

POINTS TO REMEMBER

- Crops can be divided into two broad categories—food crops (grains that are consumed as food) and cash crops (crops that are sold in the market for cash, such as cotton).
- Rice is the staple food for the majority of the people. It requires plenty of water.
- China is the world's largest rice-producing country, followed by India.
- Wheat is a crop that grows well in temperature regions.
- Sugar cane is grown in the tropical and sub-tropical regions of the world.
- India is the second-largest producer of sugar cane after Brazil.
- China, India and Pakistan are important cotton-growing countries in the world.
- Jute is known as the 'golden fibre'.
- India is the largest jute-producing country in the world and West Bengal is the biggest jute-producing state in India.
- The Green Revolution refers to the spectacular increase in the yield of food grains in India in the 1960s.

IMPORTANT TERMS

Bagasse: The fibrous matter that remains after sugar cane stalks have been crushed to extract their juice.

Ethanol: A volatile, flammable, colourless liquid.

Green Revolution: The spectacular increase in the production of food grains in the 1960s in India.

HYV seeds: High yielding variety of seeds introduced during the Green Revolution to increase crop production.

Kharif crops: Crops that grow through the summer season in India.

Molasses: A thick, black, sweet sticky liquid produced when sugar is refined.

Rabi crops: Crops that grow through the winter season in India.

Zaid crops : Crops that grow from March to June.

THINK AND ANSWER

Is global warming likely to change agricultural patterns all over the world ?

Answer:

Global warming modifies the rainfall pattern, amplifies coastal erosion, lengthens the growing season in some regions, melts ice-caps and glaciers and alters the range of some infectious diseases.

Warmer temperature extends the growing season. The plants need more water to keep growing throughout the season or they will dry out. The milder winters will fail to kill dormant insects, increasing the risk of large damaging infestation.

VALUES AND LIFE SKILL

The green Revolution led to a spectacular increase in crop production in India. Yet, poor farmers could not really benefit from this because they could not afford the new and expensive varieties of seeds.

What, in your opinion, could the government have done to improve the condition of poor farmers?

Answer:

1. Govt, should give best prices for their production.
2. Govt, should provide subsidised Machinery, HYV seeds Pesticides etc.
3. Govt, should pay off the borrowings/bank loans made by the poor farmer.

EXERCISES

A. Fill in the blanks

1. There are three main crop growing seasons in India — **Kharif** and **zaid**.
2. Cash crops are grown for cash or for **commercial** purposes.
3. **Bagasse** is the crushed sugar cane fibre that is used for the manufacture of paper and fibre boards.
4. Use of **new variety** of seeds led to a spectacular increase in crop production in India in the 1960s.
5. The **green revolution** led to farmers taking loans and incurring large debts.

B. Match the columns

A	B
1. cereals	(i) are cash crops.
2. zaid crops	(ii) is the oldest fibre known to mankind.
3. oilseeds	(iii) is the largest producer of jute in the world.
4. cotton	(iv) are food crops.
5. India	(v) are grown between March and June

Answer:

A	B
1. cereals	(iv) are food crops.
2. zaid crops	(v) are grown between March and June.
3. oilseeds	(i) are cash crops.
4. cotton	(ii) is the oldest fibre known to mankind.
5. India	(iii) is the largest producer of jute in the world.

C. Answer the following questions in brief

Question 1.

What are kharif crops ? Give one example.

Answer:

The crops which are grown in July and harvested in November are called Kharif crops, eg. rice, maize, etc.

Question 2.

Which are the major rice-producing regions in India ?

Answer:

The major rice – producing regions in India are states of Odisha, Andhra Pradesh, Telangana, Gujarat, Karnataka, Madhya Pradesh, Punjab and Haryana.

Question 3.

What are cash crops ? Give two examples.

Answer:

The crops mainly grown for making profit are called cash crops, eg. sugarcane, oil seeds, etc.

Question 4.

What climatic conditions are suitable for the cultivation of cotton ?

Answer:

Cotton requires a long frost-free period of 6-8 months in a year. It requires plenty of sunshine and dry weather during harvest.

Question 5.

What are the climatic conditions required for growing tea?

