

OPEN STUDENT FOUNDATION

Chapters : 8

Std-12 Economics Practice Sheet Day 8

Date : 24/02/24

Section A

- Choose correct answer from the given options. [Each carries 1 Mark] [7]
- When NABARD was established? (March-2019, May-2021)
(A) 1982 (B) 1972 (C) 1992 (D) 1952
 - From which five year scheme, agriculture had given more importance? (March-2019)
(A) Second (B) Fifth (C) Fourth (D) First
 - Show the extent of agricultural employment in 2014-15. (March-2020)
(A) 24% (B) 26% (C) 49% (D) 72%
 - Which institute does agricultural research? (May-2021)
(A) ICAR (B) CIBRC (C) Rural banks (D) RBI
 - Which of the following is included in a grain crop? (March-2022)
(A) Ground nuts (B) Millet (C) Sugarcane (D) Cotton
 - Which of the following is included in institutional factors of the agricultural sector? (March-2022)
(A) Use of machines (B) Pesticides (C) Rural Society systems (D) Soil testing
 - How much percent of the population is residing in rural areas as per the 2011 census? (July-2022)
(A) 68.8% (B) 72% (C) 60% (D) 74%

Section B

- Write the answer of the following questions. [Each carries 1 Mark] [3]
- Give full form of ICAR. (July-2022)
 - Give full form of NABARD. (March-2022)
 - What are Cash crops? (March-2019, March-2020)

Section C

- Write the answer of the following questions. [Each carries 2 Marks] [6]
- Agriculture is the backbone of the Indian economy. (March-2018, March-2019, March-2022)
 - What is the Green revolution? (March-2019)
 - Give the names of cash crops. (July-2022)

Section D

- Write the answer of the following questions. [Each carries 3 Marks] [6]
- Discuss any three technological measures to increase agricultural productivity. (March-2023)
 - Short note : Crop rotation (March-2019, July-2018, July-2022)

Section E

- Write the answer of the following questions. [Each carries 4 Marks] [12]
- Show a time dependent line diagram for the below information and analyse it. (March-2023)

Year	1950-51	1970-71	1990-91	2000-01	2011-12
Contribution of Agriculture sector to National Income of India	53	42	30	22	14

17. Discuss the reasons for lower agricultural productivity. (Aug-2020, March-2020)
18. Measures to increase agricultural productivity. (March-2018, July-2019)



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Section A

- Choose correct answer from the given options. [Each carries 1 Mark] [7]

1. When NABARD was established? (March-2019, May-2021)

(A) 1982 (B) 1972 (C) 1992 (D) 1952

⇒ Ans : (A)

2. From which five year scheme, agriculture had given more importance? (March-2019)

(A) Second (B) Fifth (C) Fourth (D) First

⇒ Ans : (D)

3. Show the extent of agricultural employment in 2014-15. (March-2020)

(A) 24% (B) 26% (C) 49% (D) 72%

⇒ Ans : (C)

4. Which institute does agricultural research? (May-2021)

(A) ICAR (B) CIBRC (C) Rural banks (D) RBI

⇒ Ans : (A)

5. Which of the following is included in a grain crop? (March-2022)

(A) Ground nuts (B) Millet (C) Sugarcane (D) Cotton

⇒ Ans : (B)

6. Which of the following is included in institutional factors of the agricultural sector? (March-2022)

(A) Use of machines (B) Pesticides (C) Rural Society systems (D) Soil testing

⇒ Ans : (C)

7. How much percent of the population is residing in rural areas as per the 2011 census? (July-2022)

(A) 68.8% (B) 72% (C) 60% (D) 74%

⇒ Ans : (A)

Section B

- Write the answer of the following questions. [Each carries 1 Mark] [3]

8. Give full form of ICAR. (July-2022)

⇒ ICAR - Indian Council of Agricultural Research

9. Give full form of NABARD. (March-2022)

⇒ NABARD : National Bank for Agricultural and Rural Development

10. What are Cash crops? (March-2019, March-2020)

⇒ Cash crops are mainly used in industries as raw material.

