

8th July

Geography

Date :

Page :

Ch - 3 Agriculture...

Types of farming :

a) Primitive subsistence farming ⇒

- Small patches of lands
- Primitive tools like hoe, dae and digging sticks
- Family labour
- Monsoon dependent (No irrigation facilities)

• Dependent on ~~the~~ natural fertility of the soil (No fertilizers or modern input)

• Slash and burn agriculture -

1) Farmers clear a patch of land and produce crops to sustain ~~and~~ their family. When the soil fertility decreases

• the farmers shift and clear a fresh patch of land

2) This ~~the~~ technique allows nature to replenish fertility of the soil.

b) Intensive subsistence farming ⇒

• Land under cultivation has reduced over generations

• Labour intensive agriculture

• Fertilizers and other biochemical inputs are used.

• Irrigation facilities available

• Used in areas with high population and a maximum input is derived from limited land.

- Commercial farming \Rightarrow
- High doses of modern input - HYVs, fertilizers, insecticides, pesticides to get higher productivity
 - The degree of commercialisation varies from region to region.

- Plantation farming \Rightarrow
- Single crop grown on a large area
 - Migrant labourers
 - Capital intensive inputs
 - All the produce is used as a raw material in various industries
 - Eg \rightarrow Tea in Assam and North Bengal, coffee in Karnataka
 - A well-developed network of transport and communication is required for connecting plantation to processing industries and market

Types of cropping pattern:

a) Rabi -

Sown in winter i.e., Oct to Dec and harvested in summer i.e., April to June. Examples \rightarrow wheat, gram, ^{barley} mustard. It is grown in Punjab, Haryana, Jammu and Kashmir, ^{low} P. Precipitation during the winter months supports these crops.

b) Kharif -

Sown in monsoon i.e., June-July and harvested in Sept-Oct. Examples \rightarrow maize, Bajra, soyabean, rice. Grown in Assam, West Bengal, Tamil Nadu, Andhra Pradesh ^{Grown}

c) Zaid crops →

It is a short season during summer months between Rabi and Kharif seasons. Examples → watermelon, muskmelon, cucumber.

Major crops grown in India →

a) Rice →

• Kharif crop

• Temperature above 25°C

• Rainfall above 100 cm

• India second largest producer after China.

• Development of dense network of canal, irrigation and tubewells have made it possible to grow rice.

• Grown in coastal areas, north ~~Western~~ states, Punjab, Haryana etc.

b) wheat →

• Rabi crop

• Cool growing season and bright sunshine, at the time of harvesting

• Rainfall → 50-75 cm

• Two major wheat growing regions are → Satluj plains in north-west, eg - Punjab, Haryana, UP.

• Black soil in the Deccan, eg → Madhya Pradesh

↓ Millets ⇒

- It includes Jowar, Bajra and Ragi.
- Also known as coarse grains
- They have high nutritional value
- Ragi is rich in iron and calcium
- Jowar is the third most important food crop in terms of area and production. It is rain-fed and does not require irrigation. Largest producer - Maharashtra; second largest - Karnataka; Andhra Pradesh, Madhya Pradesh.
- Bajra grows well on sandy soils or shallow black soils. Largest produced by Rajasthan, followed by UP, Maharashtra, Haryana.
- Ragi crop of dry regions. Grows on red, black, sandy, loamy and shallow black soils.

↓ Maize ⇒

- Kharif crop
- Used both as food and fodder
- Grows well on alluvial soil
- Temp → 21° - 27°C
- In states like Bihar, it is grown as a Rabi crop
- Use of HYV seeds, fertilizers and irrigation have contributed to their increased growth.
- Grown in Karnataka, Bihar Madhya Pradesh.

eg Pulses ⇒

- India is the largest producer and consumer of pulse in the world
- Major source of protein
- help in restoring soil fertility, hence they are grown in rotation with other crops.
- Eg → Matar, moong, chana, arhar
- States → MP, UP, Rajasthan, Karnataka

eg Sugarcane ⇒

- Hot and humid climate
- Temp. → 21 - 27°C
- Rainfall → 75-100 cm
- India second largest producer after Brazil.
- Source of sugar, jaggery, khandsani, molasses
- States → UP, Maharashtra, Karnataka, Tamil Nadu

eg Oil seeds ⇒

* Groundnut ⇒

- Kharif crop
- Andhra Pradesh is largest producer followed by Tamil Nadu and Karnataka

* Deenseed and mustard ⇒

- Rabi crops
- Gujrat

* Sesamum →

Rabi crop in the south

* Castor seeds →

It is grown both as a rabi as well as kharif crop.

