

UNIT-II

PLANT LOCATION:

Plant location refers to choice of a region and the selection of a particular site for setting up a business or factory.

The ultimate goal of any organization is to minimize the profit through minimization of cost of production with maintaining product quality. This goal can be achieved only when the plant is of the right size and at a right place where economics of all kinds in production available.

Many factors must be considered where choosing a site for manufacturing plant, distribution, warehouse etc.

Factors effecting plant location:

1. Proximity of the market-

- Market is the location of buyers and hence become an important factor for plant location plaining
- Industrial units tried to locate the industry near the market
- Cost of service minimum

2. Availability of raw material-

- The ideal plant location is that, where at least the main raw material is easily available in required quantity and quantity with in a time
- So the daily flow of production can be maintained and the total production can be minimized
- Saving transport cost also
- Some industries require may be of more than one raw material and their sources, in this case one thing kept in mind, the transportation cost must be low

3. Transport and communication facilities-

- Transport includes movement of raw materials from source to site, movement of in process material one stage to another stage, movement of finish product to market
- While selecting location, adequate transport facility road, rail, water or air are to be analyzed, for their availability

4. Labor supply-

- Availability of labour with responsible wages
- But the labour is mobile factor and can be easily imported from other places

5. Fuel and power-

- Adequate supply of fuel and power
- Last century industries which were using coal as a major source of fuel and power situated near coal mines or places to which coal could be carried easily and cheaply
- But the power factor has become mobile, hence now-a-days this factor is not so much importance

6. Govt. Policy-

Govt. offers several incentive and subsidiary schedules to motivate businessman to locate their plant in backward regions.

Govt. policy suggest-

- Optimum use of resources
- Disparity of income

7. Climate consideration-

- Some industries require special climate to run unit efficiency
Ex- Coconut oil industry require sunlight
- Climate is very important for agricultural product also cotton industries require a humid atmosphere

8. Suitability of the land-

- Soil structure of the land most important
- Soil structure must be capable of bearing loads of foundations

9. Strategic consideration-

Strategic consideration like law and order situations, political stability and safety also influence the location decision

LOCATION THEORY AND MODELS

Weber,s theory-

Alfred Weber (German Economics)

He was first person give industrial theory

❖ Assumption-

- He assumes such state in which homogeneous condition
- Some resources are available at every where, some have fixed location
- The workforce (labor) has fixed location
- Demand for product is uniform through the region
- Transport cost and distance have positive relation

❖ Some Word-

- Ubiquitous- Any material, which found in everywhere
- Pure Material- Any material, which do not lose weight
- Gross Material- The material which lose it's weight

❖ Plant location depends on two factor-

- I. Primary (Transportation cost and labor cost)
- II. Secondary (Agglomeration)