⇒ Oilseeds (Groundnut, Sesame, Castor, Soyabean, Linseed, Sunflower, etc..) and sugarcane, rubber, cotton, jute, etc.. are included in cash crops.

Section C

- Write the answer of the following questions. [Each carries 2 Marks] [6]
11. Agriculture is the backbone of the Indian economy. (March-2018, March-2019, March-2022)
- ⇒ Agriculture has been important in India since ancient times. Agricultural production, employment and income from export-like matters depend on the agricultural sector. As of the 2011 census, 68.8% of the rural population's employment depends on the agricultural sector.
- ⇒ If agriculture sector fails in India :
- (1) Public life may be affected.
 - (2) As the income of a big mass of the population gets negatively affected, the problem of low agricultural productivity can be a rised.
 - (3) The financial stability can be compromised as industrial sectors don't get enough raw materials.
 - (4) Scarcity of service demand and reduction in income kind of effects can be a rised.
- ⇒ Thus, the failure of the agricultural sector can seriously affect human beings and the financial status of the country. So it can be said that the life of humans and economy depend on the agricultural sector and so India is known as an agriculture oriented economy.
12. What is the Green revolution? (March-2019)
- ⇒ There are three methods of collection of land revenue existed in India prior to independence which are:
- (i) Zamindari system
 - (ii) Mahalwari system
 - (iii) Ryotwari system
13. Give the names of cash crops. (July-2022)
- ⇒ Examples of cash crops are: cotton, jute, ground nut, oil seeds, sugarcane, etc.

Section D

- Write the answer of the following questions. [Each carries 3 Marks] [6]
14. Discuss any three technological measures to increase agricultural productivity. (March-2023)
- ⇒ Low productivity of the agriculture sector shows backwardness of the agriculture sector. Agriculture sector needs improvement as it is a main occupation and a very important pillar of the Indian economy. In addition, if agricultural productivity increases then the income of the rural economy will increase which will force the development of industry and service sector. It will also give solutions to employment, urbanisation, migration and inequality of income. To improve productivity of agriculture following steps to be taken :
- (1) Institutional Measures
 - (2) Technological Measures
 - (3) Other Measures
- (1) Institutional Measures: (March-2019)
- ⇒ To increase agricultural productivity economic planning has undertaken institutional reforms, which would be favourable for economic progress of agriculture. They are:
- a) Land Related Reforms
 - b) Availability of Institutional Credit
 - c) Improvement in Structure of Agriculture Marketing
 - d) Agriculture Research
- a) Land Related Reforms:

