

UNIT 1 NATURE AND SCOPE

Structure

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1.0 OBJECTIVES

After studying this unit, you should be able to :

- describe the need for costing in modern economy
- define 'costing' and 'cost accounting'
- specify the object's of costing
- differentiate between cost accounting and financial accounting
- explain the importance of costing
- state the major considerations in the installation of a costing system.

1.1 INTRODUCTION

You know that Cost Accounting is a specialised branch of accounting. It is concerned with classifying, recording and appropriate allocation of expenditure for the determination of costs of products and services and the ascertainment of the profitability. It also embraces the preparation of periodical statements and reports for purposes of controlling costs and managerial decision-making. In this unit we shall introduce you to the nature and scope of cost accounting and discuss in detail the need for cost accounting, its definition and objects, the difference between cost accounting and financial accounting, the advantages of cost accounting, and the installation of a costing system in an organisation.

1.2 NEED FOR COSTING

Every economic activity, particularly an activity involved in the production of goods or in rendering service, involves some expenditure. The expenditure may be in terms of materials, labour and other direct or indirect expenses. The major purpose of such activities in a business enterprise is to earn profit. It is, therefore, necessary that all the three elements of the transaction (i.e. cost, profit and price) are clearly identified.

For example, a shoe factory launches a new sport shoe. It has to incur Rs. 20 for material, Rs. 30 for labour and Rs. 25 for other expenses (overheads) on every pair of shoes produced by the factory and supplied in the market. The factory has fixed the selling price of the shoes at Rs. 100 per pair. Thus, the cost of a pair of shoes is Rs. 75 ($20 + 30 + 25$), its selling price is Rs. 100, and the profit per pair is Rs. 25 ($100 - 75$). The management requires such information in respect of each product manufactured and each activity undertaken by the organisation for purposes of planning, cost control and decision-making. But, the records maintained under

financial accounting fail to provide the necessary information. Hence, the accountants developed a new system of accounting called 'cost accounting' under which records of transactions are maintained in such a manner that detailed cost information is readily available in respect of each product, job, department, process, etc. In fact, various deficiencies and limitations of financial accounting gave rise to the need for cost accounting.

1.2.1 Limitations of Financial Accounting

- 1) It does not provide detailed operating information for each department, process, product, or other unit of activity within the organisation. It simply provides information in terms of income, expenses, assets and liabilities for the enterprise as a whole.
- 2) It does not classify expenses into direct and indirect or fixed and variable. The costs are not assigned to the products at each stage of production so as to reveal controllable and uncontrollable items.
- 3) It does not set up a proper system of control over the main elements of cost viz., materials and labour. Hence, the wastages and losses of materials go unchecked and utilisation of labour time remains uncontrolled.
- 4) It does not establish standards or norms against which different cost items can be compared.
- 5) It does not provide adequate costing information for fixation of selling price of various products manufactured or services provided by the organisation.
- 6) It contains historical cost information which is compiled at the end of the accounting period. Hence, it becomes difficult to compile cost data at frequent intervals.
- 7) Since product-wise cost and profit information is not available from financial accounts, the analysis of causes for profit or loss cannot be effectively done. Financial accounts are at best like a thermometer which can only indicate the temperature of the body but cannot help diagnosis or cause analysis of its health.

1.2.2 Costing and the Economy

Let us now analyse the need for costing in a relatively wider perspective. Modern economy has a few characteristic features which further establish the necessity of costing. These can be summarised as follows :

- 1) Global Competition : There is an ever increasing amount of competition in the market both internally and externally. Only those producers can meet the challenge who exercise stringent control over costs and follow sound pricing policies.
- 2) Limited Resources : There has been an acute scarcity of resources which require an effective and economic utilisation by curtailing wastages and losses.
- 3) Complex Management : The management of industrial organisations has become an extremely complex process demanding attention and action at every stage of operation and in every area of production.
- 4) Fast Decisions : Correct and quick decisions are required on the basis of adequate information supported by reliable data.
- 5) Special Responsibility : Every business shares a heavy social responsibility in terms of proper quality, reasonable prices, regular supply, etc.
- 6) Optimum Profit : All business ventures aim at maximisation of profit which is mainly based on an efficient performance in financial, personnel, production and marketing activities.

If we correlate the above factors, costing appears to be the only underlying link between different factors and the only unifying force behind business success. Costing aids pricing, checking of wastage, control of resources, management of processes, flow of data for decisions, discharge of social obligations and provides an opportunity for profit growth in the organisation. A large number of industrial establishments, therefore, have been showing an increasing confidence and reliance in the system of costing and have been applying it to the management of their different economic assignments.

