

17. Agriculture in Indian Economy

Multiple Choice Questions

1. Question

Which is the main sources of employment in India?

- A. Agriculture
- B. Industry
- C. Service Sector
- D. Livestock

Answer

Option a is correct as according to Census 2011, agriculture and its allied areas like animal husbandry, fisheries etc provide employment to 48.9% of the total working population. This makes agriculture the main source of employment in India.

Option b is incorrect as according to Census 2011, industry provides employment to 22% of the total working population.

Option c is incorrect as according to Census 2011, Service sector provides employment to 27% of the total working population.

Option d is incorrect as the word 'livestock' is not related to employment matters.

2. Question

What is the time period of short-term loans?

- A. Less than 15 months
- B. Less than 2 years
- C. Less than 5 years
- D. Less than 15 years

Answer

Option a is correct as short-term loans are needed for short term agricultural requirements like seeds, fertilizers, fodder and domestic purposes, and the time period for this type of loans are less than 15 months.

Option b is incorrect as the period of 'less than 2 years' is not applicable for agricultural loans.

Option c is incorrect as the period of 'less than 5 years' is applicable in case of medium-term loans in case of agriculture.

Option d is incorrect as the period of 'less than 15 years' is applicable in case of long term loans in case of agriculture.

3. Question

Which state made the most benefit of green Revolution?

- A. Gujarat
- B. Punjab
- C. Kerala
- D. Jammu and Kashmir

Answer

Introduction of new technology in Indian agriculture and its expansion programme after the Third 5-Year Plan period was named as Green Revolution. Green Revolution created maximum benefits in areas of wheat production. Only option b that is 'Punjab' is known for wheat production in India making it the correct answer.

4. Question

Write revolution is related to which sectors?

- A. Fisheries
- B. Animal husbandry
- C. Horticulture
- D. None of these

Answer

White Revolution refers to the rapid increase of milk production in India during the 1970s. 'Animal Husbandry' is the correct answer as it is the sector that deals with cows which produce milk.

Very Short Answer

1. Question

Which are the allied activities of agriculture?

Answer

The science and art of cultivating plants and livestock is called agriculture. Several allied activities are included in agriculture. These include forestry, wood cutting, animal husbandry, pisciculture poultry, food processing etc. Agriculture along with its allied activities forms the main source of livelihood for majority of the Indian population.

2. Question

What is zaid crops?

Answer

Zaid crops refer to those crops grown in the summer season (March – June) that falls between the harvesting of kharif crops and sowing of rabi crops. Two examples of zaid crops include watermelon and cucumber.

3. Question

What si micro-irrigation project?

Answer

Any irrigation project implemented to facilitate agriculture and covering up to 2000 hectares of land is called a micro irrigation project.

4. Question

What is agriculture holdings?

Answer

A single unit of land under the ownership of a single family and used for agricultural purposes is called agricultural holdings.

5. Question

Which chemicals are mainly used in the form of fertilizers?

Answer

The chemicals that are mainly used in the form of fertilizers include nitrogen, phosphate and potash.

6. Question

What are the non-institutional produce in our exports in percentage?

Answer

It includes - local rural, local landlord, zamindar, mahajan, commissioned agents, businessmen and family relatives.

7. Question

What is the share of agriculture produce in our export in percentage?

Answer

India exports a variety of agricultural products and the share of agriculture produce in our exports is about 12.5% in recent times.

8. Question

What is green revolution?

Answer

Introduction of new technology in Indian agriculture and its expansion programme after the Third 5-Year Plan period during 1966 was named as Green Revolution. Its main aim was to increase agricultural output and with this vision, several high yielding seed varieties were introduced in the country. These seeds required proper irrigation facilities and extensive use of fertilizers and pesticides and prompted the government to introduce them as a package programme.

9. Question

On which crops, the programme of increased production of crops was implemented?

Answer

The programme of increased production of crops is called Green Revolution. It was implemented with the aim to increase agricultural output in the country. The crops selected for this purpose included wheat, rice and different forms of millets like jowar and ragi.

10. Question

Who is the father of white Revolution in India?

Answer

Dr Varghese Kurien is considered as the father of White Revolution in India.

11. Question

Which programme was started in the form of pilot project?

Answer

Green Revolution was the programme that was started as a pilot project where new technology in agriculture was introduced in 7 districts to increase agricultural output.

