

The Story of Village Palampur

Economics

Lionel Robbins defined economics as. “the science which studies human behaviour as a relationship between ends and scarce **means** which have alternative uses

Economic activity is an **activity** of providing, making, buying or selling commodities or services by people to satisfy day-to-day needs of life. Any **activity** that includes manufacturing, distributing or utilising products or services.

Factors of production is an economic term that describes the inputs used in the **production** of goods or services in order to make an economic profit. These include any resource needed for the creation of a good or service. The factors of production typically include **land, labor, capital and entrepreneurship**

Land, In economics, the resource that encompasses the natural resources used in production. ... **Land** was considered to be the “original and inexhaustible gift of nature.”

In modern **economics**, it is broadly defined to include all that nature provides, including minerals, forest products, and water and **land** resources

Labor is the effort that people contribute to the production of goods and services. Labour is a measure of the work done by human beings. ...

Think of capital as the machinery, tools and buildings humans use to produce goods and services. Some common **examples** of capital include hammers, forklifts, conveyer belts, computers, and delivery vans

Capital is defined as “All those man-made goods which are used in further production of wealth.” Thus, **capital** is a man-made resource of production. Machinery, tools and equipment of all kinds, buildings, railways and all means of transport and communication, raw materials, etc., are included in **capital**.

The primary difference between fixed capital and working capital is that

Fixed Capital is the capital which is invested by the company in procuring the fixed assets required for the working of the business

whereas working capital is the capital which is required by the company for the purpose of financing its day to day

human capital

The skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country.

Multiple cropping corresponds to produce more than 1 **crop** on a piece of land during 1 year.

Modern farming method, HYV (high yielding variety) seeds are used for **farming** with lot of irrigation and chemical fertilizers and pesticides which inturn resulted into high yielding of crops.

Multiple cropping is the most common way of increasing production on a given piece of land. When more than one crop in grown on a piece of land during the year, it is known as **multiple cropping system**.

Traditional methods of agriculture and age old equipments are used in this kind of **farming**. For example, the plowing **in the** field is done by a pair of bullocks.

The **Green Revolution** is a movement which refers to a **series of research, development, and technology transfer initiatives**. This happened between the **1960s and 1980s**.

Market activities involve those **activities** which are performed basically for the purpose of the sale **in the market** and that include remuneration or profit. ...

Non market activities are those **activities** primarily undertaken for the purpose of self-consumption.

Very short answer questions

Question 1.

What are the factors of production?

Answer:

The essential inputs which are required for the production of goods and services are known as factors of production. For example, for the production of cloth, cotton-machine, labour and technology is required.

Question 2.

Name the main production activity of Palampur. Answer: Farming.

Question 3.

What capital is needed as first priority to set up a jaggery manufacturing unit? Answer: Fixed capital.

Question 4.

Give a few examples of fixed capital. Answer: Tools, machines and building.

Question 5.

Name any one item of working capital. Answer: Money.

Question 6.

Give an example of an entity which is not a part of fixed capital. Answer: Cash amount.

Question 7.

Give two examples of the working capital. Answer: Raw materials, Money in hand.

Question 8.

What do raw materials and money in hand call? Answer: The working capital.

Question 9.

The clay used by a potter is an example of which type of capital? Answer: Working capital.

Question 10.

Why is it important to use land very carefully?

Answer: Land is a natural resource, once destroyed it is very difficult to restore it.

Question 11.

What are rabi crops?

Answer: The crops which are grown in the winter season i.e., November or December and harvested in summer i.e., April or May. For example, wheat.

Question 12.

What are kharif crops?

Answer: The crops which are grown in the rainy season i.e., June or July and harvested in October or November. For example, rice.

Question 13.

Farmer's plough is an example of which factors of production? Answer: Capital.

Question 14.

Which is the most abundant factor of production? Answer: Labour.

Question 15.

What is physical capital?

Answer:

Physical capital includes variety of inputs required at every stage during production like machines, raw material etc.

Question 16.

What are different categories of physical capital?

Answer: Fixed capital, Working capital.

Question 17.

Categorise the following as fixed capital or working capital:

(i) Cotton,

(ii) Machine. Answer: (i) Cotton — Working capital, (ii) Machine — Fixed capital.

Question 18.

Which term is used for production for self-consumption?

Answer: Subsistence farming.

Question 19.

Enumerate a few effects of modern farming method.

