10th Standard

Social Science-Geography

Agriculture

India is an agricultural country because of the following reasons:

- 1. Two-third of its population is engaged in agricultural activities.
- 2. Agriculture is a primary activity and produces most of the food and food grains.
- 3. It produces raw materials for our various industries, e.g., cotton textile, sugar industry.
- Agricultural products, like tea, coffee, spices are exported and earn foreign exchange.

Primitive Subsistence Farming:

This type of farming is practiced in few pockets of India on small patches of land using primitive tools and family/community labor. Farmers clear a patch of land and produce cereals and other food crops to sustain their families. When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation. This type of shifting allows nature to replenish the fertility of the soil through natural processes. Land productivity is low as the farmer does not use fertilizers or other modem inputs.

Intensive Subsistence Farming:

It is practiced in areas of high population pressure on land. It is labor intensive farming. Yield per hectare is high because high doses of biochemical inputs and irrigation are used. The size of the land-holdings is small and uneconomical. Farmers take maximum output from the limited land by raising 2-3 crops in a year from the same land, i.e., multiple cropping is practiced.

Commercial Agriculture:

In this, crops are mainly grown for commercial purposes. It is practiced on large pieces of land on scientific and commercial lines using machines and modem technology. There is higher use of modem agricultural inputs, e.g., HYV seeds, fertilizers, irrigation, etc.

The degree of commercialization varies from one region to another. Rice is a commercial crop in Punjab, while in Odisha it is subsistence crop. E.g., plantation agriculture.

Characteristics of plantation agriculture:

A single type of crop is grown on a large area. Plantation is carried out on large estates using lot of capital intensive units. Lot of migrant laborers work on these estates. The plantation has an interface of agriculture and industry. All the produce is used as raw material in the respective industries. The production is mainly for the market, i.e., commercial agriculture.

Rabi, Kharif and Zaid are the three cropping seasons:

- **Rabi crops (Winter crops):** Sown in winter—October to December. Harvested in summer—April to June. Important crops: wheat, barley, mustard, peas, gram, etc.
- Kharif crops (Crops of the rainy season): Sown—onset of monsoon (June-July). Harvested— September-October. Important crops: rice, maize, millets, jowar, bajra, tur (arhar), moong, urad, cotton, jute, groundnut and soyabean.
- Zaid season: It is a short cropping season during summer months mainly between March-April and June-July. Main crops—watermelon, musk melon, cucumber etc.

Rice is the most important food crop (Kharif crop) of India. India holds second position in rice production after China. Cultivation—High temperature of 25° C and above and high humidity with annual rainfall of 100 cms is required. Four major regions of rice cultivation are —

- 1. Plains of North, India;
- 2. Plains of North-Eastern India;
- 3. Coastal areas; and
- 4. Deltaic regions. Irrigated rice is produced in Punjab, Haryana, Western UP and Rajasthan.

Wheat is the second most important cereal crop of India. It is the main food crop.

Geographical conditions:

Cool and moist growing season. Bright sunshine at the time of ripening.

Rainfall: 50 to 75 cm evenly distributed over the growing season, loamy soil. **Wheat growing zones**—

- 1. The Ganga-Sutlej plains in the North-West and
- 2. Black soil region of the Deccan.

Wheat producing states—Punjab, Haryana, UP, Bihar, Rajasthan and Madhya Pradesh.

Jowar is the third most important food crop with respect to area and production, kharif crop, rainfed crop grown in moist areas.

Major producing states

Maharashtra, Karnataka, Andhra Pradesh and Madhya Pradesh.

Millets are called coarse grains. They have high nutritional value, important part of the diet for poor people. Examples:

- **Ragi:** Leading producer is Karnataka, followed by Tamil Nadu. Himachal Pradesh, Jharkhand, Uttaranchal, Sikkim etc. are other important regions.
- **Jowar:** Maharashtra is the leading producer followed by Karnataka, Andhra Pradesh, Madhya Pradesh.
- **Bajra:** It grows well on sandy soils and shallow black soils. Rajasthan is the largest producer followed by Uttar Pradesh, Maharashtra, Gujarat and Haryana.

