

# AGRICULTURE - I

Indian agriculture is multifaceted, with horticulture and animal husbandry contributing to over 60% of India's agricultural GDP.

India is the largest milk producer, ranks 2nd in vegetables and fruits, 3rd in fish, egg and poultry production in the world.

Agri - Land, Culture-cultivation. **Agriculture** is defined as cultivation of the soil in order to grow crops and rear livestock.

Agriculture is the mainstay and backbone of Indian economy. 17.1% of its GDP, 58% employed labour force and 13% of total export.

## Importance of Agriculture:

1. It provides food for our expanding population & fodder for livestock.
2. It provides raw material to agro based industries like Sugarcane to Sugar mill.
3. It provides market to industrial goods such as fertilizers, pesticides, etc.
4. It accounts for large amount of India's export.
5. It provides employment to millions of people.

## PROBLEMS OF INDIAN AGRICULTURE

Main Factors : (i) Environmental; (ii) Economic; (iii) Institutional; and (iv) Technological.

### I. ENVIRONMENTAL FACTORS

**1. Unreliable Rainfall:** Indian agriculture is dependent to a large extent on the monsoons, which are uncertain, irregular and unequally distributed.

**Nearly 55 per cent** of the net sown area is dependent on rainfall.

**2. Lack of Irrigation Facilities:** India has the largest irrigated area of the cultivated land. Yet a large per cent of the net sown area lacks irrigation facilities and is dependent on monsoon. The failure of monsoon or too much rainfall leads to crop failure.

**3. Soil Erosion:** Soil erosion is not only a major cause for decreasing soil fertility but also results in loss of valuable crop land. The indiscriminate cutting of trees, overgrazing, faulty land use practices.

**4. Methods of Cultivation:** Old and inefficient methods and techniques of farming, inadequate irrigation facilities and inability of the farmers to purchase good quality seeds and modern equipment because of lack of funds and lack of latest know-how and inputs.

## **II. INSTITUTIONAL FACTORS**

**1. Small And Fragmented Landholdings:** Majority of landholdings in India are very small. These small and fragmented holdings cannot promote modern agriculture.

**2. Exploitation of Farmers:** Land tenure system is another important reason for low productivity in India. Under the Zamindari system, the cultivator was only a tenant who could be turned out of the land. Even though Zamindari system has been abolished but its effects have not been completely wiped out.

## **III. ECONOMIC FACTORS**

**1. Subsistence Agriculture:** Subsistence type of agriculture is mainly practised in India. This is because the per capita cultivable land is a mere one-fourth hectare and the farm produce is just enough to sustain the farmer.

**2. Human Elements:** Farmers are poor, debt-ridden and uneducated. They do not follow the modern techniques of farming, nor can they purchase modern equipment.

### **3. Challenges Posed by Globalisation:**

Firstly, the withdrawal of the government's role in promoting agriculture, led to removing subsidies from government to the farmers.

Indian farmers are facing a big challenge from international competition. Some of the reasons for this are as follows:

(i) The cost of production of crops is increasing because of government reduction of subsidy on fertilizers.

(ii) The reduction of import duty on agricultural products have proved harmful to the farmers.

(iii) The cost of agricultural crops in Indian market is increasing, while that of international markets is decreasing.

#### **IV. TECHNOLOGICAL FACTORS**

**Old and Inefficient Techniques:** Most of the farmers in India use old and inefficient techniques of farming. Wooden ploughs and bullocks are still used by a large number of farmers. Mechanisation is limited. Farmers continue to use traditional methods of irrigation.

#### **REFORMS**

Government has set up Indian Council of Agriculture Research (ICAR), Agriculture Universities, Veterinary services and animal breeding centres, Kisan Call Centre etc.



#### **The Green Revolution -**

It refer to drastic increase in the production of food grains (wheat) during the 1960 - 70.



#### **Elements of New Agriculture Strategy:**

1. Use of Large Capital and technological inputs.
2. Use of Modern scientific methods of farming.
3. Use of High Yeilding Varieties of seeds.
4. Use of Irrigation facilities.
- 5 Use of chemical fertilizer & pesticides.

#### **IMPACT OF GREEN REVOLUTION:**

## **Positive Impact**

1. It helped to change agriculture from subsistence to commercial
2. It made India self-sufficient in food grains.
3. It created more employment.
4. It gave higher profits to farmers so villages also prospered.

**Adverse Impact-** causes land degradation due overuse fertilizers, pesticides. loss of biodiversity.

## **NATIONAL AGRICULTURE POLICY:**

1. It aims over 4% p.a. growth rate.
2. Private sector to promote contract farming & land leasing.
3. High priority to Animal Husbandry, poultry, dairy & aquaculture.
4. Restriction on movement of agri commodities be removed.
5. Rural electrification to be intensified & promote crop insurance.

## **Types of farming in India:**



**1. Subsistence Farming -** Key features are:

- a) Land holding are small and scattered.
- b) Farmers use traditional method of farming.
- c) Output is low and it is consumed within family.
- d) Mostly farmers grow food crop which

is never surplus.

**2. Commercial Farming -** Rice is com. crop in Punjab but subsistence in Odisha. Key features:





- a) Landholding are large.
- b) Farmers use modern method of farming.
- c) Output is high and sold in the market.
- d) Farmers grow the crops which is surplus and sold.

**3. Shifting Agriculture** - also known as 'slash & burn method'.



- a) A patch of forest land is cleared by burning, ash is spread.
- b) Seeds are sown. Ploughing & other farm activity is not done.
- c) After 2/3 year when soil fertility is lost, field is left.
- d) Another patch of land is cleared & process is repeated.

Jhum in Assam, Poonam in Kerala, Podu in A.P. etc.

Maize, wheat, millet, dry paddy is grown.

**4. INTENSIVE FARMING** - Key features are:

- a) Small farms are intensively cultivated.
- b) Multicropping-more than 1 crop is grown.
- c) Rich manure, good fertilizer, good seeds & irrigation is used.
- d) It is labour intensive system.



**5. EXTENSIVE FARMING** - Key feature are.

- a) Farms are large in size.

- b) Usually, one grown on large scale.
- c) Natural fertility of soil so environment friendly.
- d) It is capital intensive system so large machines are used.

**6. PLANTATION FARMING -** Key features are: - Tea or Coffee plantation

- a) One crop in large field is grown scientifically.
- b) Chemical fertilizers & pesticides are used.
- c) Commercial crops are grown such as tea or coffee plantations.
- d) Latest technique and heavy capital is invested.



**7. MIXED FARMING -** Key features are:

- a) Crops and animals both are raised together.
- b) Two or more crops are grown together.
- c) Rotation of crops is practised.
- d) It ensures steady income to farmers.