12. Question

Which country has the highest number of cattle population?

Answer

India has the highest number of cattle populations in the world.

13. Question

Which is the largest Dairy Development Programme in the world?

Answer

The rapid increase in milk production through integrated systems is called White Revolution. It was a part of Operation Flood which is the world's largest integrated Dairy Development Programme.

14. Question

What was the main objective of green Revolution?

Answer

The main objective of Green Revolution was to increase agricultural output through implementation of new technologies and bring India out of the food crisis faced by it at that time.

15. Question

In how many districts, the intensive agricultural district programme was started?

Answer

The intensive agricultural district programme which was the pilot project for the Green Revolution was introduced in 7 districts in the country.

Short Answer

1. Question

What is the agricultural mechanization?

Answer

Green Revolution involved the introduction of new technology in agriculture. It involved the introduction of machineries for doing work that was generally done by animals or by human labour. This aimed at increasing agricultural output and lesser reliance on manual labour. This is called agricultural mechanization. Promotion of farm mechanization has been an important initiative taken by the government since the period of Green Revolution during the late 1960s.

2. Question

What is Kisan Credit Card Yojana?

Answer

The Kisan Credit Card Yojana was launched in 1998 – 99 with the aim of providing short term loans to farmers. Under this scheme, a farmer who was eligible for a short-term loan of Rs 5000 or more is to be issued with a Kisan Credit Card and a passbook. the size of land holding, the pattern of crop and the amount of credit determines the limit of the Kisan Credit Card. The farmer can draw a prescribed amount on the basis of this card which has to be repaid within a year. The card has a validity of 3 years beyond which the limit of credit can be increased if the farmer's performance is satisfactory. On the basis of the popularity of the scheme, it is available at all commercial, cooperative and regional rural banks.

3. Question

What are commercial crops? Give examples.

Answer

Commercial farming is a form of market-oriented and profit motivated farming. In this farming, consumption of the cultivated products by the farmers, if at all done, is an insignificant proportion of the total production. It occupies large area of cultivation and requires significant capital input along with heavy use of machinery. It includes commercial grain farming, mixed farming and plantation agriculture. Commercial farming includes commercial grain farming, mixed farming and plantation agriculture. Examples of commercial crops include cotton, sugarcane, jute, tea, coffee, tobacco, oilseeds etc.

4. Question

What are the natural causes of decreasing agricultural productivity?

Answer

Agriculture is highly influenced by natural causes. The following points describe several natural causes that has resulted in the decrease of agricultural production in India.

- Dependence on monsoon
- Natural calamities like flood and drought
- Degradation of land fertility
- Lack of irrigation facilities

5. Question

What do you understand by sub-division and redistribution of holdings?

Answer

One of the major reasons that adversely affect Indian agriculture is the small and fragmented landholdings. The reason behind this are the various inheritance rules that are in place. Sub- division refers to the division of

ancestral land according to the successor rule. This decreases the size of landholdings over time. Also, since every successor of the original land owner gets a land parcel, the land tends to be distributed all over the place giving rise to 'scattered holdings'. This causes redistribution of holdings. Together they reduce the productivity levels of agriculture.

6. Question

What is minimum support price?

Answer

The Government of India announces the Minimum Support Prices (MSPs) for different crops in order to provide farmers fair prices for their produce. It encourages the agricultural sector as the MSP is the lowest price at which the government itself will buy the crop from the farmers ensuring a certain amount of profit for the farmers. The MSPs are announced twice a year during the rabi and kharif seasons. It protects the interest of the farmers as it prevents speculations regarding agricultural output cost and allows the farmers to make the right decisions with respect to their productions. It also allows the government to run the Public Distribution System in an efficient manner as they are able to stockpile food grains at MSP and redistribute the same to the general public at effective prices. This protects consumer welfare and reduces the price of food grains in the market.

7. Question

Why is the Indian agriculture called the 'Gamble of Monsoon'?

Answer

Agriculture along with its allied activities forms the main source of livelihood for majority of the Indian population. Owing to lack of proper irrigation facilities, Indian agriculture is solely dependent on the vagaries of monsoon in the country. The timely and adequately distributed rainfall during the monsoon months in the country aid the farmers to continue their agricultural activities. Lack of rainfall can lead to drought, while excessive rainfall can lead to floods, both of the situations being harmful for agricultural activities. Thus, Indian agriculture is called the 'Gamble of Monsoon'.

