

India: Agriculture Class 10 GSEB Solutions Social Science

Chapter 10

Gujarat Board Class 10 Social Science India: Agriculture Textbook Questions and Answers

I. Answer the following questions in detail.

Question 1.

Write notes on types of agriculture.

Answer:

Types of farming:

(1) Subsistence farming: Farming done on small farms using simple and basic tools is called subsistence farming. The farmers doing this farming are very poor. So, they cannot afford good fertilizers, quality seeds and pesticides. The production out of this farming is so low that it is consumed mainly by the farmer and his family.

(2) Dry farming: Farming done by using the moisture accumulated within the land is known as dry farming. It is done in areas where rainfall is less and irrigation facilities are inadequate. Only one crop can be taken through dry farming. People who practice dry farming grow crops like jowar, millet and pulses which can grow with less water. In Gujarat, wheat and gram are grown in the humid soil after the monsoon is over.

(3) Wet farming: The farming practiced in areas receiving heavy rainfall or having good and adequate irrigational facilities is called wet farming. At least two crops are taken under wet farming. In case of less rain, the second crop is taken using irrigated water. Crops such as paddy, sugarcane, cotton, wheat and vegetables which require more water are grown using wet farming.

(4) Shifting (Jhoom) farming: In this type of farming, first a piece of forest land is cleared by cutting trees and burning trunks and branches. After this, the crops are grown for two or three years. When the fertility of soil reduces the farmers leave the land and start farming with the same method in some other land. This type of farming is also called jhoom farming. Here, the per-hectare production is low. Cereals or vegetables are grown in this type of agriculture.

(5) Plantation agriculture: It means farming of trees or bush. A lot of capital, technological knowledge, good fertilizer, irrigation facility, transport facility, managerial skills, etc. are needed for plantation agriculture. It also takes long time to grow plantation crops and requires a lot of care. Rubber, tea, coffee, cocoa, spices, coconut and different fruits like apples, mangoes, oranges, amla (myrobalan), khairek: (Khalela, dried date), etc. are grown through plantation agriculture. It is mainly practiced in hilly regions.



(6) Intensive farming: Farming done using mechanized tools, proper irrigation, chemical fertilizers, pesticides, etc. is known as intensive farming. Cash crops such as cotton, tobacco, rubber, etc. are grown more in this type of farming. Due to intensive farming, our per hectare production and net sown area has increased drastically. Here, economic return is given more importance and hence, it is also known as 'Commercial farming'.

Question 2.

State the institutional reforms made in agrarian field.

Answer:

Subsidy The reforms in areas like land ownership, crop subsidy and sale of I farm produce are considered to be the institutional reforms in India.

Following institutional reforms have taken place in Indian Agriculture:

The government has abolished the zamindari system to stop the exploitation of farmers. It has framed the Land Tenancy Act under the concept of 'land to the tiller'. This law gives the tillers to own the land on which they are tilling. The disparity among the landowners has been removed by Land Ceiling Act. Farmers are given financial help for crop subsidy by Kisan Credit Card and f by Nationalized and Cooperative Banks.

Under Prime Minister Crop Insurance Scheme (Pradhan Mantri Fasal Bima Yojana), farmers can get their crops insured. The government provides financial assistance farmers in case the crops fail due to natural calamities like floods and famines. The government has developed a system to conduct open auction for the sale of farm products in the marketing yards. This system is transportation and communication, etc. are been provided so that the farmers can get the minimum support price of their farm products.

Following organizations are operating for the purchase of the farm products from the farmers at support prices :

1. National Agricultural Co-operative Marketing Federation of India (NAFED).
2. Gujarat Co-operative Oil Seeds Growers Federation (GROFED).
3. National Dairy Development Board (NDDB).

Question 3.

Write a note on 'Global market and Indian agriculture'.

Answer:

India has adopted the policy of globalization under the economic reforms of 1991. One of the objectives of the policy was to enable the Indian farmer to sell his farm products in world markets and earn good profit.

Following are the impacts of globalization on Indian Agriculture.

Positive impact: Due to globalization many changes took place in Indian agriculture. The



government has simplified the process to export or import crop productions which has helped Indian agriculture to reap the benefits of globalization.

For example, owing to government policies, we now export cotton, chilies and til to China and other countries. Similarly, fruits from various parts of the world are now available in Indian market. The costly 'generally modified' seeds sold by the multi-national companies are now available in India. Although use of these seeds is costly, but it has increased our production of cotton and maize.

Negative impacts: Our some products like turmeric are unique and sold globally. There is now strong need for India to patent such products at world level to save them. The negative aspect of easy imports is that Indian agricultural products now face foreign competition.

Moreover, to compete with international products in foreign market India will have to adopt new production technologies to increase production and productivity and improve quality. If we are unable to do so then this may pose a serious threat to export income and also prices of local production. As a result, India has to prepare itself for another Green Revolution to stand in competition with the foreign nations.

Question 4.

Describe the 'Wheat crop of India'.