Answer: Soil degradation, reduced water table below the ground and water pollution.

Question 20.

Mention any two natural factors of production.

Answer: Land, forests, water, minerals etc.

Question 21.

What is a market? Answer: It is a place where goods and services can be sold.

Question 22.

Define yield. Answer: Crop produced on a given piece of land during a single season.

Question 23.

Who provides capital to the small farmers at high rate of interest?

Answer: Large farmers, village moneylender or the traders.

Question 24.

What does HYV stand for? Answer: High Yielding Varieties (HYV).

Question 25.

“The yield of food grains hectare is high in Punjab, Haryana and Uttar Pradesh”. Give two reasons. HOTS

Answer: Use of HYV seeds. Use of tubewells for irrigation.

Question 26.

Which are the prime requirement for production of goods and services? Answer: Market.

Question 27.

Write down the names of the crops that were promoted by Green Revolution.

Answer: Cultivation of wheat and rice.

Question 28.

During which season do farmers of Palampur grow jo war and bajra? Answer: Rainy season.

Question 29.

At present, what is the percentage of the people who are engaged in the rural areas in non-farming activities in India? Answer: 24%.

Question 30.

What is the basic constraint in raising farm production?

Answer: The basic constraint in raising farm productions land which is a fixed factor of production.

Question 31.

What is Green Revolution? HOTS

Answer:

The great increase in the production of food grains in our country during the last 40 years, due to use of high yielding variety (HYV) of seeds, and other inputs is known as the Green Revolution.

Question 32.

What was production of pulses and wheat in 2010-11?

Answer: Pulses – 18 MT, Wheat – 86 MT.

Question 33.

Mention any two non-farm activities. Answer: Dairy and transport.

Question 34.

Name any two states which benefited from the Green Revolution.

Answer: Punjab and Haryana.

Question 35.

Mention any two factors responsible for the low yield of foodgrains in India.

Answer: Old technology, Small land holdings.

Question 36.

Which of the following is not used in modern farming?

Answer: Ploughs.

Question 37.

Which is the best way to expand non-farm activities in a village?

Answer: Better transportation, availability of loan at low interest, availability of markets where goods can be sold are the best way to expand non-farming activities.

Question 38.

In which period is the cultivation of potato done? Answer: October to December.

Question 39.

In which type of activity is dairy farming included? Answer: Primary activity.

Question 40.

Which state in India has the highest consumption of chemical fertilizers? Answer: Punjab.

Question 41.

Scientific reports indicate that the modern farming methods have overused the land. Explain by giving examples.

Answer: The soil is losing fertility due to increased use of chemical fertilizers,

The continuous use of groundwater from tubewell irrigation has reduced the water table.

Question 42.

What is multiple cropping?

Answer: To grow more than one crop on a piece of land during the year is known as multiple cropping.

Question 43.

Name any two methods to increase production in agriculture.

Answer :By using HYV seeds, By irrigation.

Question 44.

Which capital is known as working capital?

Answer: Raw materials and money in hand are called the working capital.

Question 45.

Which is the most important economic activity of the people of rural India?

Answer: Farming.

Question 46.

Mention the standard unit for measuring the area of land.

Answer: Hectare.

Question 47.

“Many people belonging to SCs (dalits) are discriminated in village.” Justify giving a reason.

Answer: SCs live in one corner of the village and in much smaller houses.

Question 48.

What is production? Give an example.

Answer: Production is the creation of value in a commodity. For example, manufacturing of a car from steel.

Short Answer Type Questions

Question 1.

Define the meaning and aim of production.

Answer: Production is the creation of value in a commodity, e.g., manufacturing of a car from steel.

Aim: The aim of production is to produce the goods and services that we want. There are four requirements for production of goods and services: Land, labour, physical capital and human capital.

Question 2.

Mention three characteristics of traditional method of farming,

Answer:

- Traditional seeds with low yield were used.
- Cow-dung and natural manures were used.
- Less irrigation was required.

Question 3.

Explain the problems which arise due to unequal distribution of land.

Answer:

- Economic Inequality: Unequal distribution of land leads to economic inequality.
- Unemployment: It leads to unemployment.
- Poverty and Hunger: Lack of economic opportunities leads to poverty and hunger.

Question 4.

Describe the role of human capital in the production process. Name two investment that can improve the quality of human capital.