8. Question

Explain the importance of agriculture in the development of cattle wealth.

Answer

Agriculture along with its allied activities forms the main source of livelihood for majority of the Indian population. For rural people it is their main source of income. Along with this, the livestock species in a rural household contribute to improve income and wellbeing of their owners by providing labour, food and employment in other allied activities. The agricultural requirements also open avenues for development in breeding programmes. This economic, social and cultural roles or functions as played

by the livestock is thus enabled because of agricultural activities making it important for the development of cattle wealth.

9. Question

What is HYV programme?

Answer

HYV programme refers to the use of High Yielding Variety (HYV) seeds for increasing agricultural output. During the late 1960, the Indian Government introduced new technology in agriculture in order to increase output and end the food crisis in the country. This new technology included the introduction of HYV seeds for a number of crops like wheat, rice and millets. These seeds required proper irrigation facilities and extensive use of fertilizers and pesticides and prompted the government to introduce them as a package programme.

10. Question

Explain the micro-irrigation programme?

Answer

Beyond the usage of HYV seeds to increase agricultural output, proper irrigation facilities were also required under the aegis of Green Revolution to make it successful. Any irrigation project implemented to facilitate agriculture and covering up to 2000 hectares of land is called a micro irrigation project. It includes irrigation through hand-pumps, small canals, ponds, wells, rain-water harvesting and tube wells.

11. Question

What do you understand by crop protection programme?

Answer

Agriculture in India is often under threat from various factors that can vary between natural and economic types. The Indian Government has various schemes to protect the crops from such conditions and aid the farmers in earning their livelihoods. The use of pesticides and insecticides to keep crops safe falls under the crop conservation schemes. 1999 -2000 saw the launch of the National Agriculture Insurance Scheme through which financial help is offered to farmers whose crops have been affected by natural calamities and pests.

12. Question

Mention any four benefits of white revolution.

Answer

The rapid increase in milk production through integrated systems is called White Revolution. It was a part of Operation Flood which is the world's

largest integrated Dairy Development Programme. The following are the significant benefits of the revolution –

- Increase in milk production – production of around 140 metric tons of milk in 2013-14 has enabled India to become the largest milk producing country in the world.
- Increase in rural employment and income of farmers – Increase in animal husbandry has enabled the employment of the landless and marginal farmers and rural women. It has also increased the income of rural households.
- Impact on urban areas – milk supply has increased in urban areas as the rural areas practicing animal husbandry found a ready market.
- Improvement of cattle breed – the white revolution included the proper management of the animals and prevention of diseases in them thereby improving the cattle breed in India.

13. Question

Write the side-effect of the use of chemical fertilizers.

Answer

Under Green Revolution, the use of HYV seeds was promoted which required not only proper irrigation facilities but also extensive use of fertilizers and pesticides. This has caused degradation in the fertility of land. The soil has become polluted with increase in its salinity. This has caused an increase in land turning barren, it has also caused pollution in the groundwater which has led to various diseases among the population.

14. Question

What is the reason for the decline in ground water level?

Answer

Under Green Revolution, the use of HYV seeds was promoted which required not only extensive use of fertilizers and pesticides but also proper irrigation facilities. Micro irrigation is done through hand-pumps, small canals, ponds, wells, rain-water harvesting and tube wells all of which access the naturally occurring ground water. This exploitation is one of the major reasons behind the decline in ground water levels. the multi cropping system has also reduced the ground water levels as more than one crop on a single plot of land requires more water for proper growth.

15. Question

Write the difference between Green Revolution and White Revolution.

Answer

Green Revolution	White Revolution
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Green Revolution	White Revolution
Introduction of new technology in Indian agriculture and its expansion programme after the Third 5-Year Plan period during 1966 was named as Green Revolution.	The rapid increase in milk production through integrated systems is called White Revolution.
The main objective of Green Revolution was to increase agricultural output through implementation of new technologies and bring India out of the food crisis faced by it at that time.	The main objective of the White Revolution was to increase milk production in the country and provide rural people with alternate means of livelihood, reducing the dependency on agriculture and improve cattle breed.
Introduced in the late 1960s.	Introduced in 1970.
Norman Borlaug is considered as the Father of Green Revolution and M.S. Swaminathan is known for his leading role in India's Green Revolution.	Dr Varghese Kurien is considered as the father of White Revolution in India.
This was a global project and adopted by several developing countries.	This was an Indian project solely concentrated in the rural areas.

