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— R K JAIN —

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ICSE GEOGRAPHY

Class 10

**Chapter 17: India-Agriculture
(Crops IV- Tea and Coffee)**

TEA

Tea is the dried leaf of a tropical bush, which is the native of the Yunan plateau region of southern China. However, tea bush also grew wild on the hill slopes of upper Assam. In 1840, tea seeds were imported from China and plantations were set up by the Europeans in the Brahmaputra valley. Later on, tea plantations were also set up in the Nilgiri Hills and the Kangra Hills.

TYPES OF TEA

There are three main types of tea. These are:

1. **Black tea:** It is typical of India and Sri Lanka. It is best suited for commercial production due to its large leaves. To prepare black tea, the leaves are first dried in the sun, rolled and then fermented.
2. **Green tea:** It is typical of China and Japan. It has smaller leaves. It is not fermented.
3. **Oolong tea:** It is also typical of China and Japan. It is made by fermenting the tea leaves partially.



Picking of tea leaves in tea garden

CONDITIONS FOR GROWTH OF TEA

- ❖ Tea is an evergreen plant. It grows both in tropical and subtropical regions. The tea plant grows well in the hot and humid climate. Actually, there is an intimate relationship between climate, yield per hectare and the quality of tea.
- ❖ The ideal temperature for growing tea is between 20 °C and 30 °C.
- ❖ Tea needs heavy rainfall between 150 cm and 250 cm. The rains should be well-distributed throughout the year and should be in the form of frequent showers.
- ❖ High humidity, heavy dew and morning fog favour the growth of young leaves on a tea bush.
- ❖ Tea bush is a shade-loving plant and should be planted with rows of shady trees.
- ❖ Tea bush grows well in well-drained deep fertile sandy loams. Nitrogenous fertilisers are applied for increasing the yield.

METHODS OF TEA CULTIVATION AND PROCESSING

The tea gardens are set up on the cleared hill slopes, where shade trees are planted in advance to protect the bushes from the hot sun.

1. **Sowing:** The seeds are first planted in the raised nursery beds. After about one year, when the plants reach a height of about 20 cm, the saplings are transplanted in the main garden. They are arranged in rows, about 1 metre apart.

2. **Pruning:** If a tea bush is allowed to grow fully, it can reach a height of about 10 metres. However, the bush is constantly pruned to maintain a height of about 1 to 1.5 metres.

This helps not only in picking of tea leaves, but also in the growth of new shoots that bear soft and tender leaves. Pruning also helps in maintaining the shape of a tea bush

3. Picking: The picking of tea leaves is a skilful job and needs patience and judgement. In a tea garden, one can see a number of women standing between the tea bushes. Each one of them has a basket strapped to their backs.

4. Processing: Almost every tea plantation has a processing unit. The quality of tea depends on its method of processing and the amount of blending.

PRODUCTION OF TEA IN INDIA

Tea cultivation started in India in the middle of the 19th century in Assam. It has shown steady progress right from the beginning. At present, the total annual production of tea is about 10 lakh tonnes from about 6 lakh hectares of land under plantation. The average yield is about 1750 kg per hectare.

AREAS OF TEA PRODUCTION IN INDIA

Tea cultivation is largely concentrated in northeast India, South India and northwest India. The area under tea cultivation has increased from about 3 lakh hectares in 1950–51 to about 6 lakh hectares in 2013–14.

Northeastern India

This tea producing area lies mainly in Assam and West Bengal. This is the most important tea producing region in India and accounts for about 75 per cent of the area and also same percentage of production. Tea plantations, also called **tea gardens** are fairly large in area (about 200 hectares) but they are small in numbers.

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South India

In South India, tea is mainly produced in Nilgiri, Cardamom, Palni and Anaimalai hills in Tamil Nadu, Kerala and Karnataka states. This region produces about 25 per cent of tea from about 44 per cent of area under tea cultivation in India. Tea gardens are mostly located on the hill slopes of Western Ghats. The tea gardens are small in size, but very large in number. The production is on the higher side, as this is a frost-free region.

