UNDER STUDY :

In both the organisations under study cost accounting systems exist in order to guide the management in solving problems like determining the product mix, fixing or quoting sale prices, accepting foreign orders, and so on. Though these systems are not exhaustive enough to cover all the details, still they guide the management in decision making.

A detailed description of the systems in these mills is presented in the following chapter.

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