- ▶ Laws to abolish the zamindari system, to protect tillers and to control rent are implemented in India so that it provides ownership of land to farmers and land labourers may have protection to till land. To stop exploitation of farmers and this way farmers may have a big share of their crop. This may cause more efforts to increase agricultural production. Overall it may increase agriculture productivity.
- b) Availability of Institutional Credit
 - ▶ To provide (reach) credit and other monetary facilities, nationalisation of banks undertaken by India. Even National Bank for Agriculture and Rural Development (NABARD) which is the body of RBI set up in 1982 to do special focus on the agriculture sector and Regional Rural Banks (RRBs) and Land Development Banks (LDBs) developed under it to provide cheap and enough credit to Indian farmers. So, they would have cheap and enough credit in order to increase agricultural productivity.
- c) Improvement in Structure of Agriculture Marketing
 - ▶ To overcome the shortcomings of the system of agriculture marketing many important steps have been taken :
 - (1) Regulated markets have been set up.
 - (2) To classify the agriculture produce as per their quality "AGMARK" (Agriculture Marketing) has been introduced.
 - (3) National warehouse corporation and state warehouse corporation started to increase agricultural produce of farmers.
 - (4) Systems have been developed to provide information about prices of agricultural produce.
 - (5) To protect farmers from market price changes, the bottom price is being announced by the government.
- d) Agriculture Research
 - ▶ Since ancient times, India has been an agricultural nation but due to lack of education and training, farmers were not aware of the agricultural sector. After the independence of India, farmers have been aware of agricultural awareness programs for modern farming.
 - ▶ ICAR (Indian Council of Agricultural Research) is the only institute which manages agricultural research. It provides arrangements for research and also gives adequate help. It is also spreading awareness of Horticulture, Fishing and Cattle rearing science. ICAR has done pioneer work for the expansion of the green revolution. It has made appropriate efforts to have national food availability and nutrition.
 - ▶ Indian farmers are not able to do research as they are less educated therefore that duty is allotted to NABARD. It does a lot of research and it gives knowledge and training to farmers about it. So, farmers should not cultivate only with traditional techniques but they produce as per rising demand and by that earn more income and start doing market oriented production. To include them in agricultural reform programs, collective rural development programs, Panchayati Raj, Integrated rural development programs, Jan-Dhan Yojana, etc.. started to modernise the agriculture sector to direct them for increase in agricultural productivity.
- (2) Technological Measures: (July-2022, March-2023)
 - ⇒ Compared to institutional measures, technological measures are more easy and fast to give benefits. Therefore, these changes have more importance in agriculture developmental strategies. They are as follows :
 - i) Improved Seeds
 - ii) Use of Chemical Based Fertilisers
 - iii) Increase in Irrigation Facility

iv) Use of Machines

v) Pesticides

vi) Soil Testing

i) Improved Seeds :

- ▶ Improved seeds (Hybrid seeds) are developed by scientific inventions. These scientifically developed seeds give more production and help in producing crops speedily and protect crops against diseases.
- ▶ India has achieved a notable rise in food grain production with the help of these types of seeds. Therefore, an extraordinary rise in food grains production is known at the place of the agricultural revolution, 'as seed revolution'. National Agriculture Research Committee, National Seed Corporation and agriculture universities give priority to seed development to increase agriculture productivity in reality.

ii) Use of Chemical Based Fertilisers:

- ▶ Use of chemical fertiliser increased with the use of improved seeds in India. Chemical based fertilisers give enough nutrition to the plant and help it to grow rapidly. Therefore, these fertilisers are very beneficial to increase agricultural productivity.
- ▶ Nitrogen, phosphate, potash and other chemicals used as per crop. Chemical based fertilisers produced by public sector enterprises are also used in India. Even fertilisers are imported and distributed at lower rates (subsidy rates).

iii) Increase in Irrigation Facility:

- ▶ The Indian agriculture sector depends on sky (for rain purpose) in majority cases but rain is quite uncertain. So it directly affects agricultural production and productivity. India has one of the big issues of agriculture which is inadequate irrigation. If agriculture has to come out from uncertainty of rain and to provide certainty in irrigation facilities, then different motives of small scale and of medium scale irrigation projects should be developed and this task should be prioritised.
- ▶ To expand the service of irrigation 'Development program of irrigation sector' and 'Infrastructural development fund' set up by India. In addition to those incomplete irrigation projects and to develop other facilities NABARD is being assigned.

iv) Use of Machines

- ▶ One of the reasons for low productivity of agriculture is traditional equipment or machines. In reality, with the development of engineering and automobile sectors Tractor, Trailer, Thresher, Electric pump set, Oil engine, Pesticide sprinkler pump, etc.. modern machineries are invented. These machines are very helpful to have more than one crop a year which increases productivity.

v) Pesticides

- ▶ Ready crops are at risk of various diseases and insects. To prevent crops from various diseases and to protect plants from insects, scientifically developed pesticides are very useful. By using them, the loss of crops can be restricted which also will give high productivity.
- ▶ India has very less use of pesticides per hectare as per religious beliefs. Economic survey 2015-16 shows that India has only 0.5 kg per hectare use of pesticides where America has 7.0 kg, Europe has 2.5 kg, Japan has 12 kg and Korea has 6.6 kg use of pesticides. This is the reason why 15 to 25% of Indian crops get spoiled by insects, diseases, weeds, cattles and birds, which may be saved.
- ▶ CIBRC (Central Insecticide Board and Registration Committee) is appointed to inform Indian farmers about various types of pesticides and its level of poison. They publish different booklets to guide farmers which explain about the quantity of pesticides, time of usage and level of poison.