Answer:

Tea—Tea is a perennial plant that grows well in both tropical and subtropical regions. It

requires a moderately hot and humid climate. Temperatures between 13° and 32° C are ideal for growing tea. Tea requires frequent and well-distributed rain of 200 cm or more throughout the year.

Question 6.

Name the major coffee producing regions of India.

Answer:

Karnataka is the leading coffee producing state followed by Kerala and Tamil Nadu. Other states where some coffee is grown are Andhra Pradesh, Odisha, and the north-eastern states.

Question 7.

What are high yielding varieties of seeds ?

Answer:

The new dwarf and semi-dwarf varieties of seeds, especially of wheat which has led to Green Revolution are called high yielding varieties of seeds.

D. Answer the following questions in one or two paragraphs

Question 1.

What are the crop-growing seasons in India ? List the different types of crops that grow in each season.

Answer:

There are mainly three crop-growing seasons in India.

- **Kharif season** — From July to November — eg. Rice, sugarcane, maize.
- **Rabi season** — From October to February — eg. Wheat, barley, mustard.
- **Zaid season** — From March to June — eg. Musk melon, sweet potatoes, watermelon, etc.

Question 2.

Write a brief note on the cultivation of wheat in India.

Answer:

Wheat is mainly grown in winter months as it requires a temperature between 10° C and 15° C during growing season and 20°C to 25°C to ripen.

Uttar Pradesh is the leading wheat producing state in India.

Question 3.

What is sugarcane ? What are the different products that are made from sugar cane ?

Answer:

Sugarcane is a hardy crop that is cultivated in the tropical and sub-tropical regions of the world. It belongs to the grass family. It grows as large jointed stalks measuring 2 to 6 m in height. Products: It is from these stalks that raw sugarcane juice is obtained for making sugar. The juice is further processed to make products like molasses, jaggery

(gur), ethanol, industrial alcohol, etc. The crushed fibre, known as bagarse, is used for the manufacture of paper and fibre boards.

Question 4.

What are the main areas of tea production in India and in the world ?

Answer:

In India the main tea-producing regions are Assam, West Bengal, Tamil Nadu and Kerala. Other tea growing regions of India are Sikkim, Tripura, Arunachal Pradesh, and the Kangra Hills in northern India. The finest quality tea is grown on the hill slopes of Darjiling in West Bengal. China and Sri Lanka produce the best quality tea. India is the second largest tea producer in the world after China.

Question 5.

Describe the climatic conditions required for growing coffee.

Answer:

Coffee is a tropical and a sub-tropical plant that grows well on hill slopes. Tropical coffee grows best between 1,200 m and 2,000 m. Sub-tropical coffee grows best at altitudes between 600 m and 1,200 m. It is sensitive to frost and direct heat and therefore grows well in the shade of evergreen trees. Coffee requires rainfall between 160 cm and 200 cm annually. Humidity ranging between 70 and 80 per cent is ideal for the growth of coffee. Coffee plantations must avoid strong sunshine and heavy monsoon rains for better growth. Soil should be rich and fertile and well-drained. Labour for plucking, sowing, weeding, pruning, packaging and handling of coffee should be well-trained, skilled and cheap.

Question 6.

Give any three climatic conditions most suitable for growing rubber.

Answer:

Rubber is a tropical tree that requires a hot and humid climate. It requires rainfall between 200 cm and 300 cm annually and plenty of sunshine. The ideal temperature should range between 20° C and 34° C. Rubber requires high humidity above 80 per cent. Rubber trees are planted on slopes to avoid water stagnation.

Question 7.

What was the Green Revolution ? List its main features.

Answer:

Green Revolution is the increase in the production of food grains in 1960's in India.

Its main features are :

1. Traditional agricultural practices gave way to modern and scientific methods of cultivation.
2. There was marked decrease in shifting agriculture in many parts of India.
3. In India, farmers had the opportunity for multiple cropping, thereby increasing their income considerably.

- The genetically improved high yielding varieties of seeds of wheat, rice and maize were the most important component of the Green Revolution.

Question 8.

Why was the Green Revolution not beneficial for poor farmers ?

