

CHAPTER-IIICOST ANALYSIS OF BIDI MANUFACTURING3:1) PRODUCTION:

Economists generally define production in terms of utility creation. Any activity which imparts form utility, time utility, place utility or possession utility is classified as a production function. Production is directly and clearly concerned with the provision of form utility in all firms producing goods or services.

A manufacturing factory acquires raw-materials and performs the production function by transforming them into finished products. The utilities referred to above are provided through the production function by the acquisition of inputs in the form of materials and merchandise and their conversion into finished output.

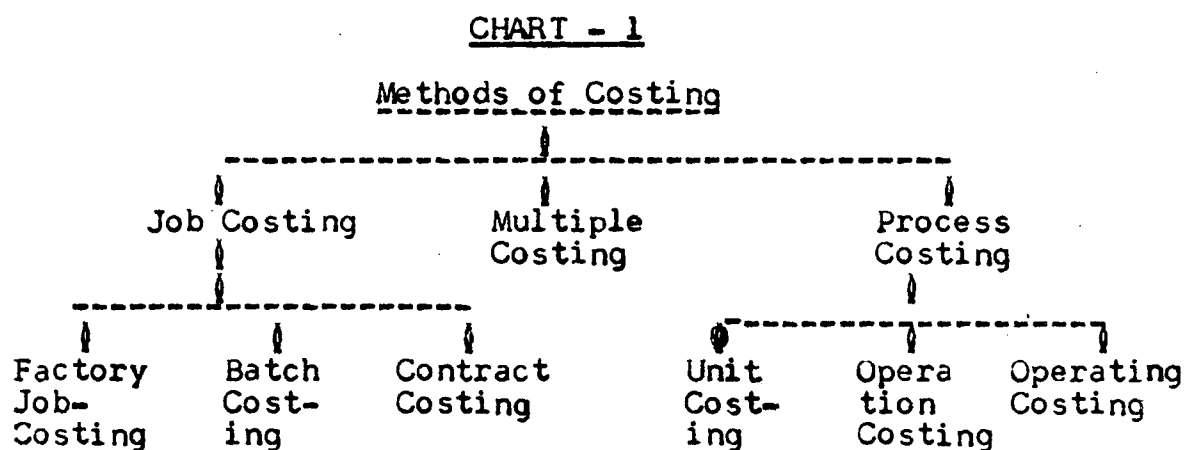
The methods to be used for ascertaining the cost of production differ from industry to industry. There are different methods of costing for different industries. This is because the nature of work carried out by different industries varies. The cost of production of any commodity is made up of different factors. They are called as elements of cost. The cost of production of Bidi-manufacturing can be classified into two heads.

1) Variable Cost: This is incurred in the form of day-to-day expenditure in the process of manufacturing of Bidies (material, labour and overheads).

2) Fixed Cost: This is incurred in the form of fixed investment for production over a longer period.

3:2) METHODS OF COSTING:

The methods or types of costing refers to the techniques and processes employed in the ascertainment of costs. Several methods have been designed to suit the needs of different industries. The method of costing to be applied in a particular concern depends upon the type and nature of industry. Basically there are three methods of costing. (i) Job Costing, (ii) process costing, (iii) Multiple costing.



1) Job-Order-Costing: This method applies where work is undertaken according to the customers' special requirements. The object of job costing is to ascertain the cost of each job or order separately.

2) Batch Costing: A batch may represent a number of small orders passed through the factory in a batch. Each batch is treated as a unit of cost.

3) Contract Costing or Terminal Costing: A contract is a big job hence this does not differ in principal from job costing.

4) Multiple or Composite Costing: It represents the application of more than one method of costing in respect of the same product. This method is used in industries where a number of components are separately manufactured and then assembled into a final product.

5) Process Costing: This method is used in mass production industries, manufacturing standardised products in continuous process of manufacturing.

6) Unit/Single/Output Costing: This method of cost-ascertainment is used when production is uniform and consists of a single or two or three varieties of the same product.

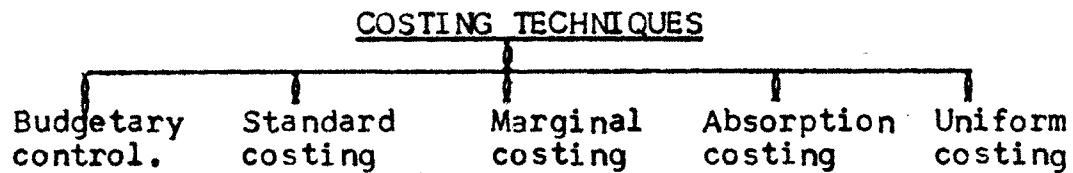
7) Operation Costing: This is nothing but a refinement and a more detailed application of process costing.