Answer:

Wheat is the second most important crop of our country after paddy. It is grown over 1 / 3rd area of arable land of India. Wheat is the staple diet of north and west India. It is now cultivated with mechanized methods. Hence, it can now be produced with less labour. After the Green Revolution, the wheat production has almost doubled.

Favorable conditions: Wheat is a rabi crop of temperate zone. It requires black or fertile loamy soil and more than 75 cm of annual rainfall. If proper irrigation is available, then wheat can also grow in the regions having lesser rainfall. Wheat cannot be grown in the area receiving more than 100 cm rainfall.

Producing States: Wheat cultivation is carried out mostly in Punjab, Haryana and Western Uttar Pradesh. These states produce about 2/3rd of the total national production. There are very good irrigation facilities in these states and hence the per hectare production of these states is quite good. Punjab is a land of five rivers.

So, there is a very strong canal water network and hence wheat is produced in abundance. Hence, Punjab is known as the 'Wheat Bowl' of India. Wheat is also produced in Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, West Bengal, etc. In Bhal region of Gujarat a variety called 'Bhaliya wheat' is produced. It is also produced in Mehsana, Rajkot, Junagadh, Kheda, etc.



Uses of Wheat: It is the most nutritious of all grains. Hence, it is considered the best among all foodgrains used in our daily meal. Many items like roti, bhakhri, sev, shiro, lapsi, ladu, sukhadi, bread, puri, cake, biscuits etc. are prepared from wheat. Owing to all these reasons wheat is called the 'King of Grains'.

Question 5.

State about the 'Oil Seed Crops of India'.

Answer:

India grows almost all the oil seed crops. The major ones are discussed below:

(1) Groundnut: India ranks 2nd after China in the world in groundnut production. It grows well on black, vital and a mixture of loamy and sandy soil, land which would not retain water, 20° to 25° C temperature and 50-70 cm rainfall. Although groundnut is a Kharif crop, if proper irrigation facility is available then it can also grow during summer as a Zaid crop.

Gujarat, Andhra Pradesh, Tamil Nadu and Maharashtra are major producers of groundnut. Gujarat is the largest producer of groundnut in India. Junagadh, Gir, Somnath, Amreli, Rajkot, Bhavnagar, etc. are other major producers. Gujarat makes maximum use of groundnut oil as edible oil.

(2) Sesame Seeds / Til: Til is used as edible oil in almost entire world. India is the largest exporter of Til in the world. North India grows Til as a Kharif crop whereas south India as a Rabi crop and occasionally as Zaid crop. Gujarat, Tamil Nadu, West Bengal, Karnataka and Madhya Pradesh are major Til producing states. Gujarat ranks in India in terms of Til production and the area sown. Banaskantha region is the largest Til producing region of Gujarat.

(3) Mustard (Sarso): Mustard is a Rabi crop. It is quite important crop of North India. Mustard seed and its oil are used for edible and medicinal purposes. Rajasthan, Uttar Pradesh, West Bengal, Gujarat and Madhya Pradesh are major producers of mustard.

(4) Coconut: It grows in hot and humid coastal climate and saline land. In India, the coconut plantations are found in Karnataka, Kerala, Tamil Nadu, Andaman-Nicobar, etc. Gujarat's coastal regions also grow coconut. In south India, coconut oil extracted from the coconut kernel and used as edible oil. Water of green coconuts is widely used as a health drink.

(5) Castor Seed: Castor is both Kharif as well as a Rabi crop. India ranks first in castor production in the world. It produces 64% castor of the world. China is the second-largest and Brazil is the third-largest producer in the world. Out of India's total production, about 80% is produced by Gujarat. Banaskantha, Patan, Sabarkantha, Rajkot, Junagadh, Amreli, etc. produce castor in small quantities. Castor is also produced in Andhra Pradesh and Rajasthan.



II. Write to the point answer of the following questions.

Question 1.

Why there is more inclination for organic farming?

Answer:

The method of farming done without using any type of chemical fertilizer, urea, insecticides, etc. is known as organic farming.

- Things like crop waste, cow dung, earthworm fertilizer, compost fertilizer, etc. are used to maintain the nutrition of crops. Moreover, cow urine, neem solvents, buttermilk, etc. are used for protecting the crops from various pests.
- The demand for pure agricultural products is rising and so farmers have started adopting organic farming.
- It also earns more returns for the farmers and helps them to come out of poverty.

Need for Organic Farming: Today, farming extensively uses chemical fertilizers and the insecticides.

- Consuming crops produced by using uncontrolled and unregulated proportions of chemicals ruin the nutritive values of the crops.
- Moreover, they also cause damage to our body and also the environment. The chemicals also reduce the soil fertility.
- As a result, in long run, the productivity of the land decreases.
- On the other hand, since products are produced completely sign organic methods, they are full of nutrition.
- They contain natural taste, sweetness and aroma.
- They are rich in minerals, vitamins and life-energizing elements.

Question 2.

Give difference between Kharif crop and Rabi crop.

Answer:

On the basis of our seasons, we can divide the agricultural crops of India into three categories. They are:

- (1) Kharif Crop
- (2) Rabi Crop
- (3) Zaid Crop

Kharif (monsoon) crop	Rabi (winter) crop	Zaid (summer) crop
Crops which are grown during rainy season are called Kharif crops.	Crops which are grown during winter are called Rabi crops.	Crops which are grown during summer are called Zaid crops.