16. Question

Explain the 'Intense Cattle Development Programme'.

Answer

Agriculture along with its allied activities forms the main source of livelihood for majority of the Indian population. For rural people it is their main source of income. Along with this, the livestock species in a rural household contribute to improve income and wellbeing of their owners by providing labour, food and employment in other allied activities. Prior to the White Revolution, during 1964-65 the Indian Government offered a comprehensive package to the farmers with livestock in order to improve the cattle breed. This was called the 'Intensive Cattle Development Programme'. Under this programme, the farmers were taught advanced and developed methods of animal husbandry. This had a positive impact on the cattle breed and increased the milk production. In a manner this programme acted as a precursor to the White Revolution.

17. Question

How did the White Revolution fulfil the need for milk in urban areas?

Answer

The rapid increase in milk production through integrated systems is called White Revolution. It was a part of Operation Flood which is the world's largest integrated Dairy Development Programme. It increased the milk supply in rural areas which the rural people needed to sell off in order to make a profit. Urban areas which lacked milk resources, thus created a ready market for the surplus milk from the rural areas. The increase in milk supply in urban areas was followed by the increase in a variety of other milk products like ghee, butter, curd etc.

Essay Type

1. Question

Explain the importance of agriculture in Indian economy.

Answer

India is predominantly an agricultural country. Different forms of agriculture are practiced in the country which depends upon a variety of physical, environmental and socio-economic conditions. Continued efforts have been made to develop agriculture in the country since independence. The importance of agriculture in Indian economy has been discussed under the following heads –

- Contribution in national income – Agriculture contributes a significant amount to the national income of the country. It was around 59% in 1950-51 which decreased to around 14% in 2012-13 due to rapid industrial development. This is still a significant amount when compared to the rest of the world.

- Employment opportunities – according to Census 2011, agriculture and its allied areas like animal husbandry, fisheries etc provide employment to 48.9% of the total working population. This makes agriculture the main source of employment in India.
- Contribution to international trade – India exports a variety of agricultural products and the share of agriculture produce in our exports is about 12.5% in recent times. This makes it an important source of foreign exchange.
- Contribution in industrial development – Agriculture not only provides the raw materials to agro-based industries, it also acts as a market for various industrial products like tractors, pesticides etc.
- Contribution in food grains and fodder – The population of this country is dependent on agriculture for supply of food grains and fodder for animals.
- Contribution in poverty elimination – being one of the most important sectors of the Indian economy, it benefits in poverty alleviation by generating employment opportunities.
- Contribution in revenue – given its important contribution to national income, the government is dependent on agriculture for a large part of revenues collected as land taxes etc.
- Contribution in development of other sectors in economy – Agriculture is a primary sector activity which influences other sectors directly or indirectly. Improvement in agriculture, improves rural life, by promoting development, transport and communication facilities, banking and various agro-based industries.
- Contribution to animal husbandry – The economic, social and cultural roles or functions as played by the livestock is thus enabled because of agricultural activities making it important for the development of cattle wealth.

2. Question

Explain the problem in development of agricultures in India and suggest the measures to eliminate them.

Answer

India is predominantly an agricultural country. Different forms of agriculture are practiced in the country which depends upon a variety of physical, environmental and socio-economic conditions. The major challenges faced by the agricultural sector in India varies according to agro-ecological and historical experiences of its different regions making them region specific. Yet there are certain problems which are common and range from physical constraints to institutional hindrances. The following are the major problems in the agricultural sector in India –

a) Environmental factors – Several natural causes that has resulted in the decrease of agricultural production in India include

- Dependence on monsoon

- Natural calamities like flood and drought
- Degradation of land fertility
- Lack of irrigation facilities

b) Economical factors – the following are the economic reasons adversely affecting agriculture in India –