8) Operating Costing: This method is used in undertakings which provide non-manufacturing products or service.

3:3) TECHNIQUES OF COSTING:

These techniques are adopted for special purpose of cost control and policy. These techniques are as follows:

CHART - II



1) Budgetary Control: A budget is an expression of a firm's plan in financial form and budgetary control is a technique applied to the control of total expenditure on material, wages and overhead by comparing actual performance with planned performance.

2) Standard Costing: This connotes the setting up in advance of definite standards or targets of performance and the expression of these standards in monetary terms. Actual performance is measured against these standards and differences are extracted to take action.

3) Marginal Costing: In this technique separation of cost into fixed and variable is made to take decisions. This technique is used to study the effect on profit of changes in volume of type of output.

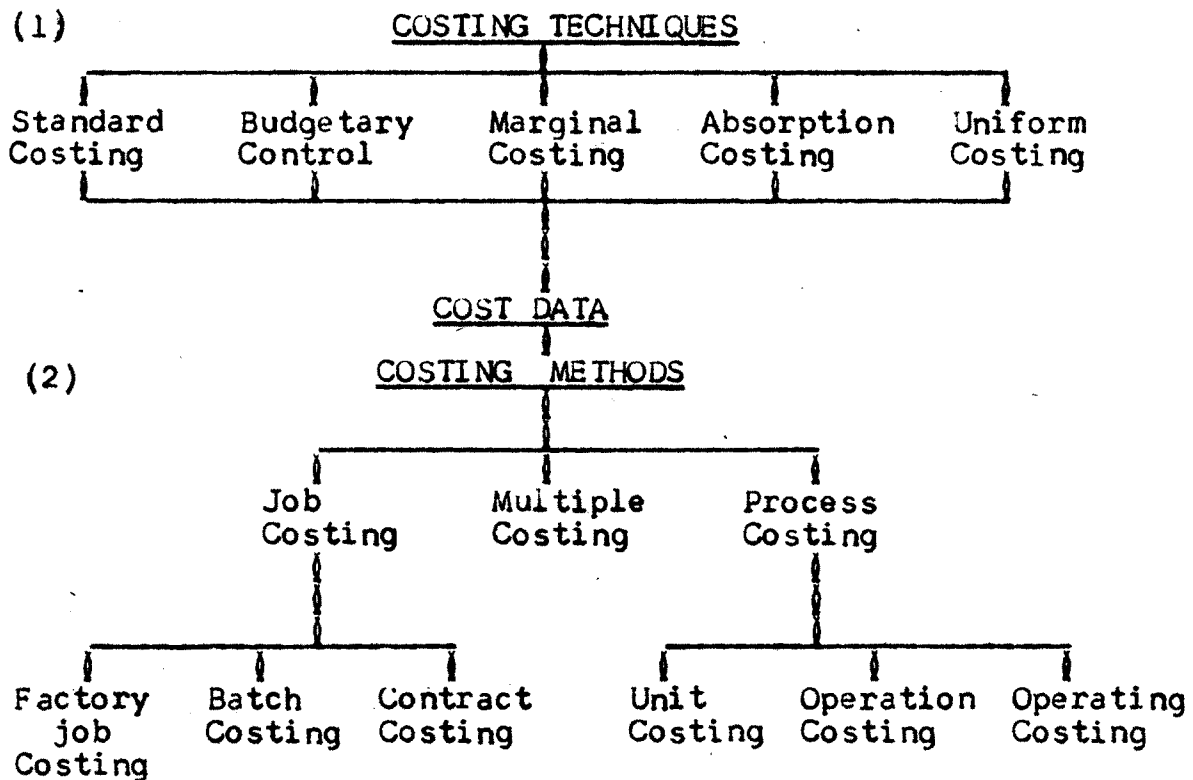
4) Absorption Costing or Total Costing: It is a traditional method of costing where-by total costs (fixed

and variable) are charged to products.

5) Uniform Costing: This term is used to refer to the use of uniform method of costing for different undertaking in the same industry.