Answer:

- Human capital can be built only in the long run through education and training.
- Human capital includes competent and trained people who put together land, capital and other factors of production to produce goods.

Question 5.

Farmers of which two states were the first to use modern farming methods in India? Mention any four positive effects of it.

Answer:

- (i) The farmers of Punjab, Haryana and Western Uttar Pradesh were the first to use modern farming methods in India.
- (ii) (a) Modern farming methods increased the productivity of land.
 (b) It increases foodgrain production in the country.
 (c) It brought the Green Revolution in the 1960s which resulted in high increase in the production of cereal grains, particularly, wheat and rice.
 (d) It has played a very important role in food security.
 (e) It has led to growth of agro-based industries.

Question 6.

Write any three differences between land and capital.

Answer:

Land	Capital
(i) It is a fixed factor of production.	It is a man-made factor of production.
(ii) It is a free gift of nature.	It is a man-made source of production.
(iii) Land varies in fertility.	It is of two types, i.e., fixed and working capital.

Question 7.

‘Capital is a basic need in agriculture.’ How is it arranged by Indian farmers? Explain.

Answer:

- Most of the small farmers borrow money from the moneylenders or traders to arrange the capital.
- The moneylenders and traders charge a high rate of interest from the farmers.
- Medium and large farmers have their own savings from the farming.
- They also get loans from the banks.

Question 8.

What problems do farm labourers face in terms of unemployment? Explain any three problems. HOTS

Answer:

Problems of Farm Labourers:

- They come either from landless families or families cultivating small plots of land.
- They do not have a right over the crops grown on the land.
- They got wages in cash or in kind.
- Wages vary widely from region to region and from crop-to-crop etc.
- Wide variation in the duration of employment was also seen, (any three)

Question 9.

Mention any four characteristics of an entrepreneur or human capital as a factor of production.

Answer:

- It is a factor of production which combines or arranges all the factors of production to produce.
- It is an active factor of production.
- It produces goods and services for self-consumption or to sell in the market.
- It is the most important factor of production.

Question 10.

How do small farmers obtain capital for farming? What is its consequence? Explain.

Answer:

Most small farmers have to borrow money to arrange for the capital. They borrow from large farmers or the moneylenders or the traders who supply various inputs for cultivation.

Consequence:

The rate of interest on such loans is very high. The small farmers are put to great distress to repay the loan.

Question 11.

Describe any three features of small-scale manufacturing as a non-farm activity in Palampur.

Answer:

- Less than 50 people are engaged in manufacturing in Palampur.
- Manufacturing in Palampur involves very simple production methods and are done on a small-scale.
- Manufacturing activities are carried out mostly at home or in the fields with the help of family labour. Labourers are hired rarely.

Question 12.

How do the medium and large farmers make their own savings and how do they utilize it? Explain.

Answer:

The medium and large farmers have surplus production even after keeping a substantial part for their own family needs. They sell it in the market and have good earnings and save it in their bank accounts. They utilize their savings:

- By lending to small farmers who are in need of a loan.
- As working capital for farming in the next season.
- As fixed capital for buying tractors etc.

Question 13.

What factors have led to the reduction of water level in Palampur?

Answer:

- Continuous use of groundwater for tubewell irrigation has reduced the water table below the ground.
- While environmental resources like soil fertility and groundwater are built-up over many years. So, once destroyed, it is very difficult to restore them.
- Misuse of groundwater is another important factor for lowering of water table.

Question 14.

Describe any three sources of irrigation in Palampur.

Answer:

- Persian wheel is the main source of irrigation in Palampur.
- Well is also a source of irrigation.
- Tubewells are also important sources of irrigation. These are run by electric supply.

Question 15.

State any two features of modern farming method.

Answer:

Its main features were:

- Use of tube wells for irrigation.
- Use of HYV seeds.
- Chemical fertilizers.
- Pesticides.
- Farm machinery such as tractors, threshers, etc. (any two)

Question 16.

Explain any two differences between physical capital and human capital.

Answer:

Differences:

- Physical capital has variety of inputs while human capital is labours, using those inputs.
- Physical capital includes tools, machines can be used over the years while human capital can produce output only if they have experience.

Question 17.

What is modern farming methods? Explain its drawbacks.

Answer:

It is a scientific way of increasing the production. Under this, production is increased by using HYV seeds and other inputs.