Northwest India

Small quantity of tea is also produced in Uttarakhand (Dehradun, Almora and Garhwal districts) and Himachal Pradesh (Kangra and Mandi districts). Green tea is mostly produced in the Kangra Valley.

TRADE

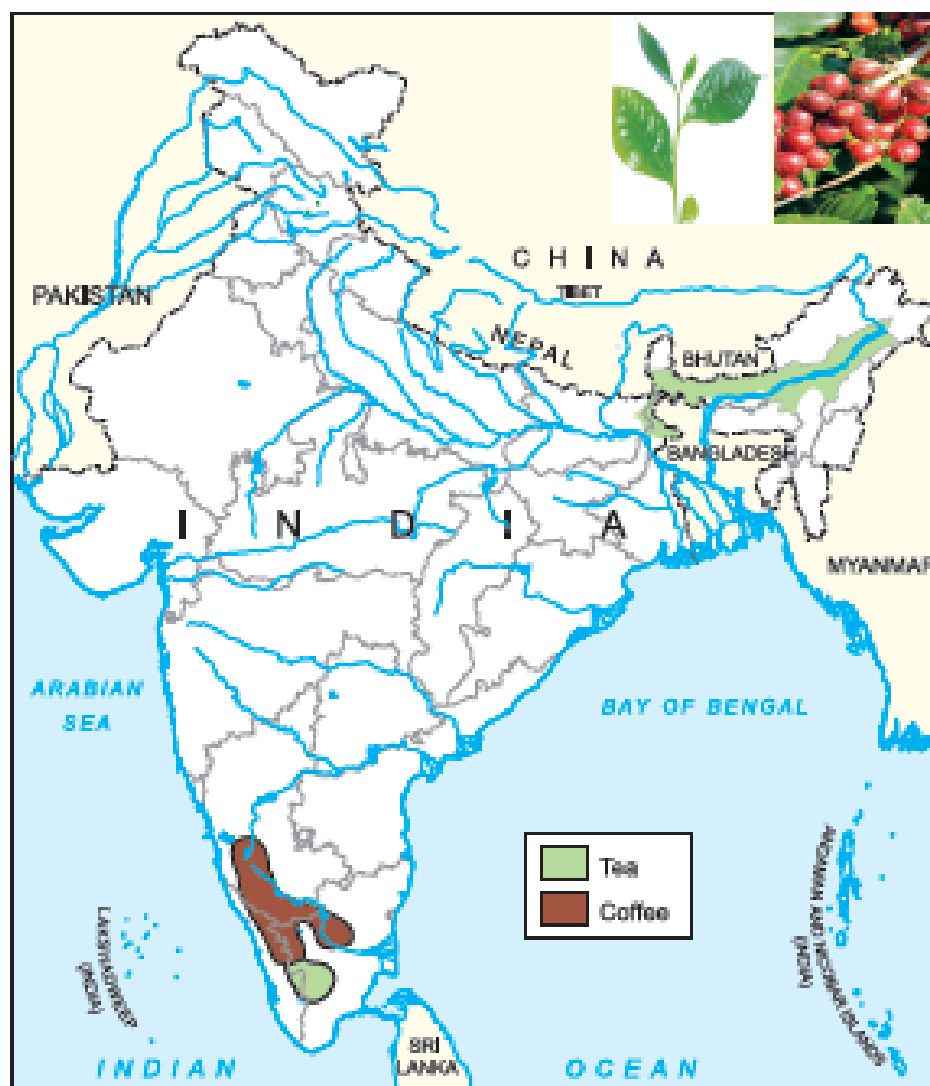
India has been one of the leading exporters of tea in the world, but in the last two decades, exports have declined due to fast increasing domestic consumption and tough competition from other tea exporting countries in the world, such as China, Sri Lanka, Japan, Vietnam, Indonesia and Kenya. In 2012–13, India exported about 2,70,000 tonnes of tea to as many as 80 countries. The main importers are Russia, UK, USA, Germany, Australia, Ireland, Afghanistan, Sudan, Iraq, Iran, Egypt, etc.

COFFEE

Coffee is the second most important beverage crop of India, next only to tea. The coffee plant is native to **Abyssinia highlands in Ethiopia** (Africa). It was taken to Arabia in the 11th century. Arabia, thus, became the home of **aromatic mocha coffee**.

