

## **Brief Notes on Class 8 Agriculture**

The word agriculture is derived from Latin words “ager” or “agri” meaning soil and culture meaning cultivation. The transformation from a plant to a finished product involves three types of economic activities. These are primary, secondary and tertiary activities.

- Primary activities include all those connected with extraction and production of natural resources. Agriculture, fishing and gathering are some good examples.
- Secondary activities are concerned with the processing of these resources. Manufacturing of steel, baking of bread and weaving of cloth are examples of this activity.
- Tertiary activities provide support to the primary and secondary sectors through services. Transport, trade, banking, insurance and advertising are examples of tertiary activities.

Agriculture is a primary activity. It includes growing crops, fruits, vegetables, flowers and rearing livestock. In the world, 50 % of persons are engaged in agricultural activity. Two-thirds of India’s population is still dependent on agriculture. Favourable topography of soil and climate is vital for agricultural activity. The land on which the crops are grown is known as arable land.

*Here are the study notes for From Trade to Territory Class 8*

### **Farm System**

Agriculture or farming can be looked at as a system whose important inputs are seeds, fertilizers, machinery and labour. Some of the operations involved are ploughing, sowing, irrigation, weeding and harvesting. The outputs from the system include crops, wool, dairy and poultry products.

### **Types of Farming**

According to Class 8 Agriculture chapter, farming is practised in various ways across the world depending upon the geographical conditions, the demand of produce, labour and level of technology. Farming can be classified into two main types – subsistence farming and commercial farming.

#### **Subsistence Farming**

This type of farming is practised to meet the needs of the farmer’s family. Traditionally low levels of technology and household labour are used to produce small output.

Subsistence farming can be further classified as intensive subsistence and primitive subsistence farming.

- In intensive subsistence agriculture the farmer cultivates a small plot of land using simple tools and more labor. Climate with a large number of days with sunshine and fertile soils permit growing of more than one crop annually on the same plot. Rice is the main crop and the other crops include wheat, maize, pulses and oilseeds. Intensive subsistence agriculture is prevalent in the thickly populated areas of the monsoon regions of south, southeast and east Asia.
- Primitive subsistence agriculture includes shifting cultivation and nomadic herding.
- Shifting cultivation is practiced in the thickly forested areas of Amazon basin, tropical Africa, parts of Southeast Asia and Northeast India. These are the areas of heavy rainfall and quick regeneration of vegetation. A plot of land is cleared by felling the trees and burning them. The ashes are then mixed with the soil and crops like maize, yam, potatoes and cassava are grown. After the soil loses its fertility the land is abandoned and the cultivator moves to a new plot. Shifting cultivation is also known as 'slash and burn' agriculture.
- Nomadic herding is practiced in the semi-arid and arid regions of Sahara, Central Asia and some parts of India, like Rajasthan and Jammu and Kashmir. In this type of farming, herdsman move from place to place with their animals for fodder and water, along defined routes. This type of movement arises in response to climatic constraints and terrain. Sheep, camel, yak and goats are most commonly reared. They provide milk, meat, wool, hides and other products to the herders and their families.

*Here are the study notes on Weavers, Iron Smelters and Factory Owners for Class 8!*

## **Commercial Farming**

In commercial farming, crops are grown and animals are reared for sale in the market. The area cultivated and the amount of capital used is large and most of the work is done by machines. As per the Class 8 Agriculture chapter, commercial farming includes commercial grain farming, mixed farming and plantation agriculture.

- In commercial grain farming crops are grown for commercial purposes. Wheat and maize are common commercially grown grains. Major areas where commercial grain farming is practiced are temperate grasslands of North America, Europe and Asia. These areas are sparsely populated with large farms spreading over hundreds of hectares. Severe winters restrict the growing season and only a single crop can be grown.

- In mixed farming the land is used for growing food and fodder crops and rearing livestock. It is practiced in Europe, eastern USA, Argentina, southeast Australia, New Zealand and South Africa.
- Plantations are a type of commercial farming where a single crop of tea, coffee, sugarcane, cashew, rubber, banana or cotton are grown. Large amounts of labor and capital are required. The produce may be processed on the farm itself or in nearby factories. The development of a transport network is thus essential for such farming. Major plantations are found in the tropical regions of the world. Rubber in Malaysia, coffee in Brazil, tea in India and Sri Lanka are some examples.

## **Class 8 Agriculture- Major Crops**

A large variety of crops are grown to meet the requirement of a growing population and supply raw materials for agro-based industries. Major food crops are wheat, rice, maize and millets. Jute and cotton are fibre crops. Important beverage crops are tea and coffee.