Drawbacks:

- It is used by rich farmers as it requires more inputs.
- Loss of soil fertility due to increased use of chemical fertilizers.
- Continuous use of groundwater for tubewell irrigation has reduced the water table below the ground.

Question 18.

Describe the role of the farmers after the crops are harvested and production is complete.

Answer:

Role of the Farmer:

- The farmers retain a part of the crop for their family consumption and sell the surplus in the market.
- The small farmers grow the crops just to fulfil the needs of the family. So, they do not have any surplus to sell in the market.
- The big farmers make big earnings by selling main crops in the market.
- They sell the crops and earn huge profit on them.

Question 19.

How many crops are grown by the farmers in Palampur? How are they able to grow these different crops in a year?

Answer:

(i) The farmers in Palampur grow jowar and bajra during the rainy season, potato between October and December and wheat in the winter season.

(ii) (a) There is the well-developed system of irrigation in Palampur that enables the farmers there to grow three different crops in a year.

- (b) Electricity came early to Palampur. Its major impact was to transform the system of irrigation in the village.
- (c) By mid-1970s, the entire area of 200 hectares was irrigated.
- (d) Modern farming methods and the Green Revolution introduced HYV seeds.

Question 20.

Why was the initial impact of Green Revolution limited to wheat and only to a few regions?

Answer:

- It was limited to wheat because HYV seeds were available only for wheat.
- Its impact was limited only to few regions as the HYV seeds need higher inputs which only the rich farmers can afford.
- HYV seeds need assured means of irrigation which were available only in northern parts of India.

Question 21.

How are traditional seeds different from HYV seeds?

Answer:

HYV Seeds	Traditional Seeds
(i) HYV seeds produce more output per hectare.	Traditional seeds produce less output per hectare.
(ii) HYV seeds need irrigation.	Traditional seeds needed less irrigation
(iii) HYV seeds need modern inputs like fertilizers, pesticides etc.	Traditional seeds needed inputs which were readily available with the farmers who did not have to buy these from the market.

Question 22.

“Most of our villages have good infrastructure.” Justify. VSQ

Answer:

- Most of the villages are well connected with other neighboring villages or town through all weathered roads.
- Most of the Indian villages have primary schools, health centers etc.
- Many kinds of means of transport are available like motorcycles, jeeps, tractors, tongas etc.

Question 23.

Why do people migrate? Explain.

Answer:

People migrate from one region to another:

- In search of better jobs.
- For better living conditions.
- For higher education.

Question 24.

What are the different ways of increasing production on the same piece of land use to explain

Multiple cropping and **use** of modern farming methods are two **different ways of increasing production on the same piece of land**. e.g., (i) Multiple Cropping When more than one crop is grown on a **piece of land** during the year it is known as multiple cropping.

Question 25.

Modern farming methods require more inputs which are manufactured in industry. Do you agree?

Answer:

Yes, higher yield is possible only from a combination of HYV seeds, irrigation, chemical fertilisers, pesticides, tubewells for irrigation, and pesticides in farming besides farm machinery, like tractors and threshers, which is necessary for faster ploughing and harvesting faster.

Question 26.

How did the spread of electricity help farmers in Palampur?

Answer: Electricity came early to Palampur. Its major impact was to transform the system of irrigation. Persian wheels were, till then, used by farmers to draw water from the wells and irrigate small fields. People saw that the electric-run tubewells could irrigate much larger areas of land more effectively. The first few tubewells were installed by the government. Soon, however, farmers started setting up private tubewells. As a result, by the mid-1970s the entire cultivated area of 200 hectares (ha.) was irrigated. To grow more than one crop on a piece of land during the year is known as multiple cropping. It is the most common way of increasing production on a given piece of land. All farmers in Palampur grow at least two main crops; many are growing potatoes as the third crop in the past fifteen to twenty years.

Question 27

Is it important to increase the area under irrigation? Why?

Answer:

Of the total cultivated area in the country a little less than 40 per cent is irrigated even today. In the remaining areas, farming is largely dependent on rainfall. In India, rainfall is not regular and irrigation is important to get better crop yield and hence it is important to increase the area under irrigation.

Question 27.

Why are the wages for farm labourers in Palampur less than minimum wages?

Answer: Due to heavy competition for work among the farm labourers in Palampur, people often agree to work for lower wages.

Question 28.

In your region, talk to two labourers. Choose either farm labourers or labourers working at construction sites. What wages do they get? Are they paid in cash or kind? Do they get work regularly? Are they in debt?

