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CHAPTER-II

"COST AND PRICE CONCEPTS"

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CHAPTER-II:

COST AND PRICE CONCEPTS

2:1) CONCEPT OF COST:

Cost-accountants, economists and others have developed the concept of cost, according to their needs. The concept of cost should, therefore, be studied in relation to its purpose and use. Some of the definitions of 'cost' are reproduced below:

i) Cost is "the price paid for something" (Oxford Dictionary).

ii) Cost is "the amount of expenditure (actual or notional) incurred on or attributable to a given thing"[1].

iii) "Cost is a foregoing, measured in monetary terms incurred or potentially to be incurred to achieve a specific objective"[2].

iv) "A cost is the value of economic resources used as a result of producing or doing the thing costed"[3].

When the term "cost" is used specifically it should be qualified with reference to the object stated by such descriptions as fixed cost, direct cost, labour cost, selling cost, marginal cost, standard cost, conversion cost differential cost, out of pocket cost", etc.

2:2) CLASSIFICATION OF COST:

Classification is the process of grouping costs according to their common characteristics. It is a systematic placement of like items together according to their common features. Depending on the purpose in view, costs may be classified in different ways e.g. by functions to which they can be related, identifiability with cost units, pattern of behaviour or variability, relevance to decision making and control etc.

2:2:1) Classification According to Function:

This is a traditional classification. A business has to perform a number of functions like manufacturing, administration, selling, distribution and research. Cost may have to be ascertained for each of these functions. On this basis, costs are classified into the following groups.

A) Manufacturing Cost: This is the cost which arises in course of production from the acquisition of raw-materials till the finished product has been turned out. It includes cost of material, cost of labour and other factory expenses.

B) Administration Cost: This is general administration cost and includes all expenditure incurred in formulating the policy, directing the organisation and controlling the operations of an undertaking.

C) Selling and distribution Cost: Selling cost is the cost of seeking to create and stimulating demand and of securing orders. Distribution cost is the cost of sequence of operations which begins with making the packed product available for despatch to market.

D) Research and development cost: Research cost is the cost of searching new or improved products or methods. Development cost is the cost of the process which begins with the implementation of the decision to produce a new product.

2:2:2) Classification According to Variability or Behaviour:

Costs, sometimes have a definite relationship to the volume of production. They vary when volume of production rises or falls. As such they are described as fixed, variable and semi-variable or semi-fixed.

A) Fixed Cost: These costs remain fixed in "total" amount and do not increase or decrease when the volume of production changes. But the fixed cost per unit increases when volume of production decreases and vice-versa.

B) Variable Cost: These costs tend to vary in direct proportion to the volume of output increases, total variable cost also increases and vice-versa, But the variable cost per unit remains fixed.

C) Semi-variable or Semi-fixed Costs: These costs are partly fixed and partly variable. A semi-variable cost has often a fixed element below which it will not fall at any level of output.

2;2;3) Classification According to Identifiability with Cost Units:

Costs are classified into direct and indirect on the basis of their identifiability with cost units or jobs or processes.

A) Direct costs: These are those costs which are incurred for and may be conveniently identified with a particular cost unit,process or department.

B) Indirect costs: These costs can not be conveniently identified with a particular cost unit, process or department. These are general costs and are incurred for the benefit of a number of cost units or cost centres.

2;2;4) Classification According to Controllability:

Thecosts can also be classified into controllable and uncontrollable.

A) Controllable Costs: They are the costs which may be directly regulated at a given level of management authority. Variable costs are generally controllable by department heads.

B) Uncontrollable Costs: These are those costs which cannot be influenced by the action of a specified member of an enterprise. Fixed costs are generally uncontrollable.

2:2:5) Classification on the basis of Time:

A) Historical Costs: There are the costs which are ascertained after these have been incurred. Historical costs are thus nothing but actual costs.

B) Pre-determined Costs: These are future costs which are ascertained in advance of production on the basis of a specification of all the factors affecting cost.

