

## Chapter- 4 Agriculture (Part-3)

### **Technological and Institutional Reforms:**

Agrioculture has been practised in India for thousands of years. Sustained uses of land without compatible techno-institutional changes have hindered the pace of agricultural development.

Agriculture provides a livelihood for more than **60%** population in India.

The Government of India initiated **technological** and **institutional** reforms to ensure the increase in agricultural production. They are

### **Technological Reforms :**

1. The **Green Revolution** based on the **use of package technology** and the **White Revolution (Operation flood)** were some of the strategies initiated to improve Indian agriculture.
2. Introduction of High Yielding Varieties of seeds, chemical fertilisers, insecticides and pesticides.
3. Development of surface and ground water irrigation and rural electrification.
4. Introduction of modern farming tools and equipments like power tiller, tractor, harvester etc.
5. Special weather bulletins and agricultural programmes for farmers were introduced on radio and television to acquaint farmers with modern farming techniques.
6. In the 1980s and 1990s, a comprehensive land development programme was initiated, which includes both institutional and technological reforms.

### **Institutional Reforms**

1. Collectivisation, consolidation of land holdings, cooperation etc. were given priority by the government after independence.
2. Abolition of zamindari system and land reforms was the main focus of our first five-year plan.
3. Establishment of Grameen Banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest.
4. Provision for crop insurance against drought, flood, cyclone, fire and disease.
5. The government also announces minimum support price (**MSP**) and remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.
6. Kissan credit cards and personal accident insurance schemes introduced.

**Green Revolution:** It refers to increase in crop production. It is based on package technology which include

- i) Use of HYV seeds,
- ii) Use of chemical fertilisers, insecticides and pesticides,
- iii) Development of surface and ground water irrigation,
- iv) Farm mechanisation,
- v) Rural electrification, development of rural roads, and storage facilities for crops.

**White Revolution:** It refers to increase in milk production in the country. It is also called **Operation Flood**. This has been achieved by

- i) introducing better breeds Of cattle,
- ii) providing them nutritious food,
- iii) controlling their diseases etc.

### **Contribution of agriculture to the national economy, employment and output:**

Agriculture has been the backbone of the Indian economy though its share in the Gross Domestic Product has registered a declining trend from 1951 onwards.

1. **Share in employment:** Agriculture is the largest employment providing sector in India. About 52%(2010-11)of the total work force was employed by the farm sector.
2. **Share in GDP:** The share of agriculture in the Gross Domestic Products is only 1.1% (2015-16).
3. **Source of raw materials:** Agriculture provides raw materials to a large number of agro-based industries in India.
4. **Food security:** Agriculture ensures food security to people in India.
5. **Sorce of foreign exchange:** Agriculture is one of the most important sources of foreign exchange in India. India earns a lot of foreign exchange by exporting agro-products.

### **Steps taken by the Government to modernise agriculture:**

The government of India made concerted efforts to modernise agriculture.

1. Establishment of Indian Council of Agricultural Research (ICAR).
2. Establishment of Agricultural Universities
3. Providing veterinary services and animal breeding centers.
4. Horticulture development.
5. Research and development in the field of meteorology and weather forecast.

**Problems faced by farmers in India:** Today Indian farmers are facing a big challenge from international competition because of the following reasons:

- a) Reduction in public investment in agriculture.
- b) Subsidy on fertilisers is deceased leading to increase in the cost of production.
- c) Reduction in import duties on agricultural products.
- d) Crop failure due natural hazards like flood, drought, peste attack, cyclone, hail storm etc.

Thus, the growth rate in agricultural sector is decelerating in India and the farmers in India are withdrawing their investment from agriculture causing a downfall in the employment in agriculture.

**Food Security:** It means availability, accessibility and affordability of food to all people at all times.

1. Food is a basic need and every citizen of the country should have access to food which provides minimum nutritional level.
2. If any segment of our population does not have this access, that segment suffers from lack of food security.
3. The number of people who do not have food security is disproportionately large in some regions of our country particularly in economically less developed states with the higher incidence of poverty.
4. In order to ensure availability of food to all sections of society the Government of India carefully designed a national food security system.
5. It consists of two components (a) **buffer stock** and (b) **public distribution system** (PDS)
6. The primary objective of India's food security policy is to ensure availability of foodgrains to common people at an affordable price.
7. The focus of this policy is on growth in agricultural production and on fixing the support price for procurement of wheat and rice to maintain their stocks.
8. Food Corporation of India is responsible for procuring and stocking foodgrains. The FCI procures food grains from the farmers at the government announced minimum support price.

**Bhoodan and Gramdan Movement:** This movement was initiated by **Acharya Vinoba Bhave** (1951). Mahatma Gandhi declared Vinoba Bhave as his spiritual heir. He also participated in Gandhiji's Satyagraha as one of the foremost satyagrahis. He was one of the votaries of Gandhiji's concept of **gram swarajya**.

**Bhoodan:** It means donation of land to landless farmers by the landlords. It is also known as Land Gift Movement.

**Gramdan:** It means donation of villages to landless by zamindars and owners of the villages. Many land-owners chose to provide some part of their land to poor farmers due to the fear of land ceiling act.

This Bhoodan-Gramdan movement is also known as the Blood-less Revolution because not a single drop of blood was shed in this movement. The zamindars and land owners willingly donated their land and villages to landless villagers.

**Impact of Globalisation on Agriculture:** Globalisation means integrating the economy of the country with the world economy. Under this process, goods, and services along with capital, labour and resources can move freely from one nation to another.

Under globalisation, particularly after 1990, the farmer in India have been exposed to new challenges. They are

1. Despite being an important producer of rice, cotton, rubber, tea, coffee, jute and spices our agricultural products are not able to compete with the developed countries. This is because of the highly subsidised agriculture in those countries.
2. Reduction in public investment in agriculture.
3. Subsidy on fertilisers is decreased leading to increase in the cost of production.
4. Reduction in import duties on agricultural products.
5. Debt-trap and farmers suicides.

**Measures that can be taken to overcome these problems:**

1. The impacts of globalisation prompts the need for making Indian agriculture successful and profitable by improving the conditions of small and marginal farmers and countering the negative effects of Green Revolution.
2. Introduction of Genetic engineering may be beneficial in India. Genetically modified crops have higher productivity, resistant to pests and insects, require less water etc.
3. We must emphasis on organic farming which reduces exposure to pesticides and chemical fertilisers and conserves soil and water.
4. Indian farmers should diversify their cropping pattern from cereals to high-value crops. This will increase incomes and reduce environmental degradation simultaneously.
5. India's diverse climate can be harnessed to grow a wide range of high-value crops like fruits, medicinal herbs, flowers, vegetables, bio-diesel crops (jatropha & jojoba) which require less water.

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### **Geography Assignment: 7**

1. Define Operation Flood. 1
2. What is meant by food security? 1
3. What are the components of food security? 1
4. What do you mean by 'Bhoodan and Gramdan'? 1
5. Who initiated 'Bhoodan-Gramdan' movement? 1
6. Why is Bhoodan-Gramdan movement also known as the 'Blood-less Revolution'? 1
7. Why does the Government of India announce **minimum support price** for some major crops? 1
8. "Agriculture is the backbone of the Indian economy." Support the statement. 3
9. Why the growth rate in agricultural sector in India is decelerating? Explain three points. 3
10. 'The Government of India made concerted efforts to modernise agriculture.' Justify the statement in three points. 3
11. Describe any five technological reforms introduced by the government to increase agricultural production in India. 5
12. Describe any five institutional reform programmes introduced by the government in the interest of the farmers. 5.

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