h/ Tea → v. Imp

- Grown by plantation agriculture
- Important beverage introduced by British
- The tea plant grows well in tropical and sub-tropical climates endowed with deep and fertile well-drained soil, rich in humus and organic matter.
- Tea bushes require warm and moist frost free climate all through the year.
- Frequent showers evenly distributed over the year ensure continuous growth of tender leaves.
- Labour ~~abundant~~, intensive industry, abundant, cheap & skilled labour.
- Tea is produce within the tea garden to retain its freshness.
- Assam, Tamil Nadu, West Bengal.
- India is the leading producer and exporter in the world.

i/ Coffee → v. Imp

- 4% of the world's production
- Known for its good quality
- Arabica variety from Yemen, is grown in India
- It has the greatest demand in the world
- It was first cultivated in Baba Budan hills

* Fruits →

→ Tropical as well as temperate fruits →

* Mango → AP, UP and West Bengal

* Oranges → Nagpur, Cherapunji in Meghalaya

* Banana → Kerala, Tamil Nadu, Mizoram

* Leeche → Guava → UP and Bihar

* Pineapples → Meghalaya

* Grapes → Andhra Pradesh,

* Apples, pears, apricots, walnuts → Jammu and Kashmir, Himachal

→ Horticulture crops →

• India is the largest producer of fruits and vegetables in the world

• 13% of the world's vegetable

* Non-food crops →

1) Rubber →

• Equatorial crop, grown in tropical and sub-tropical climates.

• Moist and humid climate with rainfall more than 200 cm

• Temperature above 25°C

• India ranks 5th among the world producers.

• It is an important industrial raw material

• Grown mainly in the hills of Meghalaya, Tamil Nadu and Karnataka

of cotton ⇒

- Main raw material for textile industry
- India 3rd largest producer of cotton.
- Grows well in black cotton soil of Deccan plateau
- Requires high temperature, light rainfall, 210 frost-free days
- Requires bright sunshine
- Kharif crops
- Requires 6-8 months to mature.
- States → Maharashtra, Gujarat, MP.

of Jute ⇒

- Golden fibre
- Requires well-drain fertile soil
- In the flood plains, where soil is renewed every year.
- Requires high temperature at the time of growth
- States → West Bengal, Bihar, Assam
- It is used for making gunny bags, ropes, carpet etc
- ★ Due to its high cost it is used in markets to synthetic fibres and packing material particularly nylon

⇒ Impact of Globalisation on agriculture ⇒

- Due to globalisation Indian farmers are exposed to new ^{challenges}
- Despite being an important producer of rice, rubber, tea, coffee etc, our products are not able to compete with the developed countries because of highly subsidize agriculture in those countries.
- Changing cropping pattern from cereals to high value crops will require import of food. However, if India imports

cereal and exports high value commodities, it would be beneficial.

→ Technical and institutional reforms → *imp.*

a) Institutional reforms ⇒

→ abolishing of zamindari system.

→ consolidation of land holdings

But these reforms were lukewarm and lack implementation.

• Some other institutional reforms were against drought, floods, cyclone, fire etc.

• Establishment of gram banks, cooperative society, banks
— x — to provide loan to farmer

• Kisan credit card, personal accident insurance, etc.
introduced by govt.

• Special weather bulletin & agricultural programs for farmers were introduced on radio and television.

• The government also announce MSP (Minimum Support Price) to ensure ~~minimum~~ ^{minimum} ~~and~~ procurement prices ~~for~~ ^{for} imp. crops to ~~set~~ check exploitation of farmers by middlemen.

→ Contribution of agriculture to the national economy
employment and output ⇒

- 1) Its share in the Gross Domestic Product has registered a share in employment and livelihood continues to be as high as 63% in 2000.
 - 2) The declining share of agriculture in the GDP is a matter of serious concern because any decline in other spheres of the economy having vital implications for the society.
 - 3) Establishment of Indian Council of Agriculture Research (ICAR), agricultural universities, veterinary ^{services} and animal breeding centres, horticulture & development, research and development in the field of meteorology and weather forecast etc. were given priority for improving Indian agriculture.
 - 4) Today Indian farmers are facing a big challenge from international competition and a govt. is going ahead with reduction in the public investment in agriculture sector particularly. In irrigation, power etc. subsidy of fertilizers is decreased leading to increase in the cost of production.
 - 5) Reduction in the import duties on agricultural products have proved detrimental to agriculture in the country.
- * Genetic engineering is recognised as a powerful supplement in inventing a new hybrid varieties of seeds.