### **Rice**

Rice is the staple diet of the tropical and subtropical regions. Rice needs high temperature, high humidity and rainfall. It grows best in alluvial clayey soil which can retain water. China leads in the production of rice followed by India, Japan, Sri Lanka and Egypt. In favourable climatic conditions as in West Bengal and Bangladesh 2-3 crops are grown in a year.

### **Wheat**

Wheat requires moderate temperature and rainfall during the growing season and bright sunshine at the time of harvest. It thrives best in a well-drained loamy soil. Wheat is grown extensively in the USA, Canada, Argentina, Russia, Ukraine, Australia and India. In India, it is grown in winter.

### **Millets**

They are also known as coarse grains and can be grown on less fertile and sandy soils. It is a hardy crop that needs low rainfall and high to moderate temperature and adequate rainfall. Jowar, bajra and ragi are grown in India. Other countries are Nigeria, China and Niger.

### **Maize**

Maize requires moderate temperature, rainfall and lots of sunshine. It needs well-drained fertile soils. Maize is grown in North America, Brazil, China, Russia, Canada, India, and Mexico.

### **Cotton**

Cotton requires high temperature, light rainfall, 210 frost-free days and bright sunshine for its growth. It grows best on black and alluvial soils. China, USA, India, Pakistan, Brazil and Egypt are the leading producers of cotton. It is one of the main raw materials for the cotton textile industry.

### **Jute**

Jute was also known as the 'Golden Fiber' and was responsible for the Golden Revolution. It grows well on alluvial soil and requires high temperature, heavy rainfall and humid climate. This crop is grown in tropical areas. India and Bangladesh are their leading producers.

### **Coffee**

Coffee requires a warm and wet climate and well-drained loamy soil. Hill slopes are more suitable for the growth of this crop. Brazil is the leading producer followed by Columbia and India.

### **Tea**

Tea is a beverage crop grown on plantations. This requires a cool climate and well-distributed high rainfall throughout the year for the growth of its tender leaves. It needs well-drained loamy soils and gentle slopes. Labour in large numbers is required to pick the leaves. Kenya, India, China, Sri Lanka produce the best quality tea in the world.

## **Agricultural Development**

On the basis of the Class 8 Agriculture chapter in Geography, agricultural Development refers to efforts made to increase farm production in order to meet the growing demand of the increasing population. This can be achieved in many ways such as increasing the cropped area, the number of crops grown, improving irrigation facilities, use of fertilizers and high yielding variety of seeds. Mechanization of agriculture is also another aspect of agricultural development. The ultimate aim of agricultural development is to increase food security.

Developing countries with large populations usually practice intensive agriculture where crops are grown on smallholdings mostly for subsistence. Larger holdings are more

suitable for commercial agriculture as in the USA, Canada and Australia. With the help of two case studies of farms, we can understand agriculture in developing and developed countries.

## A Farm in India

Munna Lal is a small farmer in the main village. He purchases high yielding varieties of seeds from the market every alternate year. The land is fertile and he grows at least two crops in a year which are normally wheat or rice and pulses. He takes a tractor on rent for ploughing his field. There is a tube well in the nearby field which he takes on rent to irrigate his field.



Credit: Modern

Farmer

Munna Lal also has two buffaloes and a few hens and sells their products in the nearby town. He is a member of the co-operative society which also advises him on the type of fodder for his animals, safety measures to protect the health of the livestock and artificial insemination. All the members of the family help him in various farm activities. Sometimes, he takes credit from a bank or the agricultural cooperative society to buy HYV seeds and implements. He sells his produce in the mandi located in the nearby town. In recent years, the government has taken some steps to develop storage facilities.

## A Farm in the USA



The average size of a farm in the USA is much larger than that of an Indian farm. The farmer generally resides on the farm. Some of the major crops grown are corn, soya bean, wheat, cotton and sugar beet. Joe Horan owns about 300 hectares of land. He grows corn on his field after making sure that soil and water resources meet the needs of this crop. Adequate measures are taken to control pests that can damage the crop.



Credit: Earth

Institute

He sends the soil samples to a soil testing laboratory to check whether the nutrients are sufficient or not which help him to plan a scientific fertilizer program. His computer is linked to the satellite which gives him a precise picture of his field. This helps him to use chemical fertilizers and pesticides wherever they are required. He uses tractors, seed drills, levellers, combined harvester and thresher to perform various agricultural operations. Grains are stored in automated grain storage or dispatched to market agencies. The farmer in the USA works as a businessman and not as a peasant farmer.