9

COST ACCOUNTING

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9.0 OBJECTIVES

The objectives of studying this unit are.

- To understand the evolution and definitions of costing.
- To study the objectives of cost accounting.
- To distinguish between Cost accounting and Financial Accounting.

- To classify cost in different ways.
- To understand the elements of cost accounting systems.

9.1 INTRODUCTION

Modern business needs information about activities to be planned for the future. A major function of management is decision-making. It requires selection of an optimal course of action from among a set of alternatives. Costing techniques play an important role in gathering and analyzing revenue and cost data. It also helps to control business results and to make a proper appraisal of the performance of persons working in an organisation. Cost accounting also helps in acquiring Plant and Machinery. Adding or dropping Product, make or buy decision, special pricing of products and replacement of assets.

9.2 EVOLUTION OF COST ACCOUNTING

The widespread interest in the subject of cost accounting could be said to have developed with Industrial Revolution which started in 1760. As mechanization, simplification, standardisation and mass production followed in the wake of factory system, costing had to keep pace with these developments. Until the 18th century, cost accounting was in the domain of the engineer. Its integration with financial accounting began when accountants started to audit the cost records. Under the influence of financial accountant, cost accounting came to be viewed almost exclusively as a means of inventory valuation and profit measurement. It has grown only in the 20th century as an independent discipline.

Cost accounting has found to be of assistance to management, in compiling and providing requisite statistical data. It has developed rapidly and assisted management in providing valuable information to take appropriate decision in time. Cost Accounting throws light on the excessive waste of materials, inefficient labour operations, idle machinery and many other similar factors, which are responsible for reduction in the profit of the business activities. Managements found that cost accounting could render valuable assistance in planning, controlling and coordinating the activities.

9.3 **DEFINITIONS**

(a) Costing:

The institute of Cost & Management Accountants (ICMA) London has defined costing as the ascertainment of costs, costing includes techniques and processes of ascertaining costs.

(b) Cost Accountancy:

The Institute of Cost and Management Accountants (ICMA) London has defined Cost Accountancy as the "application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and ascertainment of profitability as well as presentation of information for the purpose of management decision making". Accordingly Cost Accountancy includes costing, cost accounting, budgetary control, cost control and cost audit. Cost accounting refers to the process of determining and accounting the cost of some particular product or activity. It also includes classification, analysis and infers production of costs.

(c) Cost Accounting:

The I.C.M.A. London defines Cost Accounting as "the process of accounting for cost from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centers and cost units".

In practice, costing, cost accounting and cost accountancy are often used interchangeably. Costing refers to ascertainment of costs, accumulation and measurement of cost of activities, processes, products or services. Cost data are used to prepare the statement of cost or cost sheet. Cost Accounting is a specialized branch of accounting which assists management to control costs and to create an awareness of the importance of cost to wells- being of the business organization.

Systematic and useful cost data and reports are required to manage the business to achieve its objectives.

(d) Cost Centre:

Cost Centre is a location, person or an asset for which costs can be ascertained and used for the purpose of cost control. It is an organizational segment or area of activity used to accumulate costs. Different types of cost centers used in a manufacturing organization are personal cost canters, impersonal cost centers, operation cost centers and process centers.

(e) Cost Units;

A cost unit is a unit of quantity of product or service in relation to which cost may be ascertained. There should be a unit of activity for proper ascertainment of cost. Every organization has a unit of its own for measurement of raw materials, and finished products. Once the unit of activity is decided it becomes a cost unit for the cost accountant. The cost units should be suitable to the organization. The following are the examples of cost units in different industries:-

Nature of Industry	Cost Unit.
Cement	Tonne
Cable	Metre
Power	Kilowatt/ hour
Hospital	Per bed
Paper	Ream

9.4 COST ACCOUNTING PROFESSION IN INDIA

To develop the Cost and Management Accountancy profession, the Institute of Cost and Works Accountants of India was set up at Calcutta in 1944. It got statutory recognition in 1959. It has more that two chapters through India and around six overseas centres.

