Chapter 1.

COST ACCOUNTING:
AN AID TO MANAGEMENT.

Chapter Goals:
After the study, you should understand:
(1) Three classifications of subject of accounting.
(2) The need to install a system of cost accounting i.e. limitations of financial accounting.
(3) Nature of cost accounting.
(4) Contribution of cost accounting to management.

THE FIELD OF ACCOUNTING

Every organization aims at making best possible use of its scarce resources, wants to know the results of its efforts and needs a measure of comparison so that deficiencies and improvements can be identified and collective efforts of the organization can be channelized for the achievement of common goals. Different groups such as managers, investors, bankers, creditors, taxing authorities, regulatory agencies, labour unions and general public have their interests linked with business organizations. They need information concerning past, present and expected future activities of the concerns for diverse purposes.

Accounting is a specialized information system that provides economic information to different groups of people.
Financial accounting, cost accounting and management accounting are traditionally described as three branches of accounting. Each of these branches serves a different primary objectives and provides different, of course, interconnected information to different groups of users of accounting information.

Primary concern of financial accounting is to record, in a systematic way, money transactions between an economic entity and third parties such as suppliers, customers, employees, bankers etc. so that at the end of accounting year results of the whole year in terms of profit or loss can be measured and financial position on the closing date can be judged.

Financial accounts provide information to inside users i.e. management of accounting entity and to outside users i.e. shareholders, investors, bankers, government departments, trade unions and general public. The information provided by financial accounting is presented in the form of profit and loss account/income statement and balance sheet.

Main purpose for which this information is needed by the external users is to make decisions regarding their relationship with the organization. Shareholders need this information to evaluate performance of directors elected by them, investors need this information for making investment decisions, the same information is put to use by bankers for evaluating feasibility of advances, government agencies like taxation department requires this information for making assessment of tax, trade unions use this information to verify amount of bonus declared by the management under workers participation fund.

This information assists the internal users, i.e. the management, in comparing results of whole business unit with the results of previous years, for ascertaining trend of business and for making judgments about financial position of the enterprise. But utility of information provided by financial accounting is limited for the management as this information does not assist the management
in internal planning and control.

The Committee on Terminology of American Institute of Certified Public Accountants defines financial accounting in the following words:

Accounting is the art of recording, classifying and summarizing in a significant manner and in terms of money transactions and events which are, in part at least, of a financial character and interpreting the results thereof.

Cost Accounting

Cost accounting uses information provided by financial accounting together with much more details of operations of enterprise.

Cost accounting is collection, processing and evaluation of operating data e.g. cost of products, operations, processes, jobs, quantities of materials consumed, labour time used etc. for internal planning and control as well as for external reporting.

Basically cost accounting is for internal management of accounting entity; however, it also provides information for external reporting. The information provided for external reporting is quite different from information provided by financial accounting. For example, a medicine company wants to make a price adjustment; the company must submit a detailed cost report to the government to justify its claim for price increase. Similarly, in order to give a quotation for a cost plus profit contract a cost statement is to be submitted.

Production planning and scheduling, inventory planning and management, labour time and labour cost budgets are some of the areas where management is assisted by cost accounting. Cost accounting also provides information to management regarding actual results such as output of various departments, actual labour time and cost, cost of materials in process etc. This information is provided at much higher speed as these reports of actual results are prepared on hourly, daily and weekly bases. Cost accountant collects data both in monetary and nonmonetary terms e.g. kilograms of materials used, hours worked etc. Then
these data are compared with pre-established standards and budgets to exercise managerial control over the operations.

Institute of Cost and Management Accountants of U.K. defines cost accounting as:

The application of accounting and costing principles, methods and techniques in the ascertainment of costs and analysis of savings and/or excesses as compared with previous experience or with standards.

Management Accounting

Management accounting uses both financial and cost information to advise management in planning and controlling the organization. It is concerned with providing information to persons inside the organization. Management accountants design specific purpose reports to serve needs of decision makers. Because internal decision makers are primarily concerned with impact of their decisions on future performance of the organization, many management accounting reports are future oriented. Past and current activities are reported to the extent that such information helps management to plan for the future.