PRIMARY FACTOR

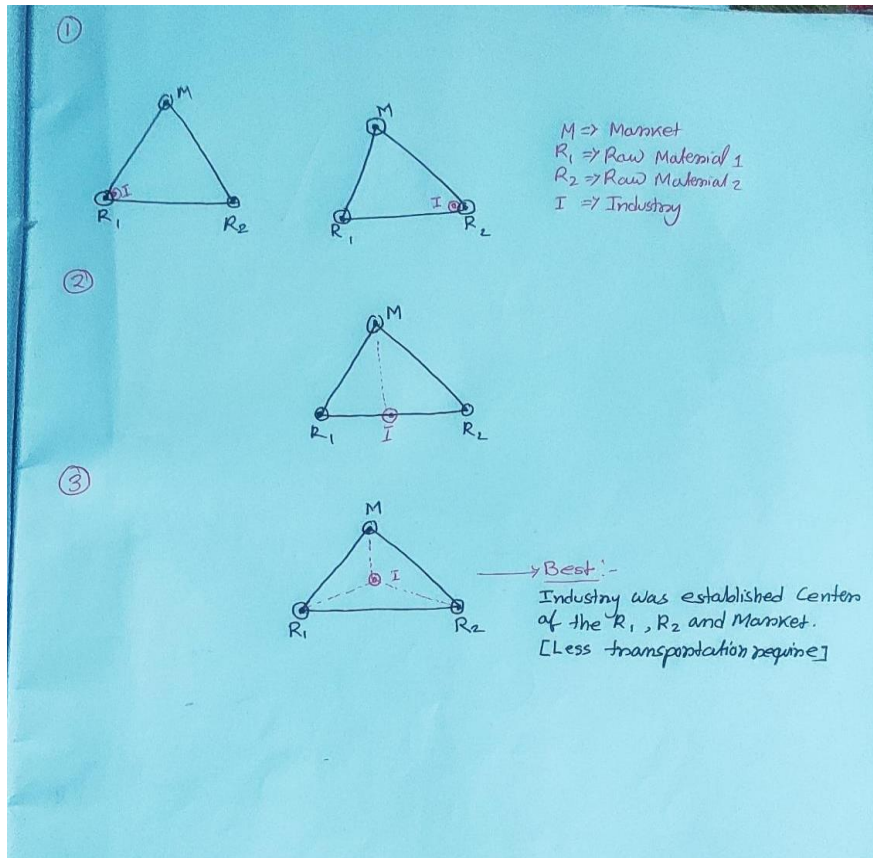
Role of transportation cost

➤ One market one raw material-

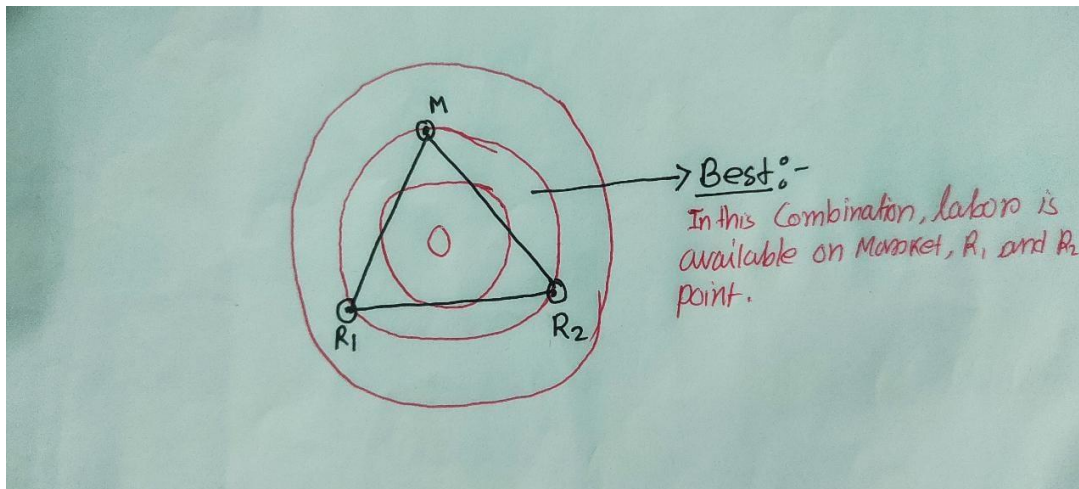
- If material is ubiquitous, it is better for industry establish near to market
- If material is pure, better for industry to establish near to market
- In case of weight losing material (gross material) better to establish near raw material

➤ One market two raw material-

- If raw materials found everywhere, we will establish the industry near market
- If raw materials are fixed and pure, industry established near to market
- If raw materials are fixed and gross in nature in this weber introduce triangle



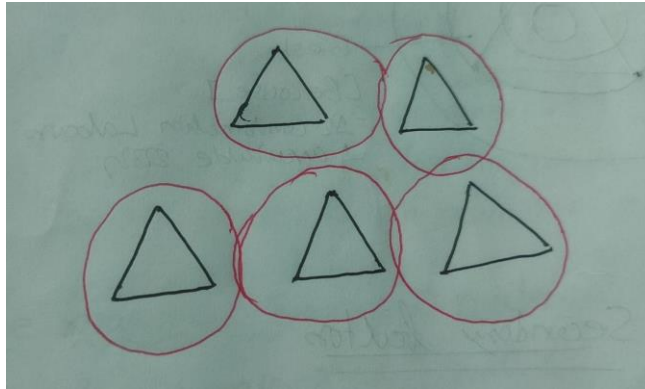
Role of labour cost-



SECONDARY FACTOR

Role of agglomeration-

Agglomeration occurs when several firms come together attain some threshold quantity of production when the isotope intersects



CRITISISM

- Condition of all people are not homogenous
- Product demand is not always equal in any area
- Transportation cost depends on various factor other than distance