2:3) SPECIAL COSTS FOR MANAGERIAL DECISION-MAKING:

Management decisions involve a selection between alternative course of action and costs play a very prominent role in decision-making. Costs which are relevant to decision making are as under -

A) Differential (or Incremental) Costs: Differential cost is the increase or decrease in total cost that results from an alternative course of action. It is ascertained by subtracting the cost of one alternative from the cost of another alternative method of production.

B) Imputed Costs: These hypothetical costs are specially computed for the purpose of decision making. Interest on capital is a common type of imputed cost, it is considered necessary to take into account when deciding about the alternative capital investment projects.

C) Opportunity Costs: Opportunity cost is the sacrifice involved in accepting the alternative under consideration. This concept is used in problems of alternative choice. It is a pure decision making cost and is not entered in the books of accounts.

D) Replacement Costs: This is the cost at which there could be purchased an asset indentical to that which is being replaced. Replacement cost is the current market cost of replacing an asset.

E) Sunk Costs: These are costs incurred in the past and are not recoverable in a given condition. The meaning of sunk cost will become clear when decision is to be made regarding the exchange of an old asset for a new asset.

F) Out-of-Pocket Costs: Out of pocket costs represent cash payments to be incurred (such as rent, wages) as against costs which don't require cash outlay (such as depreciation). This is frequently used by business concerns as an aid in making decisions pertaining to price fixation during depression, make or buy decision etc.

G) Future Costs: No decision can change what has already happened. The past is history and decisions made now can affect only what will happen in the future. Thus the only relevant costs for decision making are pre-determined or future costs.

H) Conversion costs: Conversion cost is the total cost of 'converting' a raw-material into finished product.

2:4) ELEMENTS OF COST:

A cost is composed of three elements-Material, Labour and Expenses. Each of these can be direct or indirect. This is shown below:

ELEMENTS OF COST

- Direct
  - Material
  - Labour
  - Expenses
- Indirect
  - Material
  - Labour
  - Expenses

2:4) A) Material Cost:

This is "the cost of commodities supplied to an undertaking"[4].

i) Direct materials: Direct materials cost is that which can be conveniently identified with and allocated to cost units. Direct materials generally become a part of the finished product.

ii) Indirect materials: These are those materials which can not be conveniently identified with individual cost units.

B) Labour Cost:

This is "the cost of remuneration (Wages, salaries, commission, bonus, etc.) of the employees of an undertaking"[5].

i) Direct labour: Direct labour cost consists of wages paid to workers directly engaged in converting raw materials into finished products. The wages can be conveniently identified with a particular product, job or process.

ii) Indirect labour: It is of general character and cannot be conveniently identified with a particular cost unit.

2:4) C) Expenses:

All costs other than material and labour are treated as expenses. It is defined as "the cost of services provided to an undertaking and the notional cost of the use of owned assets"[6].

i) Direct expenses: It is defined as "expenses which can be identified with an allocated to cost centres or units"[7]. Direct expenses are also known as chargeable expenses.

ii) Indirect expenses: All indirect costs, other than indirect materials and indirect labour costs, are termed indirect expenses. These can not be directly identified with a particular job, process or work order and are common to cost units and cost centres.

2:5) OVERHEAD COSTS:

According to Institute of Cost and Management Accountant, England" Overheads is the aggregate of indirect material cost indirect wages and indirect expenses".

A) Classification of overheads:

The method to be adopted for the classification of overheads depend upon the type and size of the business, nature of product, (or service rendered) and policy of the management. Broadly overheads may be divided into three categories:

i) Functional: This classification of overhead is done on the basis of major functions of a concern. It, therefore, includes production or factory overhead, Administrative or General overheads, selling overhead and distribution overheads.

ii) Elementwise: This classification is done according to the nature and source of the expenditure. The Overhead cost is broken down into indirect material, indirect labour and indirect expenses.

iii) Behavioural : This classification of overhead is based on the behaviour of costs in relation to the volume of output. According to the variability of expenses in relation to the production, the overhead expenses are classified into these three groups Fixed Overhead, Variable Overhead and Semi-variable Overhead.