The Department of Company Affairs issued a specific order under section 233 (1) of the Companies Act, 1956 to a particular company to get its cost records audited. The order indicates the product and the period to be covered. The cost audit is conducted by a Cost Accountant holding a Certificate of Practice from the Institute. The Department of Company Affairs of the Government of India also prescribed Cost Accounting Records & Rules under Section 209(1) (d) of the Companies Act, 1956. Accordingly, more than 35 industries are required to maintain Cost Accounting records relating to Production, Work in Progress, Finished Goods, Utilities, Repairs and Maintenance, Wages and Salaries Overheads and Sales.

9.5 OBJECTIVES OF COST ACCOUNTING

The cost accounting objectives are normally used to denote activities for which costs are required to be determined separately. The activities may be function, organizational sub-division, contract or other work unit for which data are required. There is direct relationship among information needs of management, cost accounting objectives and techniques and tools used for analysis in cost accounting. Thus, cost accounting has the following objectives-

- To determine product costs.
- 2. To facilitate planning and controlling of regular business activities.
- 3. To supply information for short and log run decisions.

9.6 IMPORTANCE OF COST ACCOUNTING

Cost Accounting is very important for a commercial organization. It is also useful for any other organization. It helps management in different fields one of such fields is presentation of information in the most useful manner. Cost Accounting is used to measure, analyse or estimate the costs. Profitability and Performance of individual products, departments and other segments of an organization, for either internal or external or both and to report to the interested parties. Cost Accounting concerns itself with the synthesis and analysis of costs. Its purpose in the modern days is to help management in the twin functions of decision-making and control. Thus, Cost Accounting is not simply cost finding but it is advising management, planning and control of organization and business operations. The Companies Act, also provides that certain companies have to maintain cost accounting records and accounts and conduct the audit of cost accounts.

9.7 ADVANTAGES OF COST ACCOUNTING

A cost accounting system when installed will result in the following:-

- Cost Accounting reveals areas where materials were used excessively, labour operated inefficiently and expenses incurred exorbitantly.
- It suggests cost reduction programme. A continuous cost jointly with technical personnel seeking areas for effecting cost reduction brings beneficial results.

- iii) Cost account locates the specific causes for the variations in profit. It points out the losing product or operations. It indicates reasons for loss and suggests remedial measures in time.
- iv) It provides suitable data to management to select best alternatives. It may be to decide whether to buy or make a part, to operate Machine X or Y, to accept or reject an order below cost.
- Cost accounts give actual cost for price fixation. True demand and supply play vital role in fixing price. But cost is an essential guide here.
- vi) It provides vital data to till in tenders. Tenders filled in with the help of marginal costing technique are successful.
- vii) Standard costing and budgetary control aid maximum efficiency.
- viii) Cost comparison helps cost control. Such comparison may be between different periods of the same department or comparable operations of different units.
- ix) Cost data are useful to outside agencies like Government, Tribunals, etc., for taking decisions on tariff regulations, settlement of disputes, variations in wage levels etc.
- x) It provides idle capacity cost to assist overcoming capacity utilization crises.
- xi) Marginal costing technique helps to take suitable short term decisions in times of trade depression.
- xii) Cost Accounting lays down cost centres and responsibility centres which ensures proper organizational structure.

- xiii) Cost accounting provides for perpetual inventory system. This enable inventory control and preparation of short term profit and loss accounts.
- xiv) Cost of closing stock of raw materials, work in progress and finished products are readily available in cost records.

All organizations will not get all the advantages listed above. However, an efficiently operated costing system with full support from management can reap most of them.

9.8 FINANCIAL ACCOUNTING

Financial Accounting is concerned with providing information to external users such as shareholders, creditors, labour unions, government authorities etc., It is oriented towards the preparation of financial statements i.e. Profit and Loss account and Balance Sheet which summarises the results of operations for selected periods of time and show the financial position at particular dates. It follows Generally Accepted Accounting Principle. Financial accounting accounts for money. Since, financial statements are general purpose in nature and only one set of accounts is prepared and sent to all, financial accounting suffers from the following limitations.

