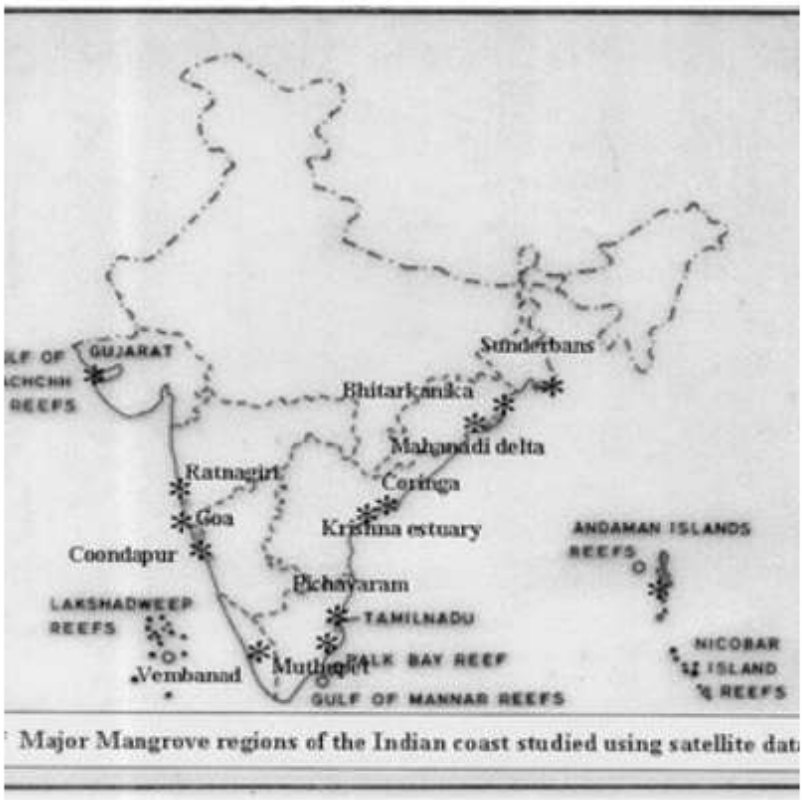
Geography Class 42

20th December, 2023 at 1:00 PM

MANGROVE FOREST (CONTINUES) (01:17 PM)

- It is found near the coastal regions.
- Mangroves in India-
- 

Major Mangrove regions of the Indian coast studied using satellite dat

- **Benefits**
- Prevents flooding during cyclone, flooding and storm surge.
- Supports the Coastal ecosystem and acts as a breeding ground for fish.
- It helps in water purification, filtering as well as nutrient recycling.
- Carbon Sequestration.
- It provides timber to the local community.
- Also helpful for tourism.
- **Issues associated with Mangroves**
- Overexploitation due to lack of other sources of timber
- Changes in river course, speed of water, Salinity, Sedimentation, Rising sea level, Ocean Acidification
- Ocean warming
- Oil Spill

AGRICULTURE (01:34 PM)

- Two main types- Tropical Agriculture Practice and Temperate Agriculture Practice

Tropical Agriculture Practice	**Temperate Agriculture Practice**
Temperature is high thus crop such as Rice is cultivated	Temperature is low thus crops such as Wheat are cultivated
Infrastructure is less developed as developing and less developed countries are located here	Infrastructure is better developed
Intensive agriculture is practised.	Extensive Agriculture is practised
Per Capita availability of land is low	Per Capita availability of land is high
Population density is high	Population density is low
Subsistence agriculture is practiced	Commercial agriculture is practised

- **Types of Agricultural in the World:-**
- **Nomadic herding**
- People roam with their animals such as sheep, Horses, goats etc.
- Nomads rely on animals for meat, milk, fur, hide etc.
- In dry regions such as North Africa and the Middle East camels are reared.
- In Central Asia- Horses are reared.
- **Transhumance-** Movement of people from one region to another with seasons. E.g. Bakarwal, Gaddi, Changpa tribe in Ladakh in India.
- **Shifting Cultivation in Tropical Region**
- Also called slash-and-burn cultivation.
- Foresh patch is cleared and burned and new crops are grown there.
- It results in Soil erosion due to flooding caused due to high rain.
- **Regions-** Amazon Forest, Parts of Venezuela, Mexico, Congo Basin, South East Asia, Northeast Asia where it is called as Jhum Cultivation. Jhum Cultivation is banned in India.
- **Intensive Subsistence Agriculture**
- Practised in densely populated regions of the world.
- Mainly dominated by Rice cultivation.
- **Characteristics-**
- Small and highly fragmented land holdings
- Lack of mechanisation and dominated by manual labour.
- High per-hectare productivity.
- **Regions-** South Asia, Indo-China, eastern China and other parts of the river valley.