2:6) <u>DIVISIONAL CLASSIFICATIONS OF COSTS</u>:

The divisional classification of costs are-

1) Production cost as incurred by the Manufacturing Divisions.

2) Administrative cost as incurred by the Administration Division, and

3) Selling and Distribution cost as incurred by the Selling and Distribution Divisions.

2:7) <u>COMPONENTS OF TOTAL COST</u>:

The costs are classified under the following heads which represent the successive stages through which the cost flow:

A) Prime Cost: It is the aggregate of direct material cost, direct labour cost and direct expenses.

B) Factory cost or Works cost: Prime cost plus the proportion of factory (or works) Overheads constitute the factory (or works) cost.

C) Cost of production: Cost of production, office or gross cost of a product is made up of works cost plus an additional proportion of office or administrative expenses.

D) Total cost or cost of sales: Cost of production plus selling and distribution overheads constitute the cost of sales or total cost.

E) Selling price: The selling price is made up of the cost of sales plus the margin of profits or minus the losses.

The following is a view of the various elements of cost[8]

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Material Cost
+
Direct Wages
+
Chargeable expenses

Prime Cost
+
Factory Overhead

Factory Cost
+
Administrative Overhead

Cost of Production
+
Selling and Distribution Overhead

Cost of Sales
+
Profit Margin

Selling Price

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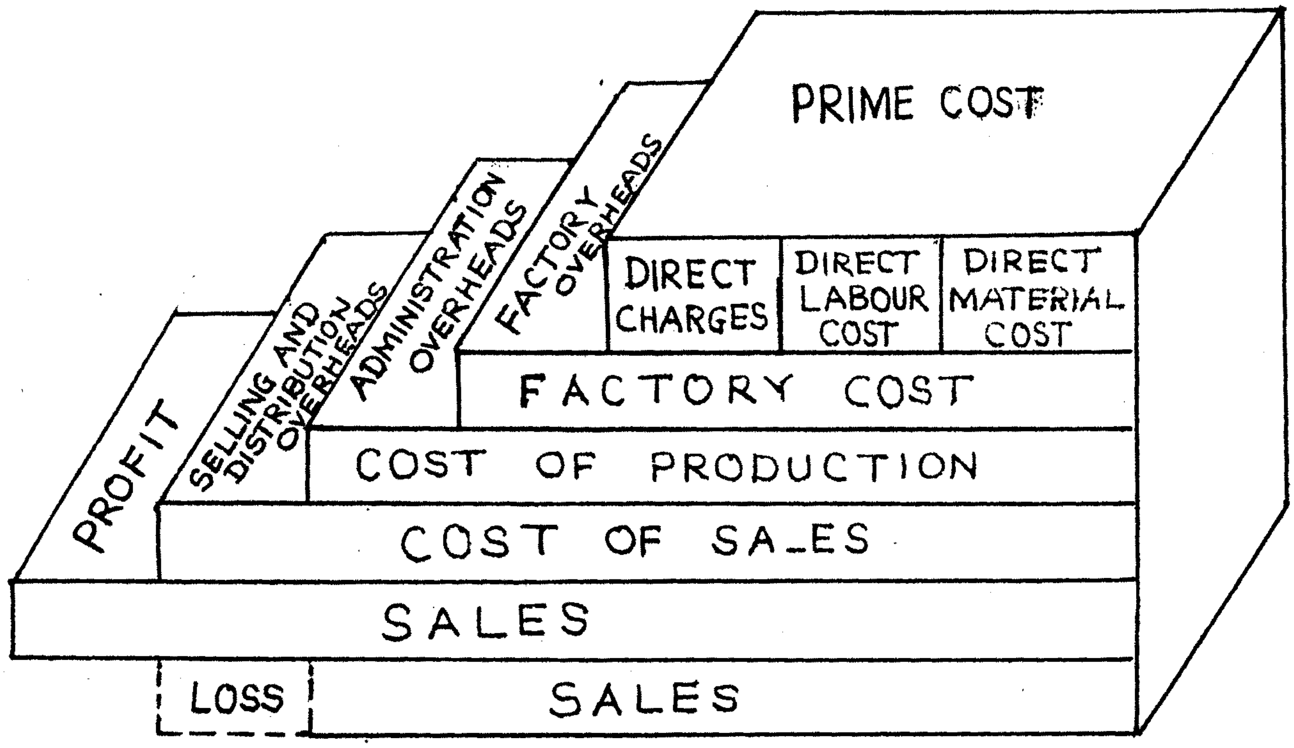
COMPOSITION OF SELLING PRICE