Institute of Cost and Management Accountants of U.K. defines management accounting in the following words:

The application of professional knowledge and skill in the preparation and presentation of accounting information in such a way as to assist management in the formulation of policies and in the planning and control of operations of the undertaking.

EVOLUTION OF COST ACCOUNTING

Practice of costing is as old as the business activity itself. Even in a barter economy people must be using some measure of costing to determine the rate of exchange of their goods.

After the industrial revolution (1750-1800) production of vast quantities of diverse products by complicated and alternative methods became a common phenomenon. Consequently the need for management of quantitative information became more profound.
Another factor that contributed towards the development of this subject was production of war equipments. During World War 1st (1914-18) huge quantities of war weaponry were produced on the basis of cost plus profit contracts, where justification and control of costs were called in question by the governments. These were the years when cost accounting got full recognition as a separate branch of subject of accounting.

The Great Depression of 1930s also increased the need to determine cost more precisely, so that it may be ensured that cost did not exceed the market price.

Price controls upon goods and services were imposed by many governments. Accurate facts and figures must have to be provided to support any claim for price increase. This also increased the need for accurate cost determination.

These factors, plus ever-increasing scale of business operations made cost accounting as an indispensable managerial tool.

**MANAGEMENT NEEDS AND ACCOUNTING**

Original financial accounting model based on double entry system of book keeping, developed by an Italian merchant named Lucas Pacioli, is basically to fulfill managerial requirements of a trading business. Financial accounting can measure results of a merchandizing business on the basis of departments which serves well the management’s needs for performance evaluation and for policy making. Similarly, in a trading business it is relatively easy to determine sales prices and value of inventory. The only costs to be considered for these purposes are the purchase price and transportation-in.

But in manufacturing concerns complicated production processes are employed. Consequently, pricing of products and valuation of inventories (raw materials, work in process and finished goods) require more elaborate computations. Moreover, evaluation of alternative methods of production, determination of profitability of different products, measurement of efficiency of labour and determination of magnitude of individual element of cost require much more detailed information which a system of financial accounting cannot provide. Management of a manufacturing enterprise needs to prepare not only financial budgets but also production budgets on weekly, daily and hourly bases and plans for purchase of manpower hours. Determination
of standard and actual costs and quantities is necessary for control purposes. Furthermore, management needs to know actual results of operations on daily or even hourly basis so that in case of deviation from budgets and standards corrective measures can be taken immediately. As such financial accounting is of little value to management as it is concerned with total of historical costs for the entire organization.

LIMITATIONS OF FINANCIAL ACCOUNTING

Limitations from which financial accounting suffers may be summarized as follow:

1. Historical And Monetary Nature. Emphasis of financial accounting is on recording transactions involving expenses and revenues only after they have occurred, then summarizing and reporting this information at the end of accounting year in the form of profit and loss account/income statement and balance sheet. These statements are general purpose statements and are valuable for external users. Value of these statements for management as a managerial tool is limited because effective management needs not only to know historical costs but also the anticipated costs.

Moreover, for the purpose of planning, budgeting, standard setting, evaluation etc., management also needs nonmonetary data e.g. kilograms of materials used, direct labour hours worked, machine hours used, maintenance and service hours produced etc. Such nonmonetary data are out of the scope of financial accounting.

2. Control Over Costs Is Not Possible. In order to exercise control over costs first requirement is to establish cost budgets and standards. Then an efficient system of reporting is required to provide data of actual operations so that wherever unfavourable deviations occur an immediate corrective action can be taken.

Financial accounting neither helps in preparing such budgets and standards nor does it help in speedy reporting of actual data. Financial reports prepared on yearly or half yearly basis can serve well the needs of taxing authorities, investors and other outside users, but one year or a half year is too long period of reporting to be effective for control purposes.
3. Does Not Reveal Relative Profitability of Products. Financial accounting measures result of whole business for a given period. While measuring the totals it may be the case that although business is earning profit yet some of the products are losing money. In this way higher profit earnings of some products are being offset by some unprofitable products. Financial accounts will keep the management in dark as to relative profitability of different products.