TYPES OF COFFEE

The most important deciding factor about the flavour and quality of coffee is the species of the trees from which coffee is obtained. There are about 40 different types of species, but only three types are commercially cultivated in India. These are as follows:



India – Tea and coffee producing areas

1. **Arabica:** This is the finest variety of coffee for flavour. It has originated from the **mocha coffee**, native to Arabian peninsula. More than 70 per cent of the coffee production in our country is of the Arabica type. This type of coffee is most expensive and is most important in world trade.

2. **Robusta:** This type is comparatively of poor quality and can survive in arid conditions. It is also disease resistant. The cost of production is low and the yield per hectare is high. Thus, it is comparatively cheaper.

3. **Liberica:** This type is native to Liberia and suited to lowlands rather than upland conditions. Both robusta and liberica are particularly suitable for making **instant coffee**, and are thus, gaining importance.



Coffee plantation

CONDITIONS FOR GROWTH OF COFFEE

- ❖ Coffee is a tropical plant and needs hot and humid climate.
- ❖ The temperature should vary between 15 °C and 28 °C and the annual rainfall should be about 150 to 250 cm. The rains should be well-distributed.
- ❖ The coffee plant cannot tolerate frost, strong sunshine and hot winds. Thus, it is grown under shady trees.

- ❖ Stagnant water is harmful, so coffee is grown on hill slopes at an elevation of 800 to 2000 metres. Northern and eastern slopes are preferred as they are less exposed to strong afternoon sun and Southwest Monsoon winds.

METHODS OF CULTIVATION AND PROCESSING

- ❖ The life on a coffee plantation is very hectic for everybody throughout the year. The following processes are involved in the cultivation and harvesting of coffee on a plantation:
 - ❖ After clearing the land, some shady trees are planted in advance.
 - ❖ Coffee seeds or cuttings are first raised in a nursery. After about 6 to 12 months, the seedlings are transplanted about 3 metres apart in the main field. Planting is done in the rainy season.
 - ❖ The coffee tree may grow up to a height of about 8 metres, but the trees are pruned to a height of about 2.5 metres. It is easier to pick berries by hand from a smaller tree.
 - ❖ The coffee tree starts bearing fruits after 5 years and yields coffee berries for the next 30 years. One tree can yield about 2 kg of coffee berries in a year.
 - ❖ The crop is normally harvested in the cool and dry season. The picking is mostly done by hand.
 - ❖ Leaves and twigs are separated from the berries by tossing them high in the air.
 - ❖ Each coffee berry has two beans inside, surrounded by a soft pulp. After removing the outer covering, the beans are kept in tanks to ferment. Then, the beans are washed and dried.

- ❖ The dried beans are made to pass through a machine, which removes the outer husk. The beans are now sorted and packed according to shape, size and quality.
- ❖ The beans are roasted by the importing countries.

PRODUCTION OF COFFEE IN INDIA

India is not an important producer of coffee in the world, when compared with Brazil, Columbia, Indonesia, etc. At present, India is the seventh largest producer of coffee in the world, next only to Brazil, Vietnam, Columbia, Indonesia, Ethiopia and Mexico

The two main varieties of coffee grown in India are **Arabica** and **Robusta**. Almost the entire production of coffee comes from three states in India – **Karnataka** (73 per cent), **Kerala** (20 per cent) and **Tamil Nadu** (5 per cent). Other coffee producing states are Andhra Pradesh and Odisha.

AREAS OF COFFEE PRODUCTION IN INDIA

Most of the coffee plantations in India are confined to a small area in south India, comprising hill areas around **Nilgiris**. The area under coffee cultivation has increased from about one lakh hectares in 1970–71 to about 4 lakh hectares in 2013–2014. Almost the entire area is shared among Karnataka (59 per cent), Kerala (22 per cent) and Tamil Nadu (8 per cent).

TRADE

The Arabica and Robusta varieties of coffee produced in India have made a place for themselves in the international market. These are in demand for good blending quality. India exports about two-thirds of its production to UK, USA, Russia, Australia, Iraq and a number of European countries.

THANK YOU