SELLING PRICE = COST OF SALES ± PROFIT OR LOSS

COST OF SALES OR TOTAL COST = PRODUCTION COST + SELLING AND DISTRIBUTION OVERHEADS

PRODUCTION COST = FACTORY COST + ADMINISTRATION OVERHEADS

FACTORY COST = PRIME COST + FACTORY OVERHEADS.

PRIME COST = DIRECT MATERIAL COST + DIRECT LABOUR COST + DIRECT CHARGES.

2:8) ELEMENTS OF COST OF BIDI MANUFACTURING:

Introduction:

Cost of production of any commodity and service is made up of different factors of production. In economics we study the factors of production such as land, labour, capital and organisation. In costing such factors are called as elements of cost. They are known as "Material, Men, Money and Management".

In capitalistic economy every organisation is trying to combine the factors of production such as Material, Men, Money and Management in such a way to have minimum cost to get Maximum profit during given time of production as per market conditions.

2:8:1) The cost of production of Bidi:

Manufacturing can be broadly, as usual, classified into two heads.

i) Fixed cost (or Capital Cost): This is incurred in the form of fixed investment for production over a longer period.

ii) Variable cost (or marginal cost): This is incurred in the form of day-to-day expenditure in the process of manufacturing Bidies. Thus cost will change as per production.

2:8:2) A) Fixed Cost in Bidi Industry:

While considering the fixed cost in relation to the production of Bidies the following factors must be taken into consideration.

1) Factory presmises or Factory Building or Godown: One of the basic factors of production is factory premises. In costing, investment in building is regarded as permanent capital. Such expenditure is of a fixed nature, a fair return on which has to be taken into consideration while calculating the cost of Bidi Manufacturing.

2) Manufacturing Machinery and Equipments: The tools and equipments used by a major section of the Indian Bidi-manufacturers are primitive crude tools like scissors, winnows, wire-nets and other equipments (such as Block and design, small knife type instrument, locally known as 'Nakki') is of a permanent nature and therefore forms a part of fixed cost. It has been a general practice that while calculating the cost 20% rate of interest on such fixed investment is taken into account.

3) Depreciation: In addition to the above the depreciation of manufacturing equipments is provided as per companies Act of 1956. This depreciation must also be added to the cost of production. The duration of manufacturing process and income return-payment is at about 12 months.

B) Variable Cost (Marginal Cost):

Variable cost means the expenditure which varies with the volume of production. It means the expenditure incurred right from the purchases of Bidi-tobacco, Tendu leaves, storing and issues of materials to production, wages, electricity charges and taxes are together called variable cost or marginal cost.

1) Material Cost:

Bidi manufacturing requires quality materials. The important two types of Raw-Materials required are Bidi Tobacco and Tendu-leaves. Bidi-tobacco is purchased locally in Nipani and surrounding area during the period of harvest from January to May end of every year. Raw-Tobacco is known as anagad-tobacco. It is in the broken form of tobacco leaves. Different qualities of tobacco are mixed to reach a certain standard developed by the bidi manufacturer. It is known as Chaki process. A fter this process the Bidi tobacco is known as Jarda or Jardi. Besides, Bidi manufacturer purchases Jardi (Bidi Tobacco) from Tobacco traders and commission agents.

