THEORY OF INDUSTRIAL LOCATION:

ALFRED WEBER

BY

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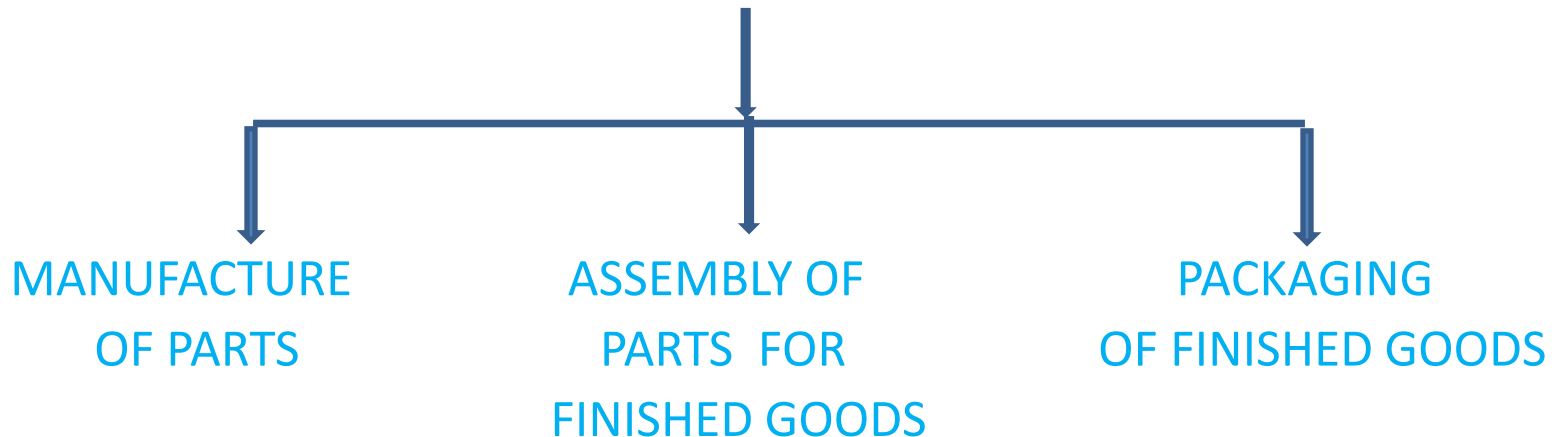
GEOGRAPHY, BARASAT GOVT. COLLEGE

FROM 1907 TO 1933, WEBER WAS

A PROFESSOR OF ECONOMICS

AT THE UNIVERSITY OF

HEIDELBERG, GERMANY

UNTIL HIS DISMISSAL FOLLOWING

CRITICISM OF HITLERISM.

WEBER'S THEORY WAS PUBLISHED IN

1909 IN GERMAN LANGUAGE AND

SUBSEQUENTLY IN 1929 IN ENGLISH

BY FREIDRISCH. HIS THEORY IS

CALLED THE LEAST COST

LOCATION THEORY.

ASSUMPTIONS OF WEBER'S THEORY

- A   THE CENTRES OF CONSUMPTION ARE FIXED

PRODUCTION

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   MANUFACTURE    ASSEMBLY OF    PACKAGING
   OF PARTS       PARTS  FOR     OF FINISHED GOODS
                  FINISHED GOODS
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FACTORS INFLUENCING LOCATION OF PLANTS

1. PRIMARY OR REGIONAL FACTORS
2. SECONDARYOR AGGLOMERATIVE AND DEGLOMERATIVE

PRIMARY FACTORS

THESE FACTORS INFLUENCE THE LOCATION OF PLANTS OVER DIFFERENT REGIONS.

WEBER DEVELOPED HIS THEORY ON THE BASIS OF TWO REGIONAL FACTORS:

- TRANSPORTATION COST
- LABOUR COST

TRANSPORT COST IS DEPENDENT ON TWO FACTORS:

1. TOTAL WEIGHT TO BE TRANSPORTED
2. DISTANCE TO BE COVERED

WEBER CLASSIFIED RAW MATERIALS

INTO TWO TYPES:

A. UBIQUITOUS MATERIALS

B. B. LOCALIZED MATERIALS

UBIQUITOUS MATERIALS

- THESE MATERIALS ARE PRESENT EVERYWHERE. EXAMPLES: WATER, AIR, SAND, SUNLIGHT, ETC.