- Small and fragmented land holdings reducing productivity of land and decreasing profits for farmers.
- Lack of agricultural credits from established places often force farmers to lend money from money lenders who exploit the situation by charging high rates of interests. Along with a dearth in the capital, exploitative type of land tenure system is also practiced in India.
- The lack of funds affects the availability of proper seeds and equipment required for farming which in turn reduces agricultural output.
- Owing to lack of proper irrigation facilities, Indian agriculture is solely dependent on the vagaries of monsoon in the country. The timely and adequately distributed rainfall during the monsoon months in the country aid the farmers to continue their agricultural activities. Lack of rainfall can lead to drought, while excessive rainfall can lead to floods, both of the situations being harmful for agricultural activities.
- Degradation of land fertility through excessive use of fertilizers and pesticides also affects agricultural output.
- Lack of proper implementation of land reform programmes in many areas has caused inequality in the distribution pattern of land and has resulted in poor productivity and agricultural backwardness.

c) Social factors – Wasteful agricultural practices like shifting cultivation destroy the functional capability of agricultural land. Traditional techniques also affect agricultural productivity in India. Also, there is massive underemployment in the agricultural sector. Economically viable work is unavailable in the rural areas beyond the cropping season. Along with these problems the illiteracy levels are high among farmers causing difficulty in understanding modern farming techniques.

The government has undertaken various programmes to correct or combat these problems.

a) Proper implementation of land reform programmes to solve the problems created by small landholdings.

b) Provision of agricultural inputs to marginal and landless farmers including subsidies and support prices.

c) Dry farming techniques are being strengthened in the country to reduce dependency on monsoon and irrigation.

- d) Increase in literacy levels of farmers to enable them to understand the implementation and importance of new technologies in agriculture.
- e) Promotion of alternative employment methods including strengthening of rural cottage industries to reduce the pressure on agriculture as the only source of employment in rural areas.
- f) Policies like MSPs, the National Agriculture Insurance Scheme to safeguard the interest of farmers.
- g) Promotion of organic farming methods to reduce soil degradation through use of fertilizers.

3. Question

Write the meaning of green Revolution and describe its major achievements.

Answer

Introduction of new technology in Indian agriculture and its expansion programme after the Third 5-Year Plan period was named as Green Revolution. Its main aim was to increase agricultural output and with this vision, several high yielding seed varieties were introduced in the country. These seeds required proper irrigation facilities and extensive use of fertilizers and pesticides and prompted the government to introduce them as a package programme. It initially started with wheat and later extended to rice and other crops. The major achievements of the Green Revolution were:

- Increase in crop production – significant rise in crop production was observed specifically in wheat grain production in the country.
- Increase in employment and income – increase in commercial farming and multiple cropping systems increased the employment for the landless marginal agricultural labourers in the rural areas. This also caused a decrease in rural poverty.
- Modernization of agriculture – high levels of mechanization, used of HYVs, extensive use of fertilizers and pesticides modernized the agricultural production system in the country.
- Import substitution and export promotion – it allowed the country to gain self-sufficiency by lessening import requirements of various crops like oilseeds etc. Excess production has allowed India to also become a reliable exporter of several food grains.

Green Revolution created maximum benefits for the rich farmers who had large farms and the necessary capital for obtaining new technology which also includes farm machinery. Small farmers with even with offers of institutional credits could not avail the economic benefits of the green revolution contributing to high levels of unequal growth in the country.

4. Question

What do you understand by white Revolution? Which benefits were obtained by various sectors through this?

Answer

Agriculture along with its allied activities forms the main source of livelihood for majority of the Indian population. For rural people it is their main source of income. Along with this, the livestock species in a rural household contribute to improve income and wellbeing of their owners by providing labour, food and employment in other allied activities. Although India had the largest number of cattle in the world, the produce from them was of inferior quality. To correct this, the government launched an integrated programme to increase milk production and create better breeds of cattle. The rapid increase in milk production through integrated systems is called White Revolution. It was launched in 1970 by the National Dairy Development Board as a part of Operation Flood which is the world's largest integrated Dairy Development Programme. Dr Varghese Kurien is considered as the father of White Revolution in India. The following are the significant benefits of the revolution –

- Increase in milk production – production of around 140 metric tons of milk in 2013-14 has enabled India to become the largest milk producing country in the world.
- Increase in rural employment and income of farmers – Increase in animal husbandry has enabled the employment of the landless and marginal farmers and rural women. It has also increased the income of rural households.
- Impact on urban areas – milk supply has increased in urban areas as the rural areas practicing animal husbandry found a ready market.
- Improvement of cattle breed – the white revolution included the proper management of the animals and prevention of diseases in them thereby improving the cattle breed in India.