CHART - III

COSTING TECHNIQUES AND METHODS



Source : M.N. Arora : A Textbook of Cost Accountancy
Vani Education Books, New-Delhi-2(1984)
P.14

3:4) COSTING METHODS AND TECHNIQUE AS TOOLS:

"Methods and techniques" should be regarded as tools of the cost accountant. All tools have their use and for a given task the appropriate tools should be selected. Clearly every tool will have its limitations and it is a vital part of the cost accountants skill to know when such limitations render a particular technique unsuitable.

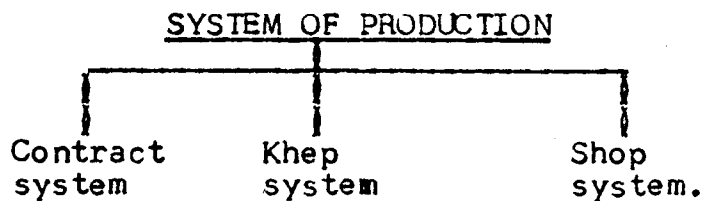
In the Bidi Industry the unit costing method and the technique of marginal costing may be useful to ascertainment of cost and price decisions. This technique is useful in Bidi-Industry in the competition to fix the selling price.

3:5) NATURE OF BIDI INDUSTRY:

The Bidi-manufacturing does not involve engagement of skilled labour and machinery. Hence, Bidi rolling has become a popular occupation among both men and women who take it up as full time or part-time occupation.

3:5:1) The system of production:

Bidi-rolling is normally carried out under three different systems as follows:



1) Contract System: The most popular system is the "Contract" system where the trade mark holders enter into an agreement with a contractor to whom the raw materials for Bidi manufacture are sold or issued. The contractor undertakes to engage his own labour also on contract basis for rolling Bidies. Then the contractor sells the Bidies to trade mark holder as per the contract after rolling the Bidies. Under this system Bidi-rollers are not regular employees of either the trade-mark holder or the contractor. This system is also known as the thekedary system. In West Bengal this system is known as farming out system".

2) Khep or Gharkhata or outside workers: The second system the "Khep" system involves employment of a large number of workers in a factory for rolling Bidies. It is also known as external workers system. In this system of production the workers are appointed by the manufacturer. He provides them raw materials i.e. processed tobacco or jardi, Tendu leaves and thread. The workers bring all that materials to their respective households to roll the Bidies and return them as per norms or conditions fixed by the factory. This system is followed in Nipani-Bidi factories.

3) Shop system or Factory premises system: Under the shop system, the shop owners supply the raw materials to the workers who roll the Bidies in the shop or in the godown of the owners or in the factory premises. These Bidi-rollers are paid

on piece wages-basis. The Bidies produced in such shops are generally sold without any brand or name in the local market. The workers have to sit and work in a common place provided by the owners and roll the Bidies during the fixed hours of the day. This system is known as factory system. The un-branded Bidies are manufactured as per this method.

In the above systems of production there are no fixed hours of work. The manufacture of Bidies through labour is resorted to largely to avoid incidence of factory Act and Rules. Further such systems do not impose any time regulation on the Bidi-rollers and allow them to roll Bidies at their own leisure. Due to this facility in rural areas during the slack season, farmers develop this expertise of rolling Bidies and use it to earn additional income during remaining period of the year.

3:6) MANUFACTURING COST OF BIDIES:

The Bidi-rolling is entirely a manual process in all stages of manufacturing. There are no machine and sophisticated tools required to manufacture the Bidies. The manufacturing of Bidies may involve the following steps-

- 1) Collection of materials for Bidi-manufacturing.
- 2) Conversion of materials into Bidies, with the help of workers.
- 3) Administration of Bidi-manufacturing process.

4) Selling of Bidiies in the market.

In the above stages of manufacturing of Bidiies the cost of Bidiies may be calculated as the cost of material, cost of labour and cost of overheads. These three elements of cost of manufacturing are as follows:

3:6:1) Materials for manufacturing the Bidiies:

The Bidi-industry usually uses the following raw-materials for manufacturing Bidiies.

- 1) Bidi-tobacco or Jardi.
- 2) Tendu or Kendu or Bidi leaves.
- 3) A paper for labelling and packing.
- 4) Cotton thread or Yarn.
- 5) Charcoal.
- 6) Wheat and Tamarind powder liquid or Gum or Khal.
- 7) Gunny bags.
- 8) Containers etc.