Limitations of Financial Accounting -

- 1. Financial accounting is mostly historical in nature.
- 2. It does not provide detailed cost information for different jobs. processes or departments.
- 3. It is difficult to know the behaviour of cost as expenses are not classified into fixed and variable.
- 4. It does not possess an adequate system of standards to evaluate the performance of departments and employees.
- 5. It does not provide necessary information to management in taking important decisions like pricing, special orders, alternative etc.
- 6. Annual reporting is a rule in financial accounting.

9.9 METHODS OF COSTING AND TYPES OF COSTING

Several methods or types of costing have been designed to suit the needs of individual business conditions.

There are two main methods of costing; these are:

Job Costing and Process Costing.

All other costing methods are either variants of these two methods or techniques designed for particular purposes, for specific occasions and for specific conditions.

9.9.1 Job Costing : This method is suitable for ascertaining cost of a job, a specific order or a batch of finished products.

Here the cost unit is a job comprising a specific quantity manufactured as per an order. A job may be small or big. It may be as per a customer's order of for stock for eventual sale. Other variations of job costing are given below: -

- i) Contract Costing: This method is used by contractors for construction of building bridges etc. Here the unit of cost is a contract. The period of this contract normally extends beyond the current financial years.
- **Batch Costing :-** This method is applicable to manufacturers producing economic batches of components for subsequent assembling. Large engineering firms use this method. Here the costing is done for a batch of the components instead of a single component.
- **Multiple Costing :-** This is used in large industries such as automobile, aero plane industries etc., Here the cost of

components is calculated separately. Each component has a job sheet. Later, these are assembled to complete the cost of aeroplane or other finished product.

- **9.9.2 Process Costing :-** This method is used by industries manufacturing products by continuous processes. Cost is ascertained for a period by process or department. As distinct from job costing, time is given more importance here. Hence, this is also called period costing. Examples of the industries using process costing are chemical industries, paper making and refineries. Other variants of process costing are:
- i) Operation Costing: Operation Costing is applied where the production passes through several operations successively before the final product is made. Wastages may occur in each operation. Operation costing is used in industries such as box making, shoe making, toy making industries. Here cost unit is an operation around which costs are accumulated.
- ii) Single or Output or Unit Costing: This method is applied where the production is of continuous nature and the final product is only one or the different grades of same product. Examples of the industries applying this method are mining industry, quarries and steel production.
- **Operation Costing :-** This method is applied for ascertaining cost of service rendered. Examples of industries using this method are transport services, electricity and boiler house. In transport services, the unit of cost is a passenger Kilo-meter, or a Kilogram kilometer.

9.10. ESSENTIAL OF A GOOD COSTING SYSTEM

i) The costing system should fit in the general organisation of the business. Normally no alternations in the organisation should be made to facilitate costing system. However, unavoidable changes could be made in the set up to ensure effective costing system.

- ii) All relevant technical aspects (such as nature and method of production, varieties of product) should be adequately studied for employing suitable cost control devises.
- iii) The size, lay out and organisation of the factory should be adequately described for the benefit of those operating costing system.
- iv) The procedure required to be followed for purchase, receipt, storage and issue of materials should be clearly laid down.
- v) The methods of wage payment and system of labour control should be specified.
- vi) The norms for appointment and allocation of overhead should be specified.
- vii) Forms and records of original entry should be suitably designed to ensure economy.
- viii) The forms should be got printed. It should contain full instructions. Persons who use them should be adequately trained to ensure accuracy and relevance of the data written on the forms.
- ix) An examiner should check and sign every entry in the forms.
- x) Responsibility for preparing and sending the cost reports to various levels of management at periodical intervals should be fixed and necessary instructions in this regard issued.
- xi) Full co-operation from all concerned in the management should be enlisted. The resistance from the employees should be minimum.

- xii) Cost of administering the costing system should be commensurate with the benefit available there from.
- xiii) Design the system suitably to enable exercising cost control effectively.
- xiv) The cost accounts and the Financial accounts should be interlocked. Alternatively, result of the two sets of accounts should be reconciled.
- xv) Frequency, regularity and promptness in the presentation of cost reports should be ensured.