This information should be spread among farmers, to make pesticides environment friendly.

vi) Soil Testing:

- ▶ Soil testing is very popular in cultivation with the help of scientific techniques. That tests give information about land, it means, it is land favourable to crop or not can be known by tests. Even it gives information of deficiency of elements of soil. That helps to remove land deficiency.
- ▶ This way land can be made favourable to crop and it becomes capable of high productivity. This test answers about the favorability of land for crop or not so.

(3) Other Measures :

- ⇒ To improve agriculture productivity farmers are needed to educate or they may be well informed about new technology to bring changes in their working pattern. Even they should be awakened for bad customs of rural areas and can be explained about, not to believe in fatalism. New measures like agriculture fair can be used to increase agriculture productivity.
- ⇒ In addition to that, allied activities like cattle rearing, poultry farming, food processing, jungle and others can be used to reduce dependency on agriculture. That can increase agricultural productivity. If small scale industries can be expanded to rural areas, that kind of industry can become supporting to agriculture and that can make improvement of agriculture productivity easier and possible in reality.

15. Short note : Crop rotation (March-2019, July-2018, July-2022)

⇒ Multiple cropping shows the nature of agricultural work. Normally two types of crops are seen :

- (1) Food grains
- (2) Non food grains which are also known as cash crops. Reasons for multiple cropping are two : (1) Technological factors (2) Economic factors.

⇒ Using these factors, the time period and kind of lands are decided for cultivating food grains and cash crops.

(1) Technological factors :

- ⇒ Cultivation of any one crop leads a land to deficiency of soil elements and so land loses its fertility. By making land suitable for multiple cropping at a proper and certain time, fertility and deficiency of soil elements can be saved.
- ⇒ Moreover, deficiency of soil elements can be known using soil testing and then cultivation of crops is taken.
- ⇒ Nowadays, higher production with quality has increased using modern farming as per wish.
- ⇒ Modern farming is done by tractors, hybrid seeds, chemical based fertilisers, pesticides, newer technology and irrigation systems.

(2) Economic factors :

- ⇒ Economic factors are also important for multiple cropping. These economic factors are as follows :
 - (1) To maximise price and income
 - (2) Availability of agricultural instruments
 - (3) Size of farm
 - (4) Protection of insurance
 - (5) Tenure (Tenure avail from landlord) etc.. Availability or scarcity of these factors are responsible for selection of crops.
- ⇒ The availability or scarcity of above factors are responsible for crop rotation/multiple cropping.

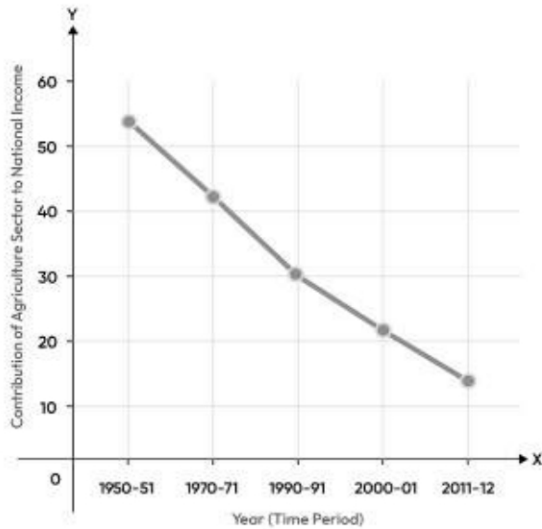
Section E

[12]

● Write the answer of the following questions. [Each carries 4 Marks]

16. Show a time dependent line diagram for the below information and analyse it. (March-2023)

Year	1950-51	1970-71	1990-91	2000-01	2011-12
Contribution of Agriculture sector to National Income of India	53	42	30	22	14



Analysis and interpretation:

Above diagram shows a time dependent line diagram where x-axis shows years and y-axis shows Contribution of agriculture sector to National Income of India per for the given span of time period shown over x-axis.