Maize crop — Geographical conditions:

Kharif crop, requires temperature between 21° C to 27° C, requires moderate rainfall between 50-100 cm. It grows well in old alluvial soils.

Maize is a crop which is used both as food and fodder. In some states like Bihar, maize is grown in rabi season also. Maize production in India has increased due to factors like—use of modem inputs such as HYV seeds; use of fertilisers; and use of irrigation facilities.

India is the second largest producer of sugarcane after Brazil.

Geographical conditions:

It is a tropical as well as subtropical crop.

It grows well in hot and humid climate. Temperature: 21°C to 27°C. Annual rainfall between 75 cm and 100 cms. Irrigation is required in the regions of low rainfall. It can be grown on a variety of soils. It needs manual labour from sowing to harvesting.

Six major states producing sugarcane—Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar, Punjab and Haryana. Sugarcane is the main source of sugar, gur (jaggery), khandsari and molasses.

Oilseeds:

India is the largest producer of oil seeds in the world. 12% of the total cropped area is under oilseed production. Six major oilseeds produced in India—Groundnut, mustard, coconut, sesamum (til), soyabean, castor-seeds, linseed, sunflower and cotton-seeds. Most of these oilseeds are edible and are used as cooking mediums. Some are also used as raw material in the production of soap, cosmetics and ointments.

Tea Geographical conditions:

It grows well in tropical and subtropical climates. It requires deep, fertile, well drained soil, rich in humus and organic matter. It requires warm and moist frost free climate round the year. Frequent showers evenly distributed through the year ensure continuous growth of tender leaves. Tea is a labour intensive industry. It requires abundant, cheap and skilled labour.

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Coffee:

Most important beverage crop of South India, India produces 4% of the world's coffee production. Major states—Karnataka, Kerala, Tamil Nadu (mainly in Nilgiri hills).

Cotton is mainly produced in Maharashtra, Gujarat and Madhya Pradesh. Cotton is the fibre crop which is mainly grown in the black soil of the Deccan Plateau region.

- 1. Position. India is the 3rd largest producer of cotton in the world.
- 2. Geographical conditions. Requires—high temperature; light rainfall or irrigation; 210 frost-free days; bright sunshine; black cotton soil; Kharif crop and requires 6-8 months to mature.

3. Major cotton producing states—Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

Iute:

Mainly grown in West Bengal, Bihar and Assam, known as golden fibre. Jute is mainly grown in West Bengal, especially in the Hoogly Basin because there the geographical conditions favour its growth. These conditions are—

- High temperature required during the time of growth,
- Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year.

Jute products are—gunny bags, ropes, mats, carpets, yams and other ornamental artifacts.

Rubber is produced in Kerala, Tamil Nadu and Karnataka, Andaman and Nicobar islands and Garo hills of Meghalaya. Conditions: It requires hot and humid climate. Rainfall—200 cms. Temperature— above 25° C. Maximum rubber is consumed in the manufacture of auto types and tubes and cycle types STION and tubes.

Institutional reforms in Agriculture:

- 1. Collectivization and consolidation of land holdings to make them economically viable.
- 2. The green revolution based on the use of package technology and the White Revolution to increase milk production.
- 3. Cooperation with farmers and Abolition of Zamindari system.
- 4. Provision of crop insurance to protect the farmers against losses caused by natural calamities, i.e., drought, flood, cyclone, fire and disease.
- 5. Establishment of 'Grameen Banks', Cooperative Societies and Banks.
- 6. Kissan Credit Card (KCC), Personal Accident Insurance Scheme (PAIS).
- 7. Special weather bulletins and agricultural programmes for farmers on radio and TV.
- 8. Announcement of minimum support price, remunerative and procurement prices for crops to check the exploitation of farmers.