1.3 DEFINITIONS OF COSTING AND COST ACCOUNTING

The term 'Costing' refers to the technique and process of ascertaining costs. It consists of principles and rules which are applied for ascertaining the cost of products manufactured and services rendered. The term 'Cost Accounting' refers to the process of accounting for costs. It begins with the recording of all incomes and expenditures and ends with the preparation of periodical statements and reports for ascertaining and controlling costs. Thus, cost accounting is more comprehensive a term which includes costing. **In actual practice, however, these two terms are used interchangeably.** Wheldon, after expanding the ideas contained in the definitions of 'Costing' and 'Cost Accounting' has given an exhausting definition of Costing which reads as follows :

Costing is the classifying, recording and appropriate allocation of expenditure for the determination of the costs of products or services; and for the presentation suitably of arranged data for purposes of control and guidance of management.

At initial stages of the development of cost accounting, the Terminology published by the Institute of Cost and Management Accounts (ICMA) of U.K. even distinguished between 'cost accounting' and 'cost accountancy' and defined the latter as "the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability as well as the presentation of information for the purpose of managerial decision-making." But, now-a-days the term, 'Cost Accountancy' is not used at all. Most of the authors use the term "Cost Accounting" and do not even recommend the use of 'Costing'. According to the latest Terminology published by the Institute of Cost and Management Accountants, "Cost accounting is that part of management accounting which establishes budgets and standard costs and actual costs of operations, processes, departments or products and the analysis of variances, profitability or social use of funds." Thus, we can say that

- a) Cost accounting is a process of accounting for costs.
- b) It incorporates incomes and expenditures relating to the production of goods or services.
- c) It provides statistical data on the basis of which future estimates may be prepared.
- d) It serves as a basis of ascertainment and control of costs of products and services.
- e) It involves the functions of (i) analysis, (ii) recording, (iii) establishment of budgets and standards, (iv) comparison, and (v) reporting.

Check Your Progress A

- 1) What is Costing?

- 2) Define Cost Accounting?

- 3) Give four examples of expenses which constitute cost in a ready-made garments factory.
 - a)
 - b)
 - c)
 - d)

- 4) State whether each of the following statements is True or False.
- i) Cost Accounting gets its basic data for estimates from the financial accounting system.
 - ii) Cost Control means a lower amount of profit to the company.
 - iii) Customers get more satisfaction when they buy goods at reasonable prices.
 - iv) If resources are scarce, cost of production will be low.
 - v) Cost Accounting is a comprehensive term which includes costing.
 - vi) Cost Accounting provides data for managerial decision-making.

1.4 OBJECTS OF COST ACCOUNTING

The main objects of cost accounting are as follows :

- 1) To ascertain the cost of products and services;
- 2) To aid in fixation of selling price or quotation for tenders;
- 3) To analyse and classify the different elements of cost which constitute the total cost;
- 4) To identify causes of wastage and apply appropriate course of action for checking the wastage;
- 5) To control costs by analysis and comparisons;
- 6) To communicate to the management all information relating to costs and facilitate managerial decision-making;
- 7) To judge the relative efficiency of different departments, branches, products, units, plants and machinery and devise means of increasing their productivity; and
- 8) To produce cost statements as and when required by the management for an interim review of production, sales and profit or to plan future activities.

Thus the objects of costing establish the fact that it is an essential branch of accounting. It is the key to economy in cost of production and is an essential technique of ensuring efficiency in management.

1.5 DIFFERENCE BETWEEN COST ACCOUNTING AND FINANCIAL ACCOUNTING

The difference between Cost Accounting and Financial Accounting is as follows :

Cost Accounting	Financial Accounting
1) Ascertains the cost of goods or services.	Presents the operational results and financial position of the business.
2) Serves the information needs of the management.	Provides financial information about the company to its shareholders , creditors, employees and the society at large.
3) Need not be followed by a system of external audit.	Needs a system of independent audit to ensure that the financial statements give a true and fair view of the state of affairs.
4) Classifies expenses into material cost, labour cost, fixed overheads and variable overheads.	Transactions relating to all receipts and payments of the business are classified into debit and credit entries.
5) Shows expenses in a cost sheet, process account, contract account or some other statement of account.	Consolidates all transactions into two financial statements i.e., Trading and Profit & Loss Account and Balance Sheet.