From the diagram, it can be seen that after independence, the contribution of the agriculture sector was 53% in 1950-51 which is higher. It had been decreased to 42% in 1970-71, 30% in 1990-91, 22% in 2000-01, 14% in 2011-12.

Above line diagram depicts that as the development of the industrial and service sector, the contribution of the agricultural sector constantly decreases to the national income.

This reduction depicts that day by day non-agricultural sectors are rapidly increasing.

Thus, as the importance given upon industrialisation, the agriculture sector is losing its importance.

17. Discuss the reasons for lower agricultural productivity. (Aug-2020, March-2020)

India is an agriculture oriented nation. Most of the people get employment in this sector. In spite of that, the development of the agricultural sector is not as it should be as there are so many problems. The main problem is low productivity from the agricultural sector. Compared to other countries, India is less productive in the agricultural sector. The reasons are:

- (1) Institutional Factors
- (2) Technological Factors
- (3) Other Factors

(1) Institutional Factors: (July-2018, March-2020, May-2021, March-2022)

⇒ The influence of those farmers who work in the institution and are felt in the physical, social, economic and legal factors are institutional factors. Such factors are negative in India due to that agriculture development is very low or of a very low level. Therefore, low productivity of agriculture is being seen.

⇒ Zamindari system, Mahalwari system, Ryotwari system are land revenue collection systems implemented by Britishers, facility of agriculture finance, agriculture marketing system, land ownership system etc.. are included in institutional factors. These institutional factors remain resistant or nega-

tive. Due to this agriculture productivity has also remained low.

- a) Land Revenue Collection Systems
- b) Agriculture Finance
- c) Agriculture Marketing
- d) Rural Social Structure

a) Land Revenue Collection Systems :

- ▶ Three revenue collection systems - Zamindari system, Mahalwari system and Ryotwari system were prevalent during India's independence.
- ▶ Tenants of land or landless labourers were cultivating the land under these systems.
- ▶ A large share of crop or just by leaving subsistence level of farmer, the entire crop was compulsorily taken by the landlords as rent of land. This was the reason why farmers were not interested in increasing productivity as they did not make efforts to increase production or they were not ready to implement any innovations, so agricultural production remained stagnant. As a result, agriculture production did not increase as per nation's requirement and not according to the requirement of the cultivators.
- ▶ After independence to protect tillers and to control rent of land, "Tillers land" act was passed. But this act was not completely implemented and due to that farmers are not exploitation free. Finally, the productivity of the agriculture sector becomes a serious issue.

b) Agriculture Finance :

- ▶ Majority of the farmers are facing poverty in India and they are in need of agriculture finance. To buy fertilisers, seeds, pesticides, etc.. They require finance to do cultivation. But, since independence a great role has been played by private money lenders. 71.6% of the agriculture finance business was managed by money lenders in 1951. They were providing finance at a very high rate of interest, not even that, they were manipulating accounts to exploit poor farmers.
- ▶ After independence the government had nationalised banks which has reduced the importance of money lenders. Government has expanded institutional agriculture finance by constructing regional rural banks in 1975 and National Bank for Agriculture and Rural Development (NABARD) in 1982. Due to all these efforts, the role of money lenders fell down to 27% where the remaining entire agriculture credit is managed by institutes.
- ▶ These factors prove that farmers are paying higher cost to avail credit and due to that their revenue (profitability) remain very low. As profits are remaining very low farmers are not much interested in improving productivity to do agriculture oriented work and agricultural productivity has also remained low.

c) Agriculture Marketing:

