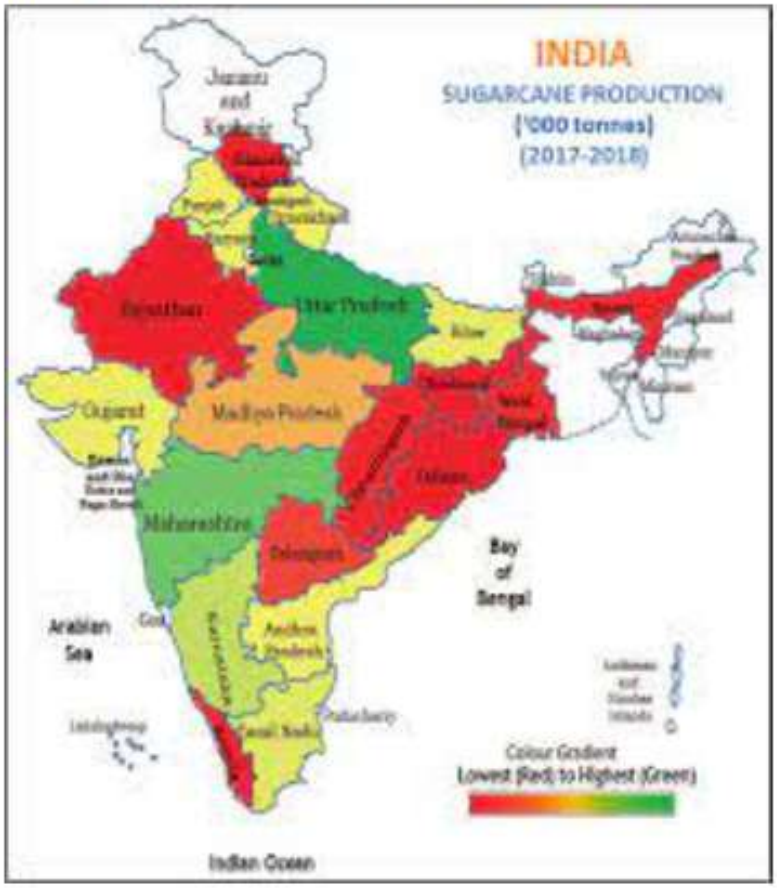
Geography Class 46

10th January, 2024 at 1:00 PM

THE CLASS STARTED WITH A BRIEF REVIEW OF THE PREVIOUS CLASS: (01:12 PM):

SUGAR INDUSTRY: (01:17 PM):

- **1) Significance:** Second largest agro-based industry after the cotton textile.
- a) Attracts the backward and forward linkages.
- b) Sugar is a commodity that is controlled.
- c) Less skilled labor can be useful.
- **2) Locational Factors:**
- a) Moderate temperature.
- b) High rainfall (minimum 150 cm).
- c) Grows well in alluvial and black soil.
- d) Sugarcane is perishable (weight-losing raw material).
- e) Sugarcane will lose its weight by 1/10th during the crushing while making sugar.
- While the other factors are not dominant the locational factor is crucial for the production.

- **Map Of Distribution Sugar Industries In India:**
- 

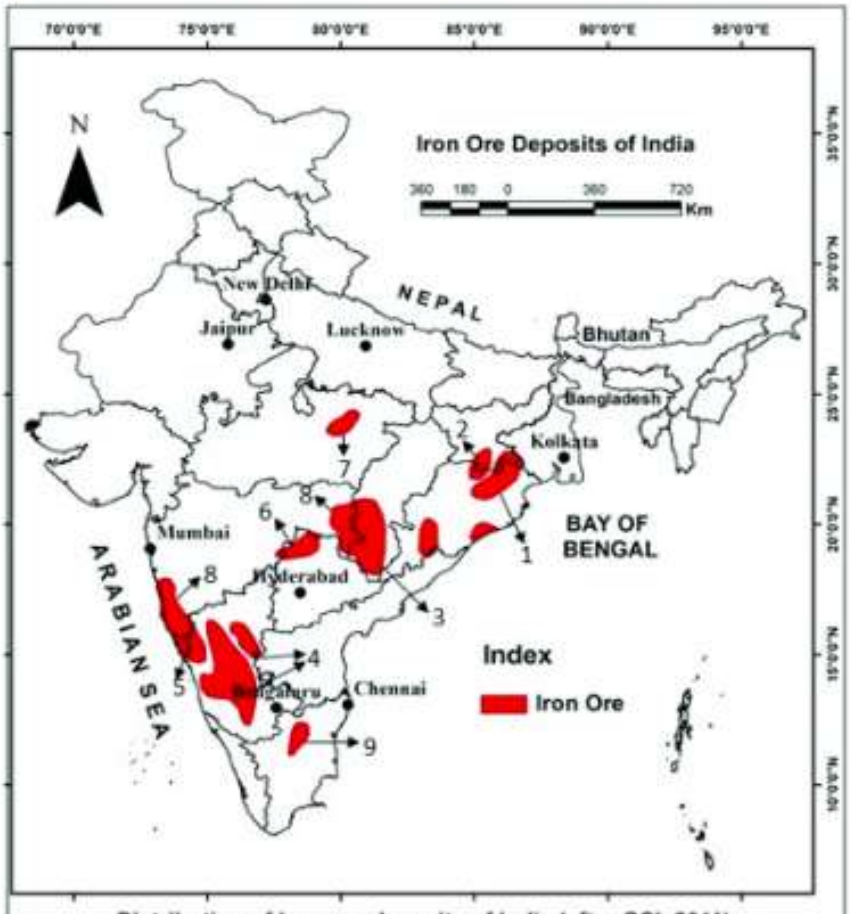
- Bihar, Champaran, Muzzafarpur.
- UP: Saharanpur, Muzzafarnagar.
- Haryana: Ambala, Karnal.
- Punjab: Bhatinda, Amritsar.
- In the South, sugarcane grows in Black Soil also and uses groundwater for irrigation.
- The Sucrose content is higher due to humidity and gives higher per-hectare productivity.
- Sugar mills were established through cooperatives.
- In Maharashtra: Pune and Nasik are the major centres.
- Karnataka: Shimoga, Mandya.
- Tamilnadu: Salem, Trichuy.