6) Does not form a basis for tax assessment because this is not a record.	Acts as a basis for determination of tax liabilities of the business.
7) Requires variance analysis to identify the favourable or adverse differences between the standard cost and actual cost.	Records only the actual transactions occurring in course of business operations.
8) Presents the cost information at frequent intervals.	Presents financial information once or twice a year.
9) Finds out the profit or loss on specific products, branches, departments, jobs, or processes.	Gives the operational results of the entire business.
10) Maximises future efficiency of operations with the help of cost data used to exercise control and check wastage.	Uses accounting ratios to compute the major trends which have already taken place in the previous accounting period.
11) Accounts also for physical units such as labour hour, machine hour, etc.	Follows only monetary units for recording transactions in the books of account.

Common Goal : Despite the differences of purpose and approach between Cost Accounting and Financial Accounting, both the systems have a **common** goal of continuously assisting the organisation they serve. In fact, the two are complementary to each other. In a developing enterprise, therefore, both the systems operate to the advantage of the organisation and contribute to the smooth running of the business.

1.6 ADVANTAGES OF COST ACCOUNTING

Having learnt the need for costing, its meaning and objects, and the difference between Cost Accounting and Financial Accounting, it should not be difficult for you to list the advantage's of Cost Accounting-and appreciate it as an invaluable aid to management.

An effective and organised system of costing helps :

- 1) Continuous flow of information regarding production, cost, materials, labour, stores, plant capacity, etc., which assist output planning.
- 2) **Identification** of unproductive activities, losses or wastage of resources, obsolete machinery and points of inefficiency which demand a quick remedial action.
- 3) Compilation of correct and reliable cost data.
- 4) Preparation of budgets and business forecasts.
- 5) **Measurement** of efficiency of operations through establishment of standards and analysis of variances.
- 6) **Fixation** of selling prices.
- 7) Cost comparisons **between different periods**, products, departments or firms.
- 8) Estimates of costs **and** revenue in advance.
- 9) Inventory control **and** periodical stock-taking.
- 10) Identification of idle capacity and the cost of working below the installed capacity.
- 11) Ascertainment of cost and profit more frequently and examination of their causes in detail.
- 12) Decisions on the basis of facts and figures and formulation of suitable policies for various matters such as
 - i) level of output
 - ii) make or buy decision
 - iii) replacement or modernisation of old equipment
 - iv) shut down or continue during depression
 - v) introduction of new products or elimination of old ones
 - vi) acceptance of a special order
 - vii) replacement of labour with machinery

Because of the above advantages of cost accounting, its use is no more restricted to manufacturing establishments. Now-a-days, costing is used by various institutions **such** as hospitals, transport undertakings, local authorities, offices, banks, educational institutions; etc.

Besides, costing is of considerable advantage to the consumers. They get products at reasonable prices due to proper costing system. To the employees of the organisation, costing is beneficial in granting incentives to good work, bonus and higher wages. Costing helps the investors, bankers, lenders and shareholders in evaluating the past profitability and future prospects of the company. It ultimately benefits the economic development of the country as a whole because of efficiency in industrial operations, effective mobilisation of resources, balanced utilisation of funds and timely achievement of targets.

Check Your Progress B

- 1) Give four main objects of costing.
 - a)
 - b)
 - c)
 - d)
- 2) State four major differences between Cost Accounting and Financial Accounting.
 - i)
 - ii)
 - iii)
 - iv)
- 3) Select and tick the most appropriate alternative to fill in the blanks.
 - i) Cost Accounting can the future cost of production
 - a) ascertain
 - b) forecast
 - c) analyse
 - d) estimate
 - ii) Cost Accounting gives information to the management for the purpose of
 - a) employees' welfare
 - b) decisions
 - s) efficiency
 - d) profitability
 - iii) Cost statements form part of the, accounts of a company.
 - a) published
 - b) statutory
 - c) internal
 - d) taxation
 - iv) Costing is based on figures.
 - a) estimated
 - b) actual
 - c) accurate
 - d) projected
 - v) Costing records must also be, by management.
 - a) audited
 - b) prepared
 - c) verified
 - d) analysed

1.7 INSTALLATION OF A COSTING SYSTEM

In view of the growing size and variety of organisations a single system of costing cannot suit every business. The principles and procedures of costing, therefore, have to be applied in each organisation according to its own characteristics and environment. In other words, it is only a properly designed system of costing suitable to the organisation which can help its successful operation.

Before introducing a system of costing, it would be advisable to conduct a preliminary investigation to assess the exact requirements of the business in respect of :
(a) product, (b) organisation, (c) manufacturing process, and (d) selling and distribution methods. Moreover, it should ensure that

- i) the existing organisation is disturbed to the minimum;
- ii) the system is implemented gradually;
- iii) the process of costing designed for the organisation is compact and goes into meaningful details only;
- iv) the procedure is simple and economical to operate; and
- v) the system is able to generate periodical reports to various levels of management.

