Chapter 9: Agriculture

9.1 Introduction to Agriculture

- Agriculture is the practice of cultivating soil, growing crops, and raising animals for food, fiber, and other products.
- It is the **primary occupation** for a large portion of India's population.
- Agriculture depends on climate, soil, water availability, and technology.

9.2 Types of Farming in India

9.2.1 Primitive Subsistence Farming

- Practiced mainly in tribal and hilly areas.
- Uses simple tools and traditional methods.
- Low productivity, crops grown for **self-consumption**.
- Examples: Jhum or shifting cultivation in Northeast India.

9.2.2 Intensive Subsistence Farming

- High use of labor and capital on small landholdings.
- Mainly found in Punjab, Haryana, Uttar Pradesh, Bihar.
- Crops include wheat, rice, sugarcane, vegetables.

9.2.3 Commercial Farming

- Producing crops for sale in the market.
- Uses modern tools, fertilizers, irrigation.
- Examples:
 - o Plantation farming: Tea, coffee, rubber (Kerala, Assam).
 - o **Mixed farming**: Growing crops and rearing animals.

9.3 Major Crops of India

9.3.1 Food Crops

- Rice: Grown mainly in Bihar, West Bengal, Punjab.
- Wheat: Grown in Punjab, Haryana, Uttar Pradesh.
- Millets and Pulses: Grown in dry regions.

9.3.2 Cash Crops

- Sugarcane: Uttar Pradesh, Maharashtra.
- Cotton: Gujarat, Maharashtra.
- Tea and Coffee: Assam, Kerala.
- Rubber: Kerala.

9.4 Agricultural Practices

- Irrigation: Essential for increasing production.
- Common methods: Canals, wells, tube wells, drip irrigation.

- Use of fertilizers and pesticides to enhance yield.
- Adoption of modern machinery like tractors, harvesters.

9.5 Problems in Indian Agriculture

- Dependence on monsoon causing droughts and floods.
- Small and fragmented landholdings.
- Lack of modern technology in many areas.
- Soil degradation and waterlogging.
- Low productivity compared to developed countries.

9.6 Government Measures to Improve Agriculture

- Introduction of **Green Revolution**: High-yield variety seeds, chemical fertilizers.
- Expansion of irrigation facilities.
- Providing subsidies and crop insurance.
- Encouraging organic farming and sustainable practices.
- Development of agricultural research institutes.

9.7 Role of Agriculture in Indian Economy

- Provides food and raw materials to industries.
- Employment for more than 50% of the population.

- Contributes significantly to the **GDP**.
- Supports **export earnings** through cash crops.