LOCALIZED MATERIALS

- LOCALIZED MATERIALS ARE FOUND AT SPECIFIC LOCALS. EXAMPLES: MINERALS, CROPS, WOOD, ETC.

LOCALIZED MATERIALS ARE OF TWO TYPES:

1. PURE MATERIALS, SUCH AS COTTON, JUTE

2. GROSS MATERIALS, SUCH AS IRON ORE, WOOD, ETC.

WEBER ALSO DIVIDES MATERIALS INTO TWO TYPES ON THE BASIS OF THEIR NATURE OF TRANSPORTATION IN THE PROCESS OF PRODUCTION

PURE MATERIALS

PURE OR NON-WEIGHT LOOSING MATERIALS DO NOT LOOSE THEIR WIGHT IN THE PROCESS OF PRODUCTION.

SUCH MATERIALS DO NOT PULL PLANTS TO THEIR PLACES OF OCCURRENCES. EXAMPLES: COTTON TEXTILE, WOOL, ETC.

IMPURE OR GROSS MATERIALS

IMPURE OR GROSS MATERIALS LOOSE PART OF THEIR WEIGHT OR THEIR TOTAL WEIGHT IN THE PROCESS OF PRODUCTION. HENCE, IMPURE MATERIALS EXERT STRONG INFLUENCE ON LOCATION OF PLANTS. EXAMPLES: IRON & STEEL, SUGAR INDUSTRY, ETC.

MATERIAL INDEX

- ON THE BASIS OF THE ABOVE REASONING WEBER DEVELOPED A MATHEMATICAL FORMULA TO MEASURE THE RELATIVE PULL OF MATERIALS.

- MATERIAL INDEX = WEIGHT OF LOCALIZED MAYTERIALS/WEIGHT OF THE FINISHED PRODUCTS.

→ IF MATERIAL INDEX > 1 THEN THE PLANT WOULD BE LOCATED NEAR THE SOURCES OF MATERIALS.

→ IF MATERIAL INDEX < 1 THEN THE PLANT WOULD BE LOCATED NEAR TO THE MARKET.

LABOUR – THE DEVIATING FACTOR

A PLANT MAY DEVIATE FROM THE POINT OF

LEAST TRANSPORTATION COST WHEN THE

SAVINGS IN LABOUR COST ARE GREATER THAN

THE ADDITIONAL COST OF TRANSPORTATION AT

THE NEW CENTRE

ISODAPANES

ISODPANES REPRESENT POINTS OF EQUAL

TRANSPORTATION COST INCLUDING

ASSEMBLING COST OF MATERIALS

AND DISTRIBUTION COST OF

FINISHED PRODUCTS.

CRITICAL ISODAPANE

IT IS A POINT WHERE

WHERE BOTH LABOUR COST AND

TRANSPORTATION COST ARE

MINIMUM AS COMPARED TO THEIR

TOTAL COST ANYWHERE ELSE.

LABOUR COST

LABOUR COST IS MEASURED IN TWO DIFFERENT WAYS:

1. LABOUR COST INDEX WHICH IS PER UNIT COST OF LABOUR TO THE WEIGHT OF THE FINISHED PRODUCT.

2. LABOUR COEFFICIENT WHICH IS THE RATIO BETWEEN LABOUR COST INDEX AND LOCATIONAL WEIGHT (WEIGHT TO BE TRANSPORTED DURING THE PROCESS OF PRODUCTION).

WEBER CONCLUDED THAT HIGHER THE LABOUR COEFFICIENT, GREATER IS THE TENDANCY FOR A PLANT TO BE LOCATED NEAR THE CENTRE OF CHEAP LABOUR SUPPLY.

SECONDARY FACTORS

SECONDARY FACTORS LEAD TO CONCENTRATION OR DISPERSAL OF INDUSTRIES. THEY ARE:

A.   AGGLOMERATIVE FACTORS ARE THE EXTERNAL ECONOMIES WHICH RESULT FROM CONCENTRATION OF INDUSTRIES AT A PARTICULAR PLACE.

B.   DEGLOMERATIVE

THANK YOU