The two other aspects which need a proper assessment before the installation of a system of costing are :

- 1) What are the major objectives of costing in the business? For example, whether it is being introduced for fixing the prices or for instituting a **system** of cost control, or for both.
- 2) What are the practical difficulties in the process of introduction of the system?

1.7.1 Possible Difficulties

We must be conscious of the difficulties in introducing the system of costing and that they have to be overcome. These difficulties usually are :

- 1) Inadequate support from top management and opposition to the system by some officers.
- 2) Resistance from staff associated with the operation of the financial accounting system.
- 3) Resentment at other levels in view of the additional work expected due to the costing system.
- 4) Shortage of trained and qualified staff to handle the new system.
- 5) Heavy costs involved in the process of installation.

1.7.2 Factors to be Considered

The following factors should be considered before the installation of a system of costing :

- 1) Objective of the costing system
- 2) Nature of the business
- 3) Quality of the management
- 4) Size and type of organisation, scope of authority, sources of information and reports to be submitted
- 5) Technical aspect of the business
- 6) Attitude and behaviour of the staff in extending co-operation to the system and the organisation
- 7) Impact of different operations on variable expenses
- 8) Manner of reconciliation between cost and financial accounts and the possibilities of developing them into an integrated system of accounting through control accounts
- 9) Quantum of information needs and the process of collecting the data without much labour
- 10) Nature of the product and the type of costing system which will suit the product
- 11) Extent to which the importance of the system can be appreciated by the supporting staff and an awareness created among them about the relevance of regular data collection

1.7.3 Success of the System

The requisites of an effective system of costing are as follows :

- 1) It suits the nature and requirements of the business.

- 2) It is simple and easy to operate. For this purpose, standard forms should be used and the objective of every record and report should be clear to all Concerned.
- 3) It receives full cooperation of the staff.
- 4) It ensures promptness and regularity in flow of required information for the preparation and presentation of costing reports.
- 5) It is closely linked with the financial accounting system and makes it easier to reconcile the results obtained by cost accounts and financial accounts.
- 6) It contributes to cost control effectively.
- 7) It provides for comparison of estimates with the actual results.
- 8) There is considerable amount of flexibility in the system so that it can easily adjust with the changing conditions or requirements of the business.
- 9) The cost of installation and operation of the costing system is justified by the benefits derived from the system.

Thus, the system of costing proposed to be installed in an organisation must be properly planned and introduced carefully so that it is competent enough to deliver the desired results. Much depends upon the manner in which the system operates so as to derive its best advantage.

Check Your Progress C

- 1) State four major factors which you will take into account for installation of a costing system in an organisation.
 - i)
 - ii)
 - iii)
 - iv)

- 2) State the possible difficulties faced in introducing a costing system in an organisation.

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- 3) Answer YES or NO in case of the following statements.
 - i) Costing produces information which may also be useful to the competitors of the business. Yes/No
 - ii) Wastage of labour need not be checked in an effective system of costing. Yes/No
 - iii) Cost records can assist verification of results shown by the financial accounts. Yes/No
 - iv) There is a standard system of costing which suits all types of organisations. Yes/No
 - v) The cost of the costing system should be justified by the benefits derived from the system. Yes/No
 - vi) The costing system should be independent of the financial accounting system. Yes/No

1.8 LET US SUM UP

Costing is a specialised branch of accounting which is responsible for the ascertainment and control of costs of goods produced and the services provided by the business. Its need arose because of the limitations of the financial accounting and the complexities of managing a modern enterprise.

Cost Accounting refers to the principles, methods and techniques used for the ascertainment and control of costs as well as the presentation of information for managerial decision-making. Its main objects are (i) ascertainment of costs, (ii) fixation of prices, (iii) control of costs, and (iv) providing cost data for managerial use. Cost Accounting differs from Financial Accounting in respects of (i) the interests it serves, (ii) the objectives to be achieved, (iii) analysis of cost and profit, (iv) mode of presenting information, and (v) the periodicity of reporting.

For installation of a costing system in any organisation, it must be ensured that (i) it suits the nature of the business, (ii) it is simple to understand and easy to operate, (iii) it is introduced gradually, (iv) it provides the necessary information promptly and regularly, (v) it is economical, and (vi) it is flexible.

1.9 KEY WORDS

Allocation : Distribution of expenditure among various cost centres.