- **3) Challenges In Sugarcane Industries:**
- a) Low efficiency of industries due to obsolete technology.
- b) Low FRP given by the govt.
- c) Excessive usage of chemical fertilizer.
- d) High requirement of water.
- e) Overall supply of the raw material(sugarcane) varies.

IRON AND STEEL INDUSTRY: (01:45 PM):

- **Significance:**
- It is considered the foundation of every other type of industry.
- **Locational factors:**
- a) Requires highly skilled labor.
- b) Availability of regular and cheap power for this the plants are located near thermal or hydel power plants.
- c) Transportation is key and logistics are managed largely by the railways (Bi-directional relationship of railways and coal).
- d) Requires huge capital and has a high gestation period.
- **Raw materials:** Iron ore, limestone, and coal are required to make Pig Iron.
- In the pig iron manganese with other ingredients are added to make steel.
- This industry is a weight-losing industry.

- **Distribution of Iron-Ore Deposits In India:**



Distribution of Iron-ore deposits of India (after GSI, 2011)

1. Sundergarh, Kendujhar, Mayurbanj and Cuttack districts of Odisha, 2. East and West Singhbhum districts of Jharkhand, 3. Bastar and Durg districts of Chhattisgarh, 4. Bellary, Hospet and Chikmagalur districts of Karnataka, 5. North and South Goa, 6. Adilabad district of Telangana, 7. Jabalpur and Sarguja districts of Madhya Pradesh, 8. Chandrapur and Ratnagiri districts of Maharashtra and 9. Salem and Trichinapally of Tamil Nadu.

- **Distribution of Steel Plants:**

- **Integrated Steel Plants Of India:**
- Durgapur and Burnpur: West bengal.
- Jamshedpur & Bokaro: Jharkhand.
- Bhilai: Chattisgarh.
- Rourkela: Orissa.
- Vizag: Andhra Pradesh.
- Vijaynagar and Bhadrwati: Karnataka.
- Selam: Tamilnadu.
- Mini-steel Plants: Do not require iron ore as a raw material.
- Low capital and has a shorter gestation period.
- Near to market and fulfills the local demand.
- **Challenges Of the Iron and Steel Industry:**
- a) Supply of coal and other raw materials is a huge issue.
- b) Requires huge capital and a long gestation period.
- c) Huge power consumption and results in air pollution.
- d) Requires highly skilled labor.

CEMENT INDSUTRY: (02:16 PM):