Second Raw-material required for Bidi manufacturing is Tendu leaves or Kendu leaves. In Nipani area such Bidi-leaves are not grown. In the Belgaum District in the Sutkatti Forest some quantity of Tendu leaves are available but it is not of a good quality. In emergency time such Bidi-leaves are used for making bidies. Bidi-manufacturers have to purchase such

Bidi leaves from M.P., U.P. and Maharashtra. The Bidi leaves are a product of Forest. All Forests in different states of India are nationalised so there is a difficulty in purchasing Bidi-leaves from places outside the Nipani area. Bidi leaves are purchased in the month of April and May and stock is made.

2) Labour Cost (Wages):

Bidi workers are required to roll the Bidies as per brand or manufacturing contract. Tc convert the Bidi-tobacco and Bidi-leaves the Bidi-workers or Bidi-rollers are appointed. Bidi tobacco, tendu leaves, yarn etc. are provided to the bidi rollers who take them to their houses and with the help of the members of their families roll the bidies and return the rolled Bidies in the raw-form as per time schedule of factory. Bidi-workers are paid weekly as per register of output of Bidies. They are paid as per minimum wages Act of 1966.

3) Paper and Yarn Cost (Or labelling charges):

This is manufacturing variable cost required after rolling the Bidies. After rolling the Bidies, they are tied with special quality of yarn having some colour. The different types of colours are used to identify that Bidies for price-fixation. In the Bidi factory the Raw-Bidies are taken to baking process known as Tanduri-process. After this process the Bidies are packed in the Puda or Box having 10 or 20 Bidies in a bundle. The Bidi-Bundle is made up with 10 or 20 Bidies.

In Nipani Puda-packing may be done with 480 Bidies or 24 Bundles of 20 Bidies each or 48 Bundles of 10 Bidies in each. All the Pudas are packed in the Gunny bag. The capacity of a gunny bag varies from 72 Pudas to 80 Pudas as the case may be.

The Bidies are packed with label or Trade mark as the case may be. This is required to identify their products in the market.

4) Overheads:

Supervision or Mangerial Expenditure:

Supervision is a process of getting the things done with the help of others. The enterprenuer brings together all the factors of production. He carries out the functions like organising, staffing, supervising, controlling, planning, directing, budgetting, etc. All the managerial expenditure is included in the cost of industrial product.

5) Miscellaneous Expenditure and Taxes:

Bidi manufacturers are required to pay certain types of taxes to the concerned authorities. The taxes are charged by State Govt. Central Govt., Municipality, etc.

6) Selling and Distribution Expenses:

The advertising expenses, showroom expenses, transport charges and other distribution expenses are required to get the market for the product.

2:9) CONCEPT OF PRICE:

2:9:1) General theory of Price:

The price is the value of product expressed in the terms of currency. The price of any commodity has a vital significance in a Capitalistic or Mixed economy. The entrepreneur takes decisions about the volume of production with due regard to its prevailing and future price in the market. The entreprenuer continues the production so long as the price covers the cost production. In case the price is more than the cost of production, he gets an incentive to increase production. On the other hand, when the price falls short of its cost it results in curtailment of production. Naturally the producers are always keen on maximisation of their profit. It is said that perfect competition offers a reasonable (or fair) price to both producers and consumers.

2:9:2) Price determination in perfect competition:

In perfect competition there are unlimited suppliers on the one hand and unlimited buyers on the other hand. Neither suppliers nor the consumers can influence the supply or demand, price of a commodity is fixed when demand curve and supply curve intersect each other and this price is accepted by both the producer and consumers. In perfect competition producers as well as buyers known the market situation. Hence no one can influence the prevailing market price. The goods sold in the market are homogeneous and every producer has freedom to enter or leave market. In the long run the price of a commodity gives fair profit (or normal profit) to producer. Hence the industry attains equilibrium.

2:9:3) Price determination in monopolistic competition:

Perfect competition and pure monopoly are rare Phenomena in the real world. Monopolistic competition approximates most closely to the real business world. The model of monopolistic condition developed by Edward H. Chamberlin presents a more realistic picture of the actual market structure and the nature of competition.