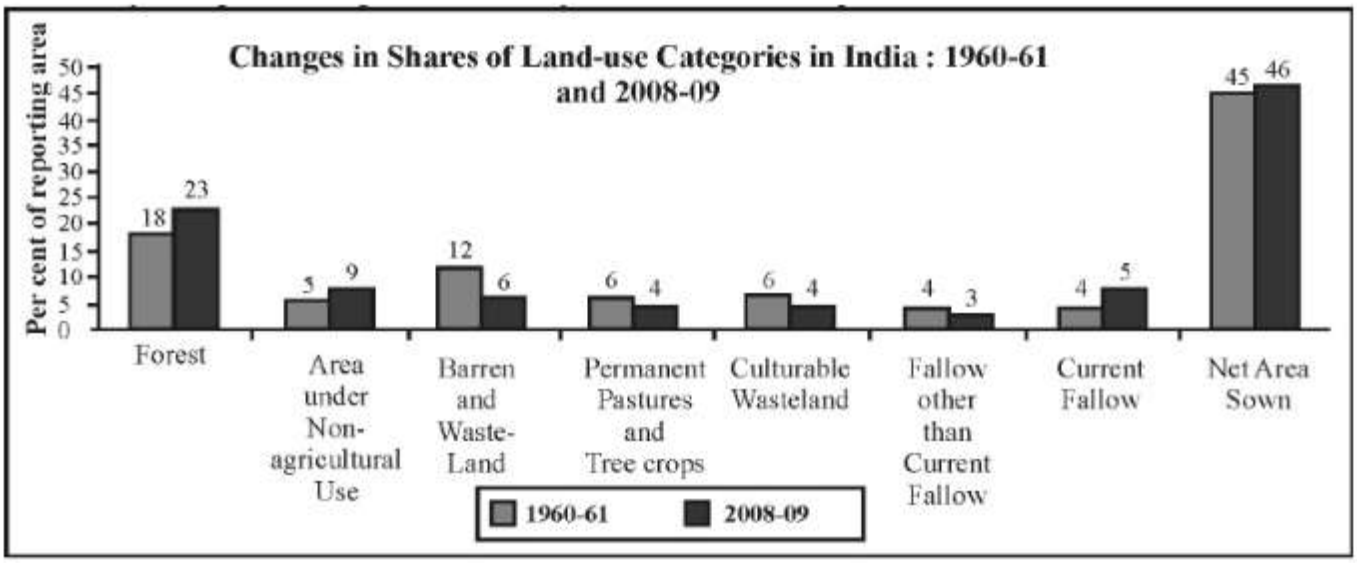
- **Plantation Agriculture**
- It is commercial in nature.
- E.g. Tea and Coffee estates
- **Characteristics**
- Highly centralised - Large area of land is cultivated under single ownership.
- Requires large investment.
- Scientifically managed.
- most of the crops are export-oriented.
- **Regions-** Malaysia - rubber plantations, Indonesia- Sugarcane, Fiji- Sugarcane Plantations, South Africa- Sugarcane, India - Coffee, Tea, Rubber, West Indies- banana and Sugarcane, West Africa- Coffee and Cocoa plantations.

TYPES OF AGRICULTURE IN TEMPERATE REGIONS (02:15 PM)

- **Mediterranean type of Cultivation**
- Known for short bushes, draught resistant and deep-rooted plants.
- E.g. Grapes, Olives, Organes, Citrus fruits.
- The practice of growing grapes is called **Viticulture**.
- **Regions-** Mediterranean region
- **Extensive commercial grain farming**
- Prairie region soil is very fertile.
- **Regions-** Prairies of N. America, pampas of Argentina, Velds of South Africa, Down of Australia, Central Europe and Central Asia.
- **Characteristics**
- Large area of per capita availability of land.
- Dominated by wheat mono-agriculture.
- Highly profitability.
- Highly mechanised.
- Scientifically managed in terms of seed variety, fertiliser, pesticide etc.
- Highly fertile soil due to **calcification.**
- Per hectare, output is less but per capita production is high.
- **Livestock ranching**
- Very profitable
- scientifically managed
- Regions- Western USA, Canada, Mexico, Pampas of South America (cattle rearing), Welds of South Africa, Down of Australia (Sheep rearing), Parts of New Zealand.