- **Significance:** Used in construction activities, in 8 core industries, and an important economic growth indicator.
- **Raw Material:** Limestone, gypsum. For processing coal is required.
- Low-skilled labor is required.
- Capital-intensive industry.
- The cement industry is also present near to the coastal areas (cement from sea shells)
- Cement is also made from sludge, fly ash, and slag.
- **Distribution of the Cement Industry in India:**
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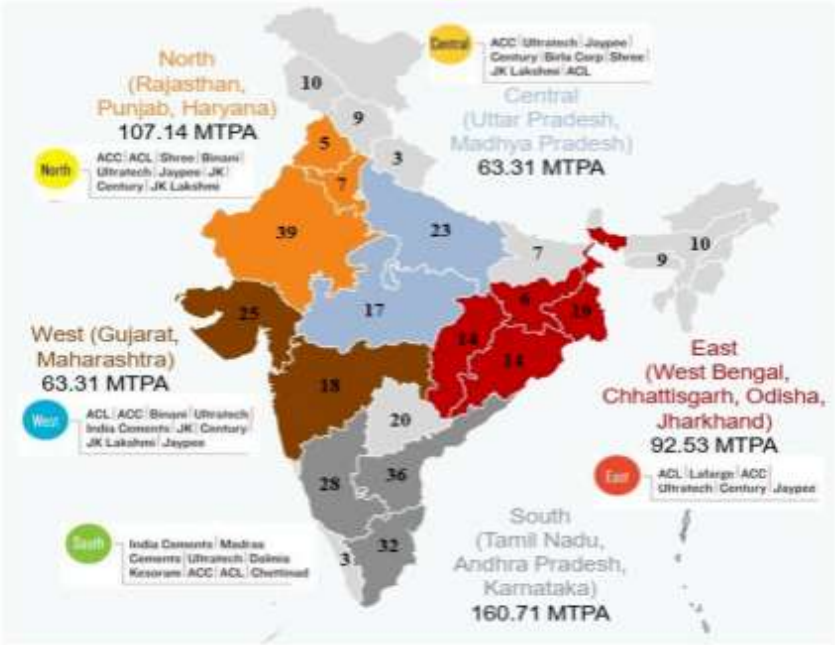

- **FERTILIZER INDUSTRY: (02:26 PM):**
- **Significance:** Supports agriculture and hence plays a significant role in food security.
- **Raw Materials:** Naptha, Ammonium Sulphate, Rock Phosphate, Sulphuric Acid.
- Market: Mainly used in agriculture so concentrated in rural areas.
- Capital and power-intensive industry.
- **Distribution of the Fertilizer Industry In India:**
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- **Challenges:**
- a) Imbalances in the production and consumption pattern of the fertilizers.
- b) Requires updated technology.
- c) Skilled labor is required.
- d) largely depended upon the govt. policy.

TRANSPORTATION: (03:00 PM):

- **Four modes of transportation:**
- **1) Roadways:**
- **Advantages:**
- a) Faster for short distances journeys.
- b) Rural connectivity.
- c) Provides last-mile connectivity.
- d) Feeder for other transports.
- **Disadvantages:**
- a) High energy consumption.
- b) Not comfortable for long-distance travel.
- c) Biggest contributor to air pollution.
- d) High maintenance cost of roadways.

- **2) Railways:**
- **Advantages:**
- a) Cheaper for both passengers and goods.
- b) Comfortable for long journeys.
- c) Fater mode in comparison to waterways and roadways.
- d) Supports the industrial growth.
- e) Efficient for urban transport (Metro, Local)
- f) Energy efficient, less polluting.
- **Disadvantages:**
- a) High maintenance
- b) Requires high capital.
- c) Requires support of the railways.
- d) Slower for a short distance.
- e) Difficult to establish in hilly terrain.
- **3) Airways:**
- **Advantages:**
- a) Supports economic growth.
- b) Safe for high-value articles.
- c) Vital mode of transport in emergencies, disasters, VIP movement, etc.
- **Disadvantages:**
- a) Costly mode of transport.
- b) Limited cargo movement.
- c) Highly energy intensive.
- d) Requires huge investment for operations.

- **4) Inland Waterways:**
- **Advantages:**
- a) Cheapest all mode.
- b) Useful for bulk and non-perishable goods transportation.
- c) Supports the industrial development.
- **Disadvantages:**
- a) Not all stretches are navigable.
- b) Not fit for perishable goods.
- c) Seasonal variation in the amount of water.
- d) Water diversion due to dams, and canals.
- e) Siltation which makes navigation difficult.

SOCIAL GEOGRAPHY: (03:29 PM):

- **Population:** The number of particular species is known as the population of that species.
- Population Density is the Total Population/Total Area.
- Nutritional density: Population/Cultivable.
- Agricultural Density: Agricultural population/Cultivable.
- The growth of the population is measured by the Death Rate which is the Number of deaths/total population.
- Birth rate: number of live births/total population*1000.
- The negative growth of the population could be measured by the Death Rate.
- Natural Growth Rate: Birth Rate-Death Rate/Total population*1000.
- Replacement Rate Fertility: It is the fertility rate required for the generation to replace itself without considering migration.
- It is the average number of children a woman would need to have to reproduce herself by bearing a daughter who survives to childbearing age so that each generation will replace exactly itself without considering migration.

- **Migration:** Changes in the place of residence for a substantial amount of time are defined as migration.
- a) International Migration.
- b) Internal Migration:
- **This is divided into 4 types:**
- b.1) Rural-Rural.
- b.2) Urban-Rural.
- b.3) Urban-Urban.
- b.4) Rural-Urban.
- c) Froced Migration.
- **Causes of Migration are of Two types:**
- a) Push Factors.
- b) Pull Factors.
- **Refer to the Settlements topic from the 12th Geography NCERT.**

SYLLABUS OF GEOGRAPHY IS COMPLETED.