Answer: Do it yourself.

Question 29.

What are the different ways of increasing production on the same piece of land? Use examples to explain.

Answer: Multiple cropping and the use of modern farming methods are some of the ways to increase production on the same piece of land.

In multiple cropping, different crops are grown in different seasons of a year. For example, jowar and bajra grow during the rainy season, followed by potatoes between October and December and during the winter season, wheat is sown in the fields. During the rainy season (kharif) farmers grow jowar and bajra. It is followed by the cultivation of potatoes between October and December. In the winter season (rabi), fields are sown with wheat.

In modern farming, HYV seeds, chemical fertilizers, pesticides and proper irrigation is used to increase the yield.

Question 30.

Describe the work of a farmer with 1 hectare of land.

Answer: Generally, all the work is done by the farmer and his family members in the land. Major work involves ploughing, sowing of seeds, harvesting and taking the product to the market.

Question 31.

How do the medium and large farmers obtain capital for farming? How is it different from the small farmers?

Answer: Medium and large farmers easily get loans from banks as they have home and lands. Medium and large farmers often put surplus cash by selling their crops for next season. Small farmers have small sizes of plots and their production is not enough. The lack of surplus means that they are unable to obtain capital from their own savings, and have to borrow from local money lenders as they don't get loans from banks, easily.

Question 32.

On what terms did Savita get a loan from Tejpal Singh? Would Savita's condition be different if she could get a loan from the bank at a low rate of interest?

Answer: Savita estimated that the working capital itself would cost a minimum of Rs 3,000. She doesn't have the money, so she decides to borrow from Tejpal Singh, a large farmer. Tejpal Singh agrees to give Savita the loan at an interest rate of 24 per cent for four months, which is a very high-interest rate. Savita also had to promise to work on his field as a farm labourer during the harvest season at Rs 100 per day.

If she could get a loan from the bank at a low rate of interest then she can concentrate on her land instead of working as a labourer in Tejpal Singh's farm at very low wage.

Question 33.

Talk to some old residents in your region and write a short report on the changes in irrigation and changes in production methods during the last 30 years. (Optional)

Answer: Do it yourself.

Question 34.

What are the non-farm production activities taking place in your region? Make a short list.

Answer: Some of the activities are:

- Construction – Transportation - Mining - Fishing - Dairy

Question 35

What can be done so that more non-farm production activities can be started in villages?

Answer: Proper and training and suitable infrastructure must be provided to promote non-farm activities. The government should also provide capital via loans at low interest. Good connectivity between cities and villages and transport is also important to promote non-farm production activities.

Long Answer Type Questions

Question 1.

Explain the meaning of 'Physical Capital'. Explain its two types with the help of suitable examples.

Or

What is physical capital? What are its different types?

Answer:

Physical capital is the variety of inputs required at every stage during production. Its two different types are as follows:

- (i) Fixed Capital: It can be used in production over many years. For example, tools, generator, turbines, buildings, computers etc.
- (ii) Working Capital: Raw materials and money in hand are called Working Capital. Production requires a variety of raw material such as yarn used by the weaver and clay used by the potter. Some money is always required during production to make payments and buy other necessary items.

Question 2.

What is land? Suggest any three ways to sustain land.

Answer:

- (i) Land is the basic natural, resource required as a factor or an input in any production activity. Various activities or human activities take place on land which is a fixed asset.
- (ii) (a) Land is a free gift of nature. So, it is necessary that we should be very careful in its use. We must avoid pollution of land.
- (b) Soil is a vital part of land and the basis of agricultural activities. So, it becomes necessary that we should use bio-compost and eco-friendly methods in place of using chemical fertilizers and pesticides.
- (c) We have to see that the Modern Farming Methods are used scientifically in such a way that the natural resource base that the land provides is saved from further damage.
- (d) Some farming practices can, if used carefully and judiciously, certainly help in making land sustainable. Such practices include intensity of cropping, rotation of crops, multiple cropping, fallowing etc.
- (e) We should give encouragement to community agriculture system or cooperative farming, instead of individual farming which is often exploitative. This could be another sustaining land productivity.

Question 3.

How do large farmers utilise surplus farm products to arrange for the capital needed for farming?