4. Does Not Assist In Pricing. As mentioned earlier financial accounting measures total cost after it has been incurred during the accounting period. Many times management is required to submit competitive bids for contracts. In order to submit such a bid, price of the product is to be determined before it is manufactured and before the costs are incurred. In such a situation financial accounting again fails to assist management.

5. Financial Accounts Are Not Classified. Management needs cost information departmentwise or processwise, jobwise or productwise so that in case of deviation from standards responsibility of individuals can be pinpointed and effective managerial control can be exercised. But financial accounts are not so classified to provide such information.

It is pertinent here to know how in a system of cost accounting the above mentioned limitations and deficiencies are removed to make the system of accounting more informative and useful. It is to be emphasized here that a system of cost accounting is based on the same fundamental principles of accounting. Debit and credit entries are made on the same principles as applicable to financial accounting. Moreover, cost and financial accounts are capable of complete reconciliation because they are produced from the same basic information.

Actual cost records compiled from day to day operations are also historical accounting records but these are summarized and reported in the form of different statements and on the basis of much shorter time span i.e. weekly, daily and even hourly basis (particularly data relating to direct labour to assist the operating managers to achieve the daily and hourly targets of production).
Cost accounting data are recorded not only in terms of rupees but also in other units of measurement e.g. units produced per hour or per worker, quantity of materials used on a job or in a process or department. Many times nonmonetary aspect of the data is recorded before recording of data in rupees e.g. supervisor of a producing department who needs materials enter only quantities of materials required on materials requisition slips and after issue of the materials from storeroom cost accounting department makes valuation of materials requisitions in rupees.

Moreover, cost accounting is not influenced by externally imposed accounting principles, therefore, it is more adaptable to practical managerial needs.

Cost accounting is now used not only by manufacturing organizations but by service and trading organizations as well, both in profit and nonprofit sectors of economy. It is used as an aid for planning and control of ongoing operations, for evaluation of alternatives and projects, for pricing, for special and non-routine decisions and for external reporting. Cost accountant determines the use to be made of cost data in order to supply the most appropriate information.

1. Planning. Planning is the process of setting objectives and determining the steps needed to attain them. In other words, planning is the activity by which managers analyze present conditions to determine ways of reaching the desired future.

Planning requires reflective thinking, imagination and foresight. But the planning to be effective must be based on facts and figures. In planning management is interested in future costs. To supply appropriate information cost accountant makes analysis of costs of past operations. These historical costs are adjusted to reflect changes in products, technology, volume, production efficiency, input cost etc. The plans are numerically expressed in the form of budgets. In the planning process budgeting is the area where contribution of cost accounting is most visible.

2. Controlling. Controlling is the process by which management makes sure that intended and desired results are consistently and continuously achieved. The controlling process consists of three
steps: (i) establishment of standards, (ii) comparison of results against standards and (iii) correction of deviations.

Techniques for controlling the operations vary depending on what needs to be controlled. Figure 1-2 illustrates a hypothetical performance report used for control purposes.

<table>
<thead>
<tr>
<th>Item</th>
<th>Budgeted Cost</th>
<th>Actual Cost</th>
<th>Variance or Difference</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Rs. xxx,xxx</td>
<td>Rs. xxx,xxx</td>
<td>Rs. + x,xxx</td>
<td></td>
</tr>
<tr>
<td>002</td>
<td>xxx,xxx</td>
<td>xxx,xxx</td>
<td>x,xxx</td>
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<td>009</td>
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<td>xxx,xxx</td>
<td>- x,xxx</td>
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<tr>
<td>010</td>
<td>xxx,xxx</td>
<td>xxx,xxx</td>
<td>+x,xxx</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Rs. xxx,xxx</td>
<td>Rs. xxx,xxx</td>
<td>Rs. - x,xxx</td>
<td></td>
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</tbody>
</table>

This type of comparison is made for particular periods of time, for jobs, for batches, for processes etc. If significant deviations occur management is notified and appropriate corrective measures are taken.

