

(ii) In fact agriculture and industry move hand in hand. Agriculture provides raw materials for various agro based industries in India and lays a strong foundation of industry.

3. How did spread of electricity help farmers in Palampur?

- Ans.**
- (i) It helped them to irrigate their lands in a better way. Previously they used to irrigate their fields with the help of the Persian wheel. It was a slow process and was not quite good. Now with the help of electricity they work quickly.
 - (ii) Due to better irrigation facility, due to use of electricity they could grow a lot of crops during a year.
 - (iii) Now they will not depend on the uncertain and erratic monsoon.
 - (iv) The use of canal water was a great problem for the farmers. Often they quarrel to get their share in time. Now Palampur is a peaceful village because there is no problem related to their farming.

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

- Ans.**
- (i) It is very important to increase the area under irrigation because it is not good to depend on uncertain and erratic Monsoon.
 - (ii) In India rainfall is only for 3–4 months and water is an essential input for agriculture.
 - (iii) With the help of irrigation farmers can grow, more than one crop in a year.

5. Construct a table on the distribution of land among the 450 families of Palampur.

Ans. Distribution Table

No. of families	Land in Hectares	Conditions of living
150 families (mostly of Dalits)	Landless and they have no land for cultivation.	Poor life working on the fields of other large farmers.
240 families (of small farmers)	Small fields less than 2 hectares in size.	Cultivation of such plots does not bring adequate income to the farmer's families
60 families (of medium and large farmers)	Comparatively large plots above 2 hectares and extending over 10 hectares or more.	They lead a good life so save some money for their future needs. Engage landless people in their lands.

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

- Ans.**
- (i) Farm labourers in the Palampur village come from the landless families, though some of them come from families cultivating small plots of land.
 - (ii) The minimum wage fixed by the Government for a farm labourer is ₹60 per day but they are paid only ₹35-40.
 - (iii) This is because of the fact that there is a great competition for work among the farm labourers of Palampur. So they themselves agree to work at much lower wages than fixed by the government. As a result they remain among the poorest people of the village.

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

- Ans.** The different ways of increasing production on the same field are :
- (i) **Multiple cropping:** A system of farming in which farmer grow more than one crop at a time. This protects farmers from crop failure at the same time production increases.
 - (ii) **Crop rotation:** In this different crops are cultivated in different seasons. This maintains the fertility of the soil.
 - (iii) **Use of modern irrigation facility in proper ways** can increase production.
 - (iv) **Use of modern tools like tractors, threshers** can also increase production.

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

- Ans.** The source of obtaining capital by, large, medium and small farmers are as under:
- (i) Large farmers have their own savings from farming which they had accumulated year after year so they don't have any need of taking any debt from any bank money lender or any other agency.
 - (ii) Mostly medium farmers also have their own savings to spend on the betterment of their farms. But if they stand in need of any borrowing, such an amount is not quite much because they have about 50% to 75% of the amount already with them.
 - (iii) Such farmers can go to the bank directly and get the loan at quite a reasonable rate. The bank shall be quite happy in advancing loan to such good paymasters.

9. On what terms did Savita get loan from Tejpal Singh? Would Savita's condition be different from the small farmers?

- Ans.**
- (i) Tejpal Singh agrees to give Savita the loan at an interest rate of 24 percent for four months, which is a very high interest rate.
 - (ii) Savita also has to promise to work on his field as a farm labourer during the harvest season at ₹35 per day. As you can tell, this wage is quite low.
 - (iii) Savita knows that she will have to work very hard to complete harvesting on her own field, and then work as a farm labourer for Tejpal Singh. The harvest time is a very busy time.
 - (iv) As a mother of three children she has a lot of household responsibilities. Savita agrees to these tough conditions as she knows getting a loan is difficult for a small farmer.

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

Ans. A short report regarding changes in irrigation and the changes in the production methods during last 30 years is given below:

Changes in irrigation system: Many changes have come in the system of irrigation. The old residents of Palampur will tell you formerly they used to draw water from the wells and irrigate small fields. Persian wheels were used by them to draw water from the wells with the help a pair of bullocks. But with the coming of electricity the farmers of Palampur were able to run electric tube wells and irrigate much larger areas of land quite effectively.

Changes in the production methods:

- (i) Likewise the farmers of Palampur village will tell you the changes that have come in the production methods during the last 30 years or so. Now the farmers can use different kinds of fertilizers along with manure so that the soils could yield better results.
- (ii) Now they can use high yields variety of seeds in order to get more production in different crops especially wheat.
- (iii) Now the farmers can use different kinds of insecticides to check pests, locusts and other insects which used to destroy much of their crops.
- (iv) They can use new tools and implements like tractors, harvesters and threshers etc. to do the different farming jobs—like reaping and threshing the crops. As a result they can save much time, enjoy leisure and save their corn from the vagaries of the season.

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

Ans. Main Non-Farming Activities are:

- (i) Dairy farming
- (ii) Small scale cottage industry
- (iii) Shop-keeping
- (iv) Transport
- (v) PCO

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

Ans. About 75% of the people of the villages are depending on farming. During the time when the farming activities are finished the farmers as well as the farm labourers remain without work. So some other work may be started during this period.

Better it would be if some other non-farm activities other than the above can be started—

- (i) Some small scale and cottage industries can be started there.
- (ii) Some families can be helped in starting their own small poultry-farms
- (iii) Bee keeping can also be encouraged.
- (iv) Rearing of pigs can be encouraged to accommodate some families.
- (v) Technical training in welding, tailoring, cycle and scooter repairing can also be given to certain families to rise above the poverty line.