9.11 DISTINCTION BETWEEN COST AND FINANCIAL ACCOUNTING:

Cost Accounting is a close follower of financial accounting. It is not independent of financial accounting. Though there are common grounds between the two, the important differences are given below:-

- i) Reporting:- The major objective of financial accounting is external reporting whereas the focus of cost accounting has been essentially internal i.e. management.
- **Flexibility:** Financial accounting is mostly historical or after the event while cost accounting is much more flexible and open minded and includes in both retrospective and anticipatory calculations.
- Nature: Financial accounting classifies, records, presents and interprets in terms of money transactions whereas cost accounting classifies, records, presents and interprets in a significant manner the material, labour and overhead costs involved in manufacturing and selling each product.
- **iv)** Financial accounting uses Generally accepted Accounting Principles while recording, classifying summarizing and reputing business transactions whereas cost accounting is not bound to

use GAAP and it can use any technique or practice which generates useful information.

- v) Time Span: Financial accounting data are developed for a definite period, usually a year, half year or a quarter, but cost accounting reports and statements can be prepared whenever needed.
- vi) Accounting Method: Financial Accounting follows the double entry system for recording, classifying and summarizing business transactions. The data under Cost Accounting can be gathered for small or large segments or activities of an organisation and monetary as well as other measures can be used for different activities in the organisation.

9.12. ELEMENTS OF COSTS.

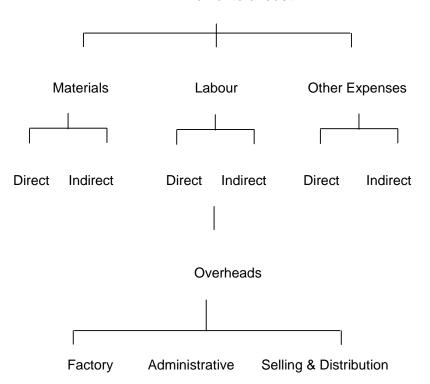
9.12.1 Composition of Elements of Costs:-

A manufacturing organisation converts raw materials into finished products. For that it employs labour and provides other facilities. While compiling production cost, amount spent on all these are to be ascertained. For this purpose, cost are primarily classified into various elements. This classification is required for accounting and control.

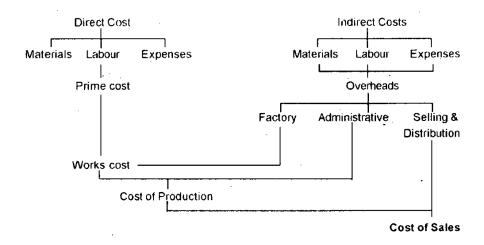
The elements of cost are (i) Direct material (ii) Direct labour (iii) Direct expenses and (iv) Overhead expenses.

The following chart depicts the broad headings of costs and this acts as the basis for preparing a Cost sheet.

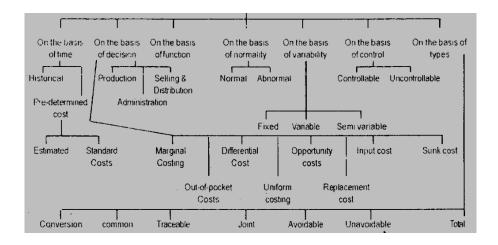
Elements of cost



Break up of cost sheet



CLASSIFICATION OF COSTS



9.12.2 Prime Cost :

The aggregate of Direct material cost, Direct labour and Direct expenses is termed as Prime Cost. Direct costs are traceable to products or jobs.

9.12.3 Direct materials

It includes cost of materials consumed in the production process which can be directly allocated to the cost center. Direct material can be identified and charged to the finished product.

Examples-

- i) Material specially purchased for a specific job or process.
- ii) Materials passing from one process to another.
- iii) Consumption of materials or components manufactured in the same factory.
- iv) Primary packing materials.
- Freight, insurance and other transport costs, import duty, octroi duty, carriage inward, cost of storage and handling are treated as direct costs of the materials consumed.

In certain cases direct materials are used in small quantities and it will not be feasible to ascertain their costs and allocate them directly. For instance, nails used in the manufacture of chairs and tables, glue used in the manufacture of toys. In such cases cost of the total quantity consumed for the period will be treated as Indirect costs.