1) The Jardi (Tobacco): The Bidi tobacco is one of the main raw materials required for manufacturing the Bidiies. This tobacco is grown in Gujarat and Nipani area comprising Belgaum District of Karnataka and part of Kolhapur as well as Sangli District of Maharashtra. Tobacco is an important cash crop of India. It occupies 0.3 percent (0.42 million hectares) of the total cropped area of the country. Areawise India ranks second next only to China while productionwise it is in the third position in the world².

Various type of tobacco like Cigarette (F.C.V., air cured), Natu burley, Lanka-bidi, Cheroot, Cigar, Filler and Wrapper Chewing, hookah, etc. are being grown in India. Bidi manufacturers use only Bidi-tobacco after processing of Angad tobacco (Part of tobacco leave). Processing of Bidi tobacco involves the preparation of flakes or Bidi patti of required size by passing the raw-produce through sieves of prescribed number of holes to a linear inch in the sieve. The size of flakes used in Bidi manufacture is expressed in terms of number viz. No.4, No.5 and No.6. In recent years though it is partly mechanised it still remains a labour intensive process. About 70% of the farm weight of tobacco becomes available as flakes for use in Bidi making. The processing of Bidi-tobacco thus involves transformation of "Angad" into Jarda-tobacco³ and finally into Jardi-mixture. It requires further mixture of "Rawal"⁴ (Granule) which is the most essential component of Jardi that gives taste in smoking and keeps the Bidi burning.

Bidi manufacturers have to perform this purchasing function every year from the month of February to May because Bidi-tobacco is agricultural-product. In Nipani Bidi manufacturer is doing the procedure of purchasing tobacco through their agents or traders. In this way the cost of Bidi tobacco may be calculated as per Kilo. It may be come about Rs.20/- per Kg.

2) Tendu leaves: The tendu leaves are also one of the basic raw-materials in the manufacturing process of Bidies. The

tendu leaves are grown in the forests of Madya-Pradesh, Maharashtra, Orissa, Andhra Pradesh, Uttar Pradesh, Karnataka⁷. Now there is the control of respective State Govt. for movement of tendu leaves from one State to another. A Bidi-manufacturer has to procure sufficient quantity of the Bidi leaves according to the annual requirement of his production during season only from March to May in every year because it is the forest-product.

3) The Cotton thread or Yarn: The cotton thread or yarn is also an important material required in manufacturing of Bidies. Different types of coloured yarns are used to tie the Bidi after rolling it. This colour of yarn may identify the brand of Bidi. At present the cotton yarn is completely controlled by the Government in some states. In some states the yarn corporation is set up to regulate the distribution of cotton yarn to the powerlooms, handlooms and other users of the yarn. Bidi-manufacturers have to get this yarn for manufacturing of Bidies.

4) The papers for packing and labelling: The different qualities of papers are required for this industry for packing and labelling. These papers are considered secondary material to this industry. The brown-colour papers are required for packing bundles of Bidies. The tissue or silver paper is used for labelling and the craft paper is used for packing the bundles and pudas of the Bidies. The paper of a specific or

a peculiar colour also plays a special role in the Bidi-industry where the unbranded Bidies are manufactured.

5) The wooden charcoal: This material is also one of the most important materials required in manufacturing process. The Bidies are normally packed in bundles of 10 or 20 Bidies. The manufacturers group about 5000 to 10000 Bidies in containers and dry them in room type kilns fired by Charcoal or coconutshell. Fire-wood is never used as fuel as it imparts smell to the Bidies. After this process the Bidies are packed in packets or Pudas of 480 (Bidies). About 100 Pudas are packed in gunny-bag for transportation and marketing.

6) The Khal or Gum: The maida and tamarind powders are mixed and boiled in the water and a specific kind of liquid is prepared which is known as Khal or a gum. It is used for packing and labelling of Bidies and bundles.

7) Gunny Bags: The gunny-bags are used for packing the Bidi-pudas. The gunny bags of a low quality are used for packing the bundles of Bidies. Some Bidi-manufacturers by placing an order with gunny-bags company may get special gunny bags for packing from the gunny bag company.

These all types of material cost may be known as direct material cost or variable cost of materials. This is every important part of elements of cost of manufacturing Bidies.

3:6:2) Labour Cost of Manufacturing of Bidies:

The Bidi-rolling is entirely a manual process in all stages of manufacturing. There are no machines and sophisticated tools required to manufacture the Bidies. The Bidies are rolled manually by hand and it involves at least five steps. They are as follows:

- a) The cutting of wrapper leaves (Tendu).
- b) Rolling the Bidies (with tobacco contents).
- c) Closing the ends of the Bidies (with nail or Nakki).
- d) Warming the Bidies.
- e) Labelling, packing and bundling.