In these activities cost accounting assists management by developing standards, collecting data of actual results, preparing performance reports and by analyzing variances.

3. Evaluation of Alternatives. Management is frequently confronted with decisions involving choice from different alternative courses of action. Examples include: whether it is less expensive to make or buy a product, whether to continue or discontinue a product, whether to accept or reject a customer’s order at a predetermined price etc. Cost accounting provides information as to how future costs and revenues will be affected under each alternative. Thus cost accounting assists management in making appropriate selection.

4. Inventory Management. Cost accounting assists in inventory management by keeping complete record of materials from the time they enter into the premises till the time they are sold in the form of finished products. This also enables stock valuation to be given quickly for preparing periodic financial statements without any need of physical stock taking. In cost accounting, records, values of inventories of materials, work in process and
finished goods are available all the time.
Quantitative models for materials planning and management developed by cost accounting enable management to keep stocks to a the minimum and, at the same time, guard against being out of stock.

5. Pricing of Products and Projects. Pricing involves determination of prices of new products, adjustments in prices of existing products as well as determination of bid prices for contracts.

In purely competitive market environment price is determined by economic forces of demand and supply, but in most of the cases conditions of perfect competition do not exist and cost is one of the most important elements to be considered while determining or adjusting the prices. Where the management is required to submit a competitive bid for a contract e.g. construction of a road, supply of uniform to army etc. a similar problem of pricing arises. The decision of management is based on cost data collected by cost accounting.

6. External Reporting. Cost accounting also serves the purpose of external reporting. While making an upward adjustment in the rates of public utilities e.g. electricity, gas, petrol etc. the government must justify the increase before the opposition in legislative assemblies and before the general public. Similarly, a claim of association of transporters or that of a medicine company for a price increase must also be justified before the government in term of cost increase. Here cost accounting comes to the rescue by providing detailed cost reports to be presented to the assembly or to the government regulatory agencies.

7. Analysis of Financial Statements. Financial statements of a business organization are analyzed by external users and by management to arrive at quantitative decisions regarding profitability, financial strength, trend etc. The external users have to rely on financial statements provided to them in the form of annual reports. But the purposes and requirements of an analysis by the management are more profound. Cost accounting assists management in analysis of financial statements by providing detailed information about sources of profits or losses.
<table>
<thead>
<tr>
<th>Financial Accounting</th>
<th>Cost Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provides information to external users.</td>
<td>1. Provides information to internal users.</td>
</tr>
<tr>
<td>2. Provides general purpose financial statements.</td>
<td>2. Provides special purpose statements and reports.</td>
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<tr>
<td>3. Must conform to generally accepted accounting principles.</td>
<td>3. Must conform to information needs of management.</td>
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<tr>
<td>5. Financial statements are prepared on yearly or half yearly basis.</td>
<td>5. Cost statements and reports are prepared more frequently i.e. weekly and daily basis.</td>
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SUMMARY.
Financial statements produced by financial accounting are used by many groups, both internal and external. These reports reflect the average needs of all the users and are general purpose statements. For internal planning and control, utility of information provided by financial statements is limited.

Cost accounting is the collection, processing and evaluation of operating data for internal planning and control and for external reporting. Cost accounting collects data in monetary and nonmonetary terms and report to management at much higher speed. The records are kept in much deeper details according to managerial requirements. Foundation of the subject is on the same basic principles as are applicable to financial accounting.

QUESTIONS FOR DISCUSSION AND REVIEW.
1. “Financial accounting produces general purpose financial statements to cater the needs of external users.” Discuss the statement, pointing out limitations of financial accounting.
2. State limitations of financial accounting. How these limitations have been overcome by a system of cost accounting?
3. What is meant by cost accounting? How does it differ from financial accounting.
4. What are three branches of “accounting”? How do these branches differ in their area of emphasis?
5. Explain the term “Cost Accounting”. How does it contribute to the effective and efficient management of an enterprise?