Answer:

- The large farmers generally sell the surplus farm products and have good earnings.
- They put most of their earnings or money in their bank accounts and get adequate interest on the same.
- A part of their earnings is saved and kept to arrange for the working capital for farming in the next season.
- They also use savings for lending to small farmers and other persons in the village.
- A part of their earnings is used to increase their fixed capital like tractor, thresher, cattle etc.

Question 4.

Distinguish between Fixed, Working and Human Capital.

Answer:

Fixed Capital	Working Capital	Human Capital
(i) Tools, machines, buildings etc. which can be used in production over many years is called fixed capital.	(ii) Fixed capital cannot be changed or built in short period of time.	Human capital includes competent and trained people who put together land, capital and other factors of production to produce goods.
The factors of production which are used up in the production process are known as working capital.	Working capital can be changed or built in short period.	Human capital can be built only in the long run through education and training.

Question 5.

What is the difference between Rabi crops and Kharif crops? When are they sown and harvested? Mention some necessary conditions for multiple cropping.

Answer:

- Kharif crops are grown in the rainy season. They are sown in June-July and harvested in October-November. Farmers in Palampur mainly grow jowar and bajra which are used as cattle feed.
- Rabi crops are grown in the winter season. They are sown in . October-November and harvested mainly in March-April. Wheat is the main crop grown in this season.
- Necessary Conditions for Multiple Cropping:
 - Adequate irrigation facilities should be available on land.
 - Farmers should also have sufficient capital to invest and meet farm expenses.

Question 6.

Explain the distribution of workforce engaged in non-farming activities in the rural areas. Suggest some measures to increase non-farming activities.

Or

Explain any four efforts which can be made to increase non-farming production activities in villages.

Answer:

25% of the total workforce is engaged in non-farming activities. Measures to Increase Non-farming Activities:

- Infrastructure: Infrastructure includes building of roads, establishing of banks and improving communication. All these are basic inputs for economic development.
- Expansion of Market: To increase non-farming activities, rural markets should be linked to urban markets.
- Education and Health: Improvement in education will lead to human capital formation.
- Cheap Loan: Non-farming activities can be promoted by providing cheap and affordable loan to the farmers.

Question 7.

State any five reasons as to why farm labourers are considered poor. –

Answer:

- Farm labourers are generally landless.
- They have no permanent jobs. They have to look for work on daily basis.
- They are not even paid minimum wages. The minimum wages for a farm labourer set by the government is ₹ 60 per day, but they get only?
- They have large family.
- They are illiterate, unhealthy and unskilled.

Question 8.

Why do modern farming methods require more capital? Explain.

Answer:

- Modern farming methods need inputs like chemical fertilizers, pesticides, tractors etc. which are manufactured in industry. So, they require the farmer to start with more cash than before.
- In modern farming methods, HYV seeds are used which require more irrigation.
- In traditional method, the farmers use cow-dung as natural fertilizer, which they do not need to buy while chemical fertilizers need more cash to buy from the market.
- Modern farming is machine-oriented. Hence, farmers need more capital to purchase them.
- To operate the machines, semi-skilled or skilled manpower is required which need more investments.

Question 9.

State three reasons of the variation in the wages of farm labourers all over India.

Answer:

There is a wide variation in the wages of farm labourers in the country. They generally get the wages less than the minimum wages set by the government. The reasons of the variation in the farm wages are as follows.:

- The farm labourers come either from landless families or the families cultivating small plots of land. They are poor and helpless. They work on daily wages. They regularly have to look for work. Since there is heavy competition for work among the farm labourers in the country, these labourers agree to work for less than the minimum wages.
- Most agricultural labourers are from low castes and the depressed classes. They have little courage to challenge the upper caste people.
- Farm labourers are generally illiterate and ignorant. They are not organised in unions. So, it is difficult for them to bargain with the landowners and secure good wages.

Question 10.

Explain the basic requirements for the production of goods and services. Which one is the most important?

Answer:

(i) Land: Land is the most important factor of production. It is required for growing crops, building factories and infrastructure. The first requirement is land. We also need other natural resources such as water, forests, minerals etc.

(ii) Labour: The second requirement is labour, i.e., people who will do the work. Different production activities require different types of workers, such as highly educated, skilled or those doing some manual work. Each worker provides labour necessary for production.

(iii) Physical Capital: The third requirement is physical capital, comprising various inputs required during production. It has two components. Tools, machines and buildings fall under 'fixed capital'. They can be used in production for many years. Raw materials and money in hand are called working capital. These are used up in production.