- **Commercial mixed farming**
- It involves the practice of growing crops along with animal rearing.
- Crops are grown for both human and animal consumption. E.g. Corn
- It requires a huge expenditure on machines and farm building.
- It results in high profits.
- **Regions-**
- East of prairies in N. America, Western Europe, Northeast Argentina, South East Australia and New Zealand
- **Commercial Dairy farming**
- Practice in regions of high population density.
- It involves centrally established commercially developed dairy farming.
- **Regions-** Densely populated regions.
- Requires both machines as well as manual labour.
- **Regions-** North East USA, North West Europe such Denmark, Sweden, Ireland, Eastern Argentina, South East Australia as well as New Zealand,
- **Truck Farming**
- It involves growing fruits, vegetables and other perishable goods near urban centres at a distance that can be covered by trucks overnight.
- Regions- North East USA, North West Europe etc.
- It is also called as **factory farming or Market Gardening**

LAND USE CATEGORIES IN INDIA (02:49 PM)



- **Land under non-cropping activities-**
- Forest - land with natural vegetation such as recorded forest, private forest etc
- Area under non-agricultural use - land used for settlements such as buildings
- Barren and Wasteland - Land which can not be used for sowing, land cant be cultivated using present technology
- Permanent pastures and Tress Crops - Areas such as common grazing land or that used for social forestry, Agroforestry etc

- **Land under cropping activities-**
- Net Sown Area- This is the area in which cultivation is being done in the current year.
- Gross cropped year - Total area under cultivation with multiple sowing being accounted for multiple times.
- Current Fallow- Area that is uncultivated in the current year.
- Culturable wasteland- where cultivation is not done for more than 5 years.
- Fallow other than current fallow- cultivation not being done more than a year but less than 5 years.
- Areas that have seen an increase- Net Sown Area, area under non-agricultural use, forest, current fallow
- Areas which have decreased- Barren and Wasteland, Permanent Pastures and Trea crops, Fallow other than current fallow, culturable wasteland.

GREEN REVOLUTION (GR) (03:14 PM)

- **Inputs used in GR-**
- High-yielding variety seeds - Productivity per hectare is high, grows faster and grows as short and dense bushes. It is highly water intensive so requires irrigation.
- High irrigation
- Regular supply of electricity
- Chemical pesticides and fertilisers
- Capital to purchase inputs.
- Favourable Govt policy
- **1961- 68: Pre Mature phase**
- Integrated Agriculture Development Program was adopted.
- 8 districts of Punjab and Haryana were targeted to grow these HYV varieties. This program was highly successful.
- **1968-81: Mature Phase**
- The entire region of Punjab and Haryana was covered.
- The government provided cheaper loans, MSPs and subsidies.
- Majorly Wheat cultivation was targeted.
- **Third Phase: 1981- 1992**
- Rice cultivation was targeted.
- By the end of the third phase rice cultivation nearly doubled.
- Through GR, self-sufficiency was achieved.

- **Significance of GR**
- Food Security
- Reduction of Poverty
- Reduction of unemployment
- Control of famine
- Emphasis was shifted to commercial agriculture.
- **Negative Consequences of GR**
- **Ecological issues**
- Negligence of Biodiversity
- Neglect of indigenous crops and seeds
- land degradation due to excessive usage of chemical pesticides and fertilisers
- Increasing cultivation of water-intensive crops
- Increased incidence of pests and insects
- Soil salinization increases due to the flood irrigation method
- Bio Magnification, Eutrophication etc
- **Economical issues**
- Increase in cost of agriculture
- Neglect of dry land agriculture
- Increased subsidy burden on Govt
- **Social Issues**
- Increased inequality within the state
- Increase in Inter state inequality
- Migration issues- Inward and Outward

NEXT CLASS- MANUFACTURING INDUSTRY, TRANSPORTATION ETC