



Introduction

- India is an **Agricultural Country**.
- **54.6% of total population** depends on **agriculture and allied activities**.
- **Agriculture** contributes **17.4% in GDP** of country.
- We have been doing **agriculture** for **thousands of year**.
- However, due to the change in climate condition, technology and environment, the **methods of agriculture** have also changed.



- Kharif Crop: These crops are sown in June–July and harvested in October–November. Rice, maize, bajra, groundnut, mooring, urad, sugarcane, soybean, etc. are the main kharif crops. These crops depend on monsoon rains. But irrigation facilities in some parts of country are also utilized for this crop.
- Rabi Crop: These crops are sown in October–November and harvested in March–April. Wheat, gram, oat, oil seeds (mustard, alsi), cumin, coriander, opium, isabgol, etc. are the main crops of rabi. Most of the rabi crops depend on irrigation.
- Zaid Crops: These crops mainly include green vegetables and fodder. These are sown in February–April and harvested in June–July. Watermelon, gourd, cucumber, etc. are examples of Zaid crops.

Different forms of Indian Agriculture on the basis of Uses

- Cereals: Those crops which are used as food are called cereal crops, e.g. rice, wheat, maize, jowar, millet, oat, pulses, etc.
- Commercial or Industrial Crops: Those crops which utilized for commercial purposes or as raw materials in industries are called commercial crops or cash crops, e.g. sugarcane, cotton, jute, tobacco, oil seeds, etc.
- Plantations crops: Those crops which are grown in large plantations are called plantation crops. These crops are utilized as beverage or in industries. Examples: tea, coffee, rubber, cinchona, spices, etc.
- Horticultural Crops: Fruits and vegetables come under this category.

Main Cereal Crops of India

- **Wheat:** Wheat is the main rabi crop in northern India. It is grown in temperate areas of India. This crop requires temperature between 10 to 20° Celsius and 25 to 75 cm rainfall. Alluvial soil and loamy soil are ideal for growing wheat.
- **Rice:** Rice is one of the main cereals in India. In most parts of the country, this crop is sown in rainy season and hence is the main crop of kharif. Rice is grown in tropical parts of India. This crop needs temperature between 19 to 27° Celsius and rainfall between 75 to 200 cm. Alluvial soil of river valleys is ideal for growing rice. Three types of rice are grown according to weather in India and they are; Aman (Monsoon), Os (Winter) and Boron (Summer).
- **Maize:** Maize was introduced in India in the 17th century by the Portuguese. Maize crop needs temperature between 12 to 35° Celsius and rainfall between 50 to 100 cm. This crop needs nitrogen-rich soil which is well drained.

- Millets: This crop is used for fodder and food grain. Millet is growing and hot and dry climate between June and October. This is a kharfi crop which needs temperature between 25 to 35°C and rainfall between 40 to 60 cm.

Main Pulses of India

Most of the people in India are vegetarian and hence pulses are the main source of protein in diet.

Moreover, pulse crop enhances soil fertility and thus helps the farmers. Pulses are grown in rabi and kharif seasons. Moong, moth, urad, arhar, etc. are grown in kharif season. Pea, gram, masoor, etc. are grown in rabi season.

Main Cash Crops of India

- Sugarcane: India is the largest producer of sugarcane in the world. India produces 50% of the world's sugarcane. Sugarcane is grown in tropical regions of India. Sugarcane crop needs temperature between 15 to 40° Celsius and 100 to 200 cm rainfall to grow properly. The moist loamy soil and alluvial soil of river valley is ideal for farming of sugarcane.

- Cotton: Cotton is grown on 6.7% of total agricultural land in our country. Cotton is grown in kharif season. Cotton crop requires temperature between 20 to 35° C and rainfall between 80 to 150 cm. Dark black soil which is rich in calcium and potash is ideal for cotton. Three types of cotton are grown in India.
- Cotton with long and thin fibers (American cotton) comprises 50% of total production and is grown in Punjab, Haryana and Rajasthan.
- Cotton with medium fibers comprises 40% of total production and is grown in Gujarat, Maharashtra, Haryana, Andhra Pradesh, Karnataka and Tamil Nadu.
- Cotton with small fibers comprises 10% of total production and is grown in all states of India.
- Oil seeds: India produces 10% of the world's oil seed production. Oil seeds are grown both in kharif and rabi seasons. Groundnut, mustard, sesame, sunflower, flex, castor and soyabean are the main oil seed crops in India. However, groundnut and mustard comprise 80% of total production of oil seeds.
- Groundnut: Groundnut is grown in India in kharif season. Groundnut comprises 45% of total oil seeds production in India.

- Mustard: India produces 70% of mustard out of total production in the world. Mustard comprises 35% total oil seeds production in country. North India produces 85% of mustard in India; out of which 41% is produced by Rajasthan.
- Other Oil seed Crops: Castor is an important oil seed. Castor oil is used as lubricant, in soap industry and in tanneries. Gujarat produces 65% of castor and Rajasthan produces 25% of castor in India. Soyabean is another oilseed which is produced by MadhyaPradesh (70%), Maharashtra (20%) and Rajasthan (10%).

Role of Agriculture in Indian Economy

- Means of Employment: Agriculture directly provides employment to 55.6% population of India. It also provides indirect employment to people in many ancillary sectors.

- Contribution to GDP: In terms of price level of 1993–94; contribution of agriculture to GDP was 55.11% in 1951 and decreased to 44.26% in 1990. In terms price level of 1999–2000; contribution of agriculture to GDP was 17.8% in 2011–12 and came down to 15.35% in 2011–12.
- Contribution to International Trade: India has a share of 2.07% in international trade in agricultural products. India is the 10th largest nation in terms of exports of agricultural products. Agriculture is the fourth largest sector in exports from India.
- Raw Materials for Industry: Many industries get raw materials from agriculture, e.g. textiles industry, sugarcane industry, vegetable oil industry, jute industry, rubber industry, spice industry, etc.
- Market of Industrial Products: India's 60% population lives in rural areas which is dependent on agriculture. Hence, this sector provides the market for farm equipment's; like tractor, harvester, and also for fertilizers, insecticides, etc.