The Bidi-rollers have to perform this process of Bidi-manufacturing. The Bidi-workers are supplied by the Bidi-manufacturer the fixed quota of Bidi-tobacco, Bidi leaves, Yarn and other materials. Firstly the Bidi-workers after getting necessary material, sort out the good and strong leaves for Bidies and soak them in the water in the evening. Then, the next day they cut them to the size required. A thin plate is given to the workers as a pattern for cutting the leaves to the size. Then the surface of the leave is levelled out with the help of the knife. The size of the Bidies differs from one manufacturer to another manufacturer and also according to public taste. It varies from two to three inches in length which is cut into a small, a medium and a special size.

After cutting the Bidi-leaves as per stated size a small but fixed quantity of Jardi (Bidi-tobacco) is placed on the cut-leaves and rolled them into a conical shape and a piece of tread is tied around them. Then the closing of mouth of Bidies is done. After that the Bidies are arranged into bundles of 20 or 25 each and taken to Bidi-manufacturer as per time given by Bidi-factory. The badly rolled Bidies are rejected by the Bidi-checker in Bidi-factories.

Baking or Warming or Tanduri - processing:- The Bhattiwala places the Bidi-bundles in tray container and pushes them into artifically heated chamber for a couple of minutes in order to get the ends dried. The Bidies are then wrapped either in the printed papers or in the plain papers with their trade-marks.

3:6:3) System of Wage payment:

The wages are rewards that are paid for the service of labour engaged in the process of production. There are different methods of wage-payments in industries in various states of the country.

At present a time rate payment or a piece rate payment is made to the workers.

1) The time-rate wage system: The time rate wages are the wages paid to the workers according to the period of time for which they have done the work.

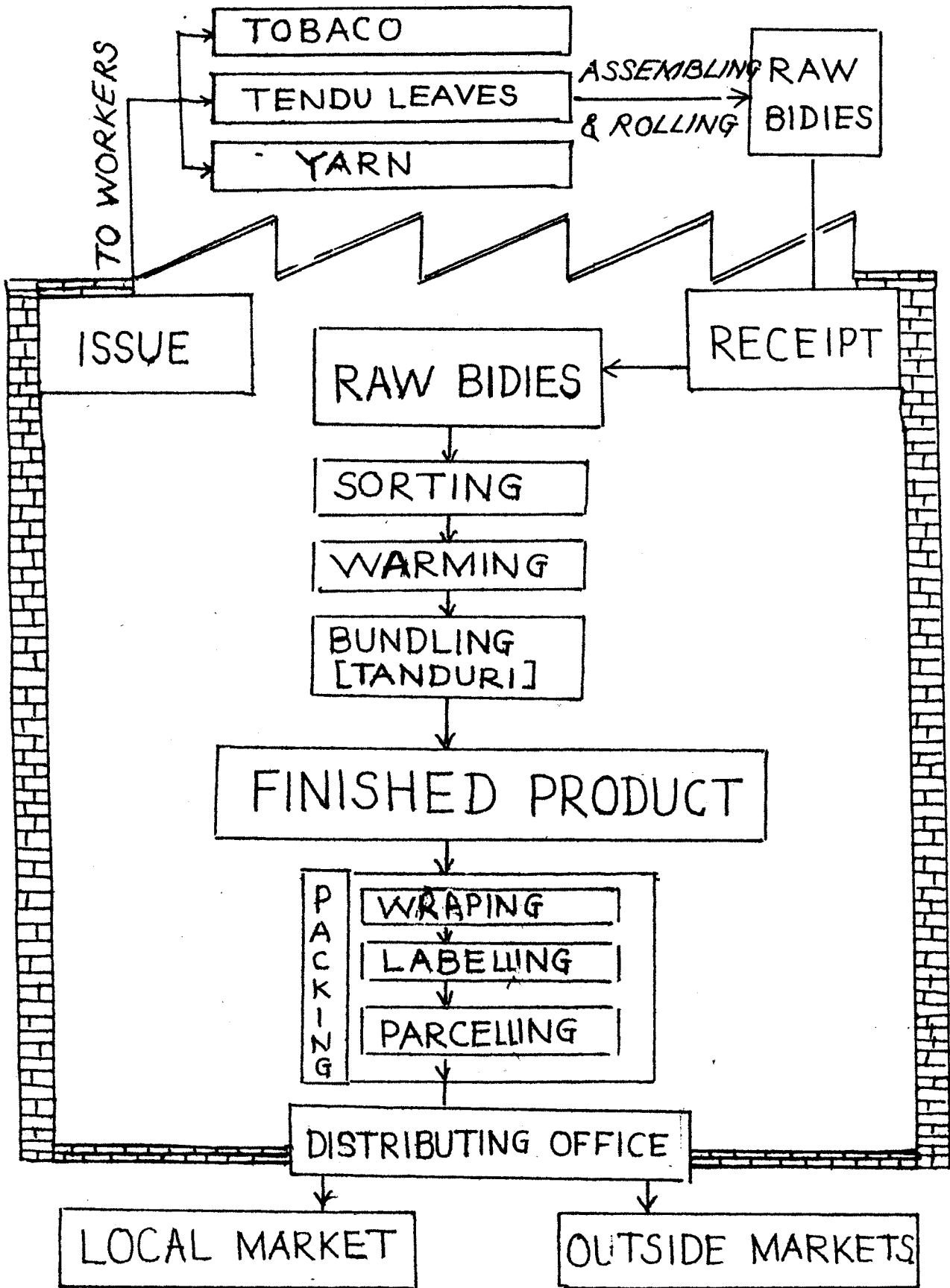
2) The piece rate wage system: In the piece rate-wage system the wages are paid to the employees on the basis of quantum of work done by them.