9.12.4 Direct Labour

This includes the amount of wages which can be easily identified and directly charged to the product. These are the costs for converting raw material into finished products. Wages paid to workers for operating Lathe machines, Drilling machines etc. in a Tool room are Direct wages.

9.12.4 Direct Expenses

This includes expenses other than materials and labour which can be easily identified with a particular product or process. For example. Excise duty expenses. Indirect costs cannot be easily identified with a particular products or process.

9.12.6 Indirect materials

Materials which cannot be traced as part of the finished products are known as Indirect materials.

Example:

- a. Consumable stores such as lubricants, cotton wastes, tools etc.
- b. Materials of insignificant value not worthwhile to ascertain the cost separately, for charging directly such as nails (for making chair) glues (for making toys). These materials can be apportioned to or absorbed by cost centres or cost units arbitrarily.

Indirect labour is the cost which cannot be directly charged or identified to the finished product. Indirect labour is apportioned to or absorbed by cost centres or cost units suitably.

Examples:

- a. Salary to Store- keeper
- b. Wages to Time keeper

9.12.7 Indirect Expenses:

These are general expenses not incurred for any particular product or service and not chargeable to the products directly.

Examples:

- a. Rent, Rates and Insurance of Factory
- b. Power,lighting,heating repairs, telephone expense, printing and stationery.

Overheads can be sub-divided into following main groups.

1. Factory or Works Overheads: Also known as manufacturing or production overheads it consists of all costs of indirect materials, indirect labour and other indirect expenses which are incurred in the factory.

Examples:

Factory rent and insurance. Depreciation of Factory building and machinery.

2. Office or Administration overheads: All indirect costs incurred by the office for administration and management of an enterprise.

Examples:

Rent, rates, taxes and insurance of office buildings, audit fees, directors fees.

3. Selling and Distribution overheads: These are indirect costs in relation to marketing and sale.

Examples:

Advertising, Salary and Commission of sales agents, Travelling expenses of salesmen.

Correct Sequence:

Direct Materials		
+		
Direct Labour	Prime Cost (main cost of production)	
+		
Direct Expenses		
+		
Indirect Materials		
+		
Indirect Labour	Factory Overheads (From raw materials to finished goods)	
+		
Indirect Expenses		
	=	
Works cost		
	+	
Indirect Materials		
+		
Indirect Labour	Administrative Overheads	
	(Management and Administration of enterprise)	
+		
Indirect Expenses		
Indirect Materials		
+	Selling and Distribution Overheads	
(Delivery from		
Indirect Labour	warehouse to customer)	
+		
Indirect Expenses		

=

Cost of Sales

+

Profit

=

Sales

9.13. SUMMARY

Cost Accounting is the process of accounting for costs from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centre and cost units. Cost accounting profession got recognition in 1939 in India. It has been made compulsory for specified manufacturing companies. Cost Accounting has the objectives of determining Product costs, facilitate planning and control of regular business activities and supply information for taking short term and long-term decisions. Cost Accounting is useful in different areas such as materials, labour, overheads, stock valuation etc.

Financial Accounting is concerned with providing information to external users. It does not provide detailed cost information for different jobs, processes or departments. It also does not possess an adequate system of standards to evaluate the Performance of departments and employees. There are two major methods of costing- job costing and process costing. Job costing includes Contract, Batch and Multiple costing. Costing system should be developed in an organisation to fit in the general organisation of the business. Cost and Financial Accounting are different from each other.

9.14 TERMINAL EXERCISE

- What is cost Accounting? What are its objectives?
- 2. How does cost accounting help in planning and control of operations of a business enterprise?
- 3. Distinguish between Cost Accounting and Financial Accounting
- 4. What is Financial accounting? What are its limitations?

- 5. What are the advantages of Cost Accounting?
- 6. What are the essentials of good costing system?
- 7. What are the various elements of costs?
- 8. Write short notes on:
 - a) Cost centres
 - b) Cost units
 - c) Costing methods
 - d) Cost Accounting as a Profession
 - e) Elements of costs

9.15 BOOKS - RECOMMENDED

- 1. Principles & Practice of Cost Accounting N.K.Prasad
- 2. Wheldons Cost Accounting & Costing Methods Owler & Brown.