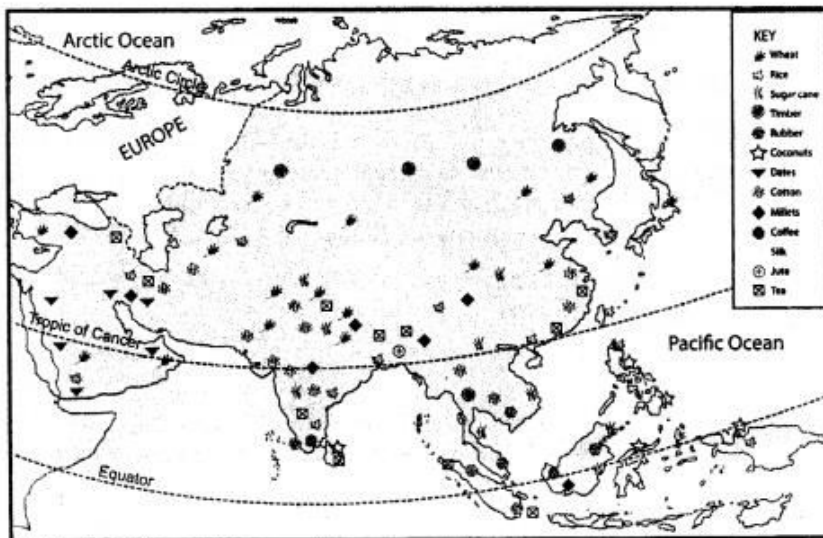
Answer:

Green Revolution was not beneficial for poor farmers as they couldn't afford to buy expensive seeds, fertilizers, machinery, etc. It led to unemployment as new machinery replaced manual labour. It encouraged farmers to take loans but ended up with large debts on the farmers.

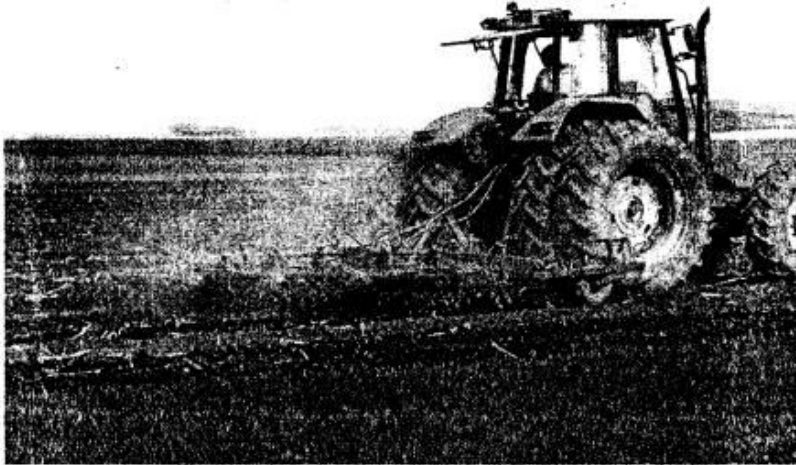
E. On an outline map of Asia mark the following

- Rice growing regions in green
- Wheat growing regions in pink
- Sugar cane growing regions in red
- Cotton growing regions in purple
- Jute growing regions in brown
- Tea growing regions in yellow
- Coffee growing regions in orange
- Rubber growing regions in blue

Answer:



F. Picture Study



The photograph here shows an important feature of an agricultural movement.

Question 1.

Identify the agricultural movement.

Answer:

This picture shows the Green Revolution which came to India in 1960's under the supervision of Dr. Norman Borlaug.

Question 2.

Who supervised this movement in India?

Answer:

The Indian government encouraged farmers to grow new dwarf and semi-dwarf varieties of seed particularly of wheat in the plains of Punjab and Haryana.

Question 3.

List any four demerits of this movement.

Answer:

The main demerits of this revolution were.

1. It leads to over dependence on fertilizers and pesticides.
2. Unemployment, as new machinery replaced manual labour.
3. It was confined to rich farmers as the cost of fertilizers, hybrid „ seeds, pesticides was high.
4. The farm water polluted with fertilizers and pesticides is affecting human health.