(iv) Human Capital: The fourth requirement is the human capital. Knowledge and enterprise are needed to put together land, labour and physical capital in order to produce an output.

Question 11.

Define Green Revolution. How is Green Revolution different from traditional farming?

Answer:

Large increase in agriculture production after 1967-68 due to the adoption of new agriculture strategy which implied a simultaneous use of better and modern agriculture inputs. Green Revolution involves the introduction of high yielding varieties of seeds. It also encompasses the use of fertilizers and irrigation techniques that increase the production and make countries like India self-sufficient in food grains. So, this technique is mainly used to improve the status of agriculture. It was brought in India by the initiative of Indian government. Dr. Norman Borlaug brought high yielding wheat in India. M.S. Swaminathan and his team also contributed towards the success of Green Revolution in India. Punjab, Haryana and Uttar Pradesh are the main regions where Green Revolution was started.

Difference between Green Revolution and Traditional Farming:

Green Revolution refers to the use of artificial fertilizers, technology, high yielding variety seeds which are genetically engineered. Traditional farming emphasises on the use of natural seeds and fertilizers.

- Till the mid-1960s, the seeds used in cultivation were traditional ones with relatively low yields.
- Traditional seeds needed less irrigation. Farmers used cow-dung and other natural manure as fertilizers.
- All these were readily available with the farmers who did not have to buy them.
- The Green Revolution in the late 1960s introduced the Indian farmer to cultivation of wheat and rice using High Yielding Varieties (HYVs) of seeds.
- Compared to the traditional seeds, the HYV seeds promised to produce much greater amounts of grain on a single plant. As a result the same piece of land would now produce far larger quantities of foodgrains than was possible earlier. HYV seeds, however, needed plenty.

Question 12.

Describe the significance of Green Revolution in Indian economy.

Answer: The Green Revolution has two types of effects on Indian economy, namely (i) economic effects and (ii) sociological effects.

(i) Economic Effects:

(a) Increase in Agricultural Production and Productivity:

Due to adoption of HYV technology the production of foodgrains increased considerably in the country. The production of wheat has increased from 8.8 million tons in 1965-66 to 184 million tons in 1991-92. The productivity of other food grains has increased considerably. It was 71% in case of cereals, 104% for wheat and 52% for paddy over the period 1965-66 and 1989-90.

(b) Employment: The new agricultural technology has created more amounts of employment opportunities in the agricultural sector. The new technology is early maturing and makes multiple cropping possible.

(c) Market Orientation: The new technology has made the farmers market-oriented. Due to excess production the farmers have to go to the market for selling their surplus production.

(ii) Sociological Effects:

(a) Personal Inequalities: Due to Green Revolution the income of rich farmers increased considerably whereas the poor farmers couldn't reap any benefit. This led to a class conflict between the rich and the poor farmers. The small and marginal farmers were deprived of enjoying the gains of new technology.

(b) Regional Inequality: The new technology was successfully implemented in the wheat-producing belt of the country whereas the rice producing zones were not at all affected by this Green Revolution. Hence, the disparity between the two regions increased considerably. Further Green Revolution became successful in irrigated areas whereas, in the rained belt the new technology couldn't be properly implemented.

Question 13.

Where and why has the Green Revolution been started in India? Give advantages and disadvantages of the Green Revolution.

Answer:

Green Revolution involves the introduction of high yielding varieties of seeds. It also encompasses the use of fertilizers and irrigation techniques that increases the production and make countries like India self-sufficient in foodgrains. So, this technique is mainly used to improve the status of agriculture. It was brought in India by the initiative of Indian government. Dr. Norman Borlaug brought high yielding wheat in India.

M.S. Swaminathan and his team also contributed towards the success of Green Revolution in India. Punjab, Haryana and Uttar Pradesh are ; the main regions where green Revolution was started.

Advantages / Merits of Green Revolution:

- The HYV seeds produce much greater amount of grains in comparison to the normal seeds.
- It has increased the production on the same pieces of land which produces large quantities of food grains than it was produced earlier.

Disadvantages / Demerits of Green Revolution:

- Poor farmers are unable to afford HYV seeds, fertilizers and machineries.
- This may lead to an end with large debts.
- HYV seeds need more fertilizers and water and they are expensive.
- Since Green Revolution introduced new machineries, it led to the replacement of labour, and further leading to unemployment and rural-urban migration.
- It was limited to rice and wheat only.