These crops are grown from June-July to October-November.	These crops are grown from October-November to March-April.	These crops are grown from March to June.
Paddy, maize, jo war, millet, cotton, til, groundnut and mung math.	Example – Wheat, gram, barley, mustard, linseed, etc.	Example- watermelon, cucumber, musk melon, etc.

Question 3.

Describe the contribution of agriculture in the economy of India.

Answer:

Agriculture is the main occupation in India and feeds the giant Indian population.

- Today, the other sectors namely industry and service have made considerable progress.
- Even then, agriculture has a very high contribution in the Indian economy. Agriculture provides employment to about 50% of India's population. It contributes about 17% to our total Gross Domestic Production (GDP).
- India ranks second in the world in terms of agricultural production.
- Crops like paddy, wheat, oilseeds, cotton, jute, sugarcane, tobacco, potatoes, etc. are major agricultural products of India and they help India earn quite a good amount of foreign exchange.
- Agriculture provides raw material to several industries like cotton textiles, sugar, paper, oil, food processing industries, etc.
- However, we are not able to contribute consistently in the world agriculture market because of irregular and uncertain rain and inadequate irrigation facilities.
- Agriculture has brought food security to India. Before we used to import foodgrains but after Green Revolution we have become self-sufficient in agriculture.

Question 4.

'Paddy' is the most important crop of India. Explain.

Answer:

Paddy is India's most important crop. Majority of the world population and about half of India's population use rice.

- In terms of paddy production, India stands 2nd in the world after China.
- Paddy is sown over 1/4 of our total sown area. Paddy is a crop of torrid zone.



III. Answer the following questions in brief.

Question 1.

State the uses of maize.

Answer:

Maize contains starch, oil-protein, bio-fuel, etc. Hence, it is used more in industries. It is also used in making rotis, popcorn and edible oil. Usage of maize is now increasing as cattle and buffalo food.

Question 2.

State the favorable conditions for the growth of coffee.

Answer:

Coffee is grown on mountain slopes in the shades of large trees in such a way that direct sunlight does not fall on the coffee leaves. Coffee crop needs 150-200 cm rainfall, 15° C to 28° C temperature and sloppy mountain land.

Question 3.

Which type of farming is carried out in Bhal region and which crop is cultivated?

Answer:

The Bhal region of Gujarat produces a special variety of wheat called 'Bhaliya wheat'.

Question 4.

What is meant by Green Revolution?

Answer:

The extraordinary increase in the agricultural production because of improved seed, increased Use of chemical fertilizers, intense efforts of the farmers, widespread arrangement for electricity distribution, improved facilities in irrigation, etc. is known as 'Green Revolution'. It took place in India in the decade of 1960.

Achievements: Before Green Revolution, India was facing problem of acute shortage of foodgrains. In spite of being an agrarian country, India had to import-foodgrains. All this changed after Green Revolution. The main objective of the Green Revolution was to increase agricultural production. To do so, farmers were encouraged to use chemical fertilizers and insecticides too. This saved the crops from getting destroyed and increase land productivity. Due to Green Revolution, the production of wheat and rice increased drastically.

We became self-sufficient in foodgrains. The self-sufficiency in foodgrains is a landmark of historic achievement of Green Revolution. There was a time when famine was a regular problem that haunted Indian agriculture. This terror has almost vanished after the Green Revolution. Two major reasons that overcame this terror are drastic improvement in irrigation facilities and huge buffer stock of foodgrains produced due to Green Revolution.

Question 5.

Name the institutions working on agricultural research at National Level.

Answer:

Institutions like Indian Council for Agricultural Research (ICAR) and Department of Agricultural Research and Education (DARE) work at National level for research and development in agriculture.

IV. Select the correct option for each question.

Question 1.

Which of the following farming types has the lowest per hectare production ?

- (a) Plantation
- (b) Jhoom Cultivation
- (c) Intensive Cultivation
- (d) Wet Farming

Answer:

- (b) Jhoom Cultivation

Question 2.

In which of the following farming types, the chemical fertilizers and insecticides are not used?

- (a) Organic farming
- (b) Mixed farming
- (c) Plantation
- (d) Sustainable farming

Answer:

- (a) Organic farming

Question 3.

Which state produces maximum groundnut?

- (a) Kerala
- (b) Tamil Nadu
- (c) Madhya Pradesh
- (d) Gujarat

Answer:

- (d) Gujarat

Question 4.

From what is the chocolate made from?

- (a) Til
- (b) Cocoa
- (c) Rubber
- (d) Tea

Answer:

- (b) Cocoa



Question 5.

In the production of which of the following condiments is Gujarat first ?

- (a) Isabgul
- (b) Fenugreek
- (c) Mustard
- (d) Corriander

Answer:

- (a) Isabgul

Question 6.

Which of the following pulses is a rabi crop ?

- (a) Udad
- (b) Mung
- (c) Gram
- (d) Math

Answer:

- (c) Gram