Budget : An estimate of allocations in respect of expenditure **and/or** revenue during a given future period.

Costing : The technique and process of ascertaining **costs**.

Cost Sheet : A statement showing different elements of cost relating to a particular product or a job for a particular period.

Cost Centre : A location, person, equipment or department for which costs may be ascertained and used for purposes of control.

Direct Expenses : Expenses incurred in connection with material, labour, etc. which can be directly identified with items produced.

Fixed Expenses : Expenses which do not increase or decrease with a change in volume of output.

Idle Capacity : Unutilised production capacity of an enterprise.

Installed **Capacity** : Total production capacity of an enterprise.

Indirect Expenses : Overheads relating to manufacturing, administration, distribution or selling which cannot be directly identified with items produced and so have to be allocated on some rational basis.

Overheads : All types of indirect expenses.

Quotation : Minimum acceptable price offered for the supply of goods or services.

Reconciliation : Matching two results by locating the causes of difference and making them agree through appropriate adjustments.

standard : Pre-determined level of performance or cost based on previous experience and a realistic assessment of the present situation.

Unit Cost : Total cost divided by the output quantity.

Variance : Difference between standard cost and actual cost.

Variable Expenses : Expenses which increase or decrease in the same proportion as the increase or decrease in the output.

1.10 ANSWERS TO CHECK YOUR PROGRESS

A 3 (a) Wages (b) Cloth (c) Buttons (d) Package
4 (i) True (ii) False (iii) True (iv) False
(v) True (vi) True

B 1 (a) Cost ascertainment (b) Cost control
(c) Fixation of prices (d) Providing data for management decisions
3 (i) d (ii) b (iii) c (iv) a (v) c

C 3 (i) No (ii) No (iii) **Yes** (iv) No (v) Yes (vi) No

1.11 TERMINAL QUESTIONS

1) Why do we need an effective system of cost accounting in a business enterprise?

- 2) Define 'Cost Accounting'. State its main objects.
- 3) State the importance of costing in a modern economy.
- 4) Differentiate between Cost Accounting and Financial Accounting.
- 5) What are the major advantages of Cost **Accounting** to a manufacturing concern?
- 6) How can you install a system of costing in a biscuit producing factory? What are the possible difficulties in installing such system?
- 7) "Financial Accounting procedures are generally designed to ascertain the periodic profit or loss, but there are important limitations and deficiencies in the system." Discuss.
- 8) How do Cost Accounting records help in the planning and control of business operations of an enterprise?

Note : These questions will help you to **understand** the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.

UNIT 2 CONCEPT OF COST AND ITS ASCERTAINMENT

Structure

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Meaning of Cost
- 2.3 Classification of Costs
 - 2.3.1 Functional Classification
 - 2.3.2 On the Basis of Identifiability with Products
 - 2.3.3 On the Basis of Variability
- 2.4 Cost Unit
- 2.5 Cost Centre
- 2.6 Elements of Cost
 - 2.6.1 Materials
 - 2.6.2 Labour
 - 2.6.3 Expenses
- 2.7 Components of Total Cost
- 2.8 Cost Sheet
- 2.9 Methods of Costing
- 2.10 Types of Costing
- 2.11 Let Us Sum Up
- 2.12 Key Words
- 2.13 Answers to Check Your Progress
- 2.14 Terminal Questions

2.0 OBJECTIVES

After studying this unit, you should be able to :

- define the term cost
- explain the concepts of cost unit and cost centre
- classify costs
- describe the elements of cost
- give a **proforma** of cost sheet and identify the components of total cost
- describe different methods of costing and identify the industries to which each method is applicable.

2.1 INTRODUCTION

In Unit 1 you have learnt about the nature and scope of costing, the difference between Cost Accounting and Financial Accounting, and the advantages of installing a costing system in an organisation. You learnt that costing is the technique and process of **ascertaining costs**. In order to understand this process, one must gain familiarity with certain concepts like cost, cost unit, cost centre, classification of costs, elements of cost and components of total cost. This unit mainly covers these aspects and gives a **proforma** of cost sheet prepared for ascertaining cost and profit of each product manufactured by an organisation during a particular period. This unit also discusses various methods of costing and identifies the industries for which each method is considered suitable.

2.2 MEANING OF COST

Cost means the amount of expenditure (actual or notional) incurred on, or attributable to, a given thing. In other words, cost indicate: (i) an actual or estimated expenditure, (ii) a direct or indirect expenditure, and (iii) it is related to a job, process, product or service. **Examples** of expenses which constitute cost are :