- ▶ Due to weak infrastructural facilities, Indian remote villages do not have adequate roads or transportation facilities to connect agriculture markets. Even agriculture markets have different rates of produce at the time of season and at the end of season.
- ▶ Majority cases high price benefits go to traders and hoarders. Farmers, who are under the debt are forced to sell their crop before the crop gets ready to local lenders and brokers.
- ▶ Farmers are least informative so they do not have knowledge of the market, knowledge of market rates, and selling procedure. Therefore, they are not able to get good returns of their crop and due to this they become pessimistic.

d) Rural Social Structure:

- ▶ Indian farmers are fatalist and have least information. Rural society is bound with old traditions and structure. As they are fatalist, they accept problems given by nature and accept situations of

scarcity.

- ▶ So, they do cultivation for their subsistence only. They are not motivated to attain economic development, development of cultivation, or increase in income. This is the reason why agriculture, which is the centre point of rural areas, is having low productivity.

(2) Technological Factors: (July-2018, March-2020, May-2021, March-2022)

- ⇒ The Indian agriculture sector utilises old traditional technology, old equipment, ideologies, techniques, etc.. which make agriculture weak. Even in the present, farmers use plough and bullock instead of tractors.
- ⇒ They use traditional seeds instead of hybrid seeds which give low productivity. They use cow dung as manure instead of chemical based fertiliser which gives low productivity. Indian farmers use very less proportion of pesticides and newer technology to protect crops. Therefore, the Indian agriculture sector moves ahead very slowly.

(3) Other Factors:

a) Pressure of Population

b) Lack of Economic Planning

a) Pressure of Population

- ▶ One of the big reasons for low productivity of the agriculture sector is population pressure on it. Population pressure on the agriculture sector can be understood by dependence on agriculture for employment. At the time of independence 72% of the population was engaged in agriculture that reduced to 58% in 2001-02, which was giving 49% employment in agriculture in 2013-14. Thus, the burden on agriculture has reduced, but, still it is higher than other sectors and even higher compared to foreign economies. Here, total produce of agriculture being distributed on the grounds of production or income among a big mass of population, shows low productivity of labour.

b) Lack of Economic Planning

- ▶ The Government of India has used the first five year plan exclusively for the agriculture sector. But, from the second five year plan (1956) India's economic planning centred on industries. The government has not taken that much effort, not allocated time and money for the agricultural sector as compared to the industrial sector. Finally, it can be said that, as the agriculture sector has an irregular and slow rate of development, the government has not given help to it and due to that only the Indian agriculture sector is in a worrisome condition.

18. **Measures to increase agricultural productivity. (March-2018, July-2019)**

- ⇒ Low productivity of the agriculture sector shows backwardness of the agriculture sector. Agriculture sector needs improvement as it is a main occupation and a very important pillar of the Indian economy. In addition, if agricultural productivity increases then the income of the rural economy will increase which will force the development of industry and service sector. It will also give solutions to employment, urbanisation, migration and inequality of income. To improve productivity of agriculture following steps to be taken :

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b) Availability of Institutional Credit

c) Improvement in Structure of Agriculture Marketing

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to guide farmers which explain about the quantity of pesticides, time of usage and level of poison. This information should be spread among farmers, to make pesticides environment friendly.

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- ▶ This way land can be made favourable to crop and it becomes capable of high productivity. This test answers about the favorability of land for crop or not so.

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- ⇒ To improve agriculture productivity farmers are needed to educate or they may be well informed about new technology to bring changes in their working pattern. Even they should be awakened for bad customs of rural areas and can be explained about, not to believe in fatalism. New measures like agriculture fair can be used to increase agriculture productivity.
- ⇒ In addition to that, allied activities like cattle rearing, poultry farming, food processing, jungle and others can be used to reduce dependency on agriculture. That can increase agricultural productivity. If small scale industries can be expanded to rural areas, that kind of industry can become supporting to agriculture and that can make improvement of agriculture productivity easier and possible in reality.