Monopolistic competition may be defined as market setting in which a large number of sellers selling differentiated product. Monopolistic competition is closer to perfect competition since it has many characteristics of later such as:

a) Large number of sellers.

b) Free entry and exit.

c) Perfect resource mobility and

d) Complete dissemination of market information.

But while in perfect competition products are homogeneous, in monopolistic competition products are differentiated by brand names, trade-mark, design, colour, shape, packaging, credit-terms, promptness in service, etc. so that buyers are in a position to distinguish between products supplied by different firms. Despite product differentiation, each product remains a perfect substitute for the other.

2:10) PRODUCT-PRICING:

Product pricing is a difficult and delicate function. It requires a knowledge of economics, an understanding of market, a familiarity with distribution techniques and a group of cost facts. In simple words fixation of price of a product is influenced by cost and non-cost factors, costs not necessarilly regulate them. In the short run prices are normally determined by interaction of the forces of demand and supply. Costs can be used as a guide and a point of reference. However, in the long run price of a product must exceed cost otherwise profit cannot be earned. Some of the important methods of pricing are as follows:

2:10:A) Total Cost Method:

This is the traditional and most commonly used method. Here the price is based on total cost plus a pre-determined percentage of profit. Thus if the cost of sales of a product is Rs.25 and profit is desired @ 20% on cost the price under this method would be fixed @ Rs.30 (i.e. Rs.25+ 20%). The costs used may be historical costs for the last available period. This method suffers from the limitation that prices are entirely cost based and economic factors of demand and supply are ignored. It also ignores the factor of competition.

2:10:B) Conversion cost Method:

Under this method only the cost of converting material with the help of workers into finished product, is calculated. This method thus excludes the cost of direct materials assuming that materials do not contribute to the profit. This method can be useful in contract-cost or job cost.

2:10:C) Marginal Cost Method:

This method is particularly suitable in the short-term. In the long run, however, price must cover full cost. During depression for instance any price over and above the marginal cost may be accepted so long as it makes a contribution towards fixed cost and profit. This will help to minimise loss during difficult periods.

2:10:D) Return on Investment Method:

Under this method the price should include a charge that ensures a fair return on capital employed. For instance, if a work is quite expensive and takes 2 years to complete then the amount of capital tied up is quite large and that the amount is tied up for a long period of two years. In situation of this type it is unfair, if capital so locked up is ignored. The formula used for determining the selling price is as as follows:

$$P = \frac{(C + R F) A}{1 - RV}$$

Where : P = Selling price.

C = Total Cost.

R = Rate of return on capital employed.

F = Fixed Capital employed.

A = Annual Sales.

V = Variable portion of capital employed.

This method is useful for pricing of products which utilises varying amount of capital investments.

2;11) PRICING PRACTICES OF THE BUSINESS FIRMS:

In the market the main pricing practices of business firms followed are as -

A) Cost plus pricing or mark up pricing:

Cost plus or mark up pricing is also known as average cost pricing. The cost plus pricing is the most common method of pricing product by manufacturing firms. The general practice under this method is to add a fair percentage of profit margin to the average variable cost (AVC). The price set is

$$P = AVC + AVC\ (m)$$

Where m is the mark-up percentage. The mark up percentage (m) is fixed so as to cover average fixed cost (AFC) and a net profit margin (NPM). Thus AVC(m) = AFC + NPM.

B) Pricing in relation to established products:

In pricing a product in relation to its well established substitutes, generally three types of pricing strategies are adopted viz. (i) pricing below the price of the established products, (ii) pricing at the prevailing market price and (iii) pricing above the existing market price.

In the Bidi-Manufacturing Industry the branded Bidi manufacturers and un-branded Bidi manufacturers are selling their products in the competition. In the short-period they are following the technique of marginal costing to fix the selling price and in the long run they are fixing the selling to cover the total cost of production.

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