The Bidi-rollers are paid according to piece rate method whereas the other workers such as the wrappers, labellers, sorters, Bhattiwalas, drivers, clerks or Diwanji according to the time rate method.

3:6:4) Overhead cost of Bidi-manufacturing:

In Bidi-manufacturing process the administrative expenses should be considered to know the total cost of manufacturing of Bidies. In the administration, there may be factory administration, office administration, selling and distribution administration. In this process all the expenses may be grouped under the overhead cost. It may be variable overhead and fixed overhead. This cost is not playing important role in the calculating the total cost of product. The investment in the fixed assets of Bidi manufacturers may not be in large amount. While calculating the overhead cost of Bidi-manufacturing the total fixed over-heads may be considered and the number of working hours of the factory in the year. With the help of above information the overhead rate may be decided and the cost of manufacturing of Bidies may be calculated in the following statement of cost.

MANUFACTURING PROCESS OF BIDIES



3:7) STATEMENT OF COST OF BIDI MANUFACTURING:

All the Bidi-manufacturers with the help of the following statement of cost calculate the cost.

TABLE - 1

Break-up of estimated cost of Bides per 1000
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 Items Rs. Rs.

A) 1) Direct Wages

i) Basic

ii) D.A. per day. _____

2) Other privileges

i) Provident Fund 8.33% of Wages (Basic)

ii) Bonus 8.30% of total wages.

i ii) Leave with wages or earned leave
5% of Basic wagesiv) Festival wages
2½% of Basic wages. _____

B) Material (Direct)

i) Tobacco.

ii) Leaf (Tendur)

iii) Papers and labels

iv) Yarn and other _____

C) Excise duty _____

 Marginal cost/Direct cost.
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Sources: Prepared from the information collected.

This statement-cost is guide-line to know the direct cost or variable cost of Bidies. In this variable cost some percentage of overheads may be considered while calculating the total cost of Bidies.

In the market the standard selling price is decided by the consumers. Usually the prices of Bidies of large factories such as Bharat Bidi Works, Mangalore and Mangalore Ganesh Bidies are more than the Nipani-Bidi factories' Bidi-prices. In Nipani the selling price of Bidies, manufactured in Nipani Bidi factory is also lower than the standard-Bidi factories in Karnataka and Maharashtra.



REFERENCES:

- 1) Jardi (Tobacco): The tobacco mix ready for use in Bidies. It contains tobacco leaves (in piece form) cut to very small size through sieving operations, well mixed with granule particles of the stalks & midribs of the tobacco plants and leaves respectively.
- 2) B.M. Savadi: Cost and Price of Bidi-Tobacco in Nipani Tract-a dissertation submitted in partial fulfilment of M.Phil Examination in Economics of Shivaji University, Kolhapur (unplished May, 1984) P.1.
- 3) Angad: The raw-tobacco as is available from the farm.
Jarda: The Half Processed tobacco containing only tobacco leaves (in piece form) cleaned through sticking, winnowing, sifting and sieving operations.
- 4) Rawal: Very small granules of stalk of tobacco leaves locally known as "Sirkadi" of tobacco leave.

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