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1. OBJECTIVES OF PLANT LOCATION

- To achieve economies in handling of raw materials, work in- progress and finished goods.
- To reduce the quantum of work-in-progress.
- To have most effective and optimum utilisation of available floor space.
- To minimise bottlenecks and obstacles in various production processes thereby avoiding the accumulation of work at important points.
- To introduce system of production control.
- To ensure means of safety and provision of amenities to the workers.

2. THEORY OF LOCATION OF INDUSTRIES

Industrial location theory was first developed in the early nineteenth century with a focus on the spatial distribution of agricultural crop production in local markets. Over time it has been expanded to provide explanations and predictions of the location of manufacturing and services. Three main factors influence industrial location; transport costs, labor costs, and agglomeration economies.

Other considerations are labor supply, the availability of infrastructure, environmental regulations and developmental effect. The food processing plant must decide whether to locate close to the agricultural raw material or close to the market for finished goods.

3. FACTORS INVOLVED IN PLANT LOCATION DECISION

The important considerations for selecting a suitable location are given as follows:

- a) Natural or climatic conditions.
- b) Availability and nearness to the sources of raw material.
- c) Transport costs-in obtaining raw material and also distribution or marketing finished products to the ultimate users.

4. MODELS USED TO IDENTIFY IDEAL LOCATION

Models for evaluating whether a location is best for an organization consist of cost-profit analysis for locations, the center of gravity model, the transportation model, and factor rating.

5.WHAT IS A PROJECT PROFILE

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Project profiling is the process of extracting a characterization from the known attributes of a project. The characterization will provide a more comprehensive understanding of the project that should result in developing an appropriate execution approach and the assignment of organizational resources .

6. **define the term plant design**

Plant layout design is the design tree (designing) of the entire facility including the food processing building design, utilities, placement of the process machinery, interior plant design layout etc.

7. **define feasibility study**

A feasibility study is a preliminary exploration of a proposed project or undertaking to determine its merits and viability. A feasibility study aims to provide an independent assessment that examines all aspects of a proposed project, including technical, economic, financial, legal, and environmental considerations.

8. **define factors involved in plant location design**

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9. **Name the classification of plant layout**

Product layout or line processing layout or flow-line layout. Process layout or functional layout or job shop layout. Fixed position layout or static layout. Cellular manufacturing (CM) layout or Group Technology layout.

10. **define units of production**

The unit of production method is a method of calculating the depreciation of the value of an asset over time. It becomes useful when an asset's value is more closely related to the number of units it produces rather than the number of years it is in use.

11. **What is Plant location?**

A Plant Location is a place, where men, money, material, machinery, etc are brought together for manufacturing products.

12. **Dis-advantages of selecting plant site in a city**

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1. Available land can be limited in area.
2. Cost of land or construction is quite high.
3. Expansion of the factory is not easily possible.
4. Taxes in cities are high.

13 . Cellular or group layout

It is a special type of functional layout in which the facilities are clubbed together into cells. This is suitable for systems designed to use the concepts, principles and approach of group technology. Such a layout offers the advantages of mass production with high degree of flexibility. We can employ high degree of automation even if the number of products is more with flexible requirements. In such a system the facilities are grouped into cells which are able to perform similar type of function for a group of products.

14. The Main Sub-Division In A DPR Is:-

- General Information of the project.
- Background and the experience of the project promoters.
- Details and working result of industrial concerns already owned and promoted by the project promoters.

15. Preparation of DPR

The preparation of DPR requires wide variety of expertise. A number of decisions are mutually related. For example: requirement and training plan is dependent on the nature of the technology, availability in the general employment market in the region, need for foreign collaboration and training, extent of specialised plant and equipments supplied from abroad etc.