

► **AGRICULTURE**
CLASS X
GEOGRAPHY

INTRODUCTION

AGRICULTURE

- ▶ OBJECTIVE: WE WILL BE ABLE TO UNDERSTAND DIFFERENT TYPES OF FARMING .
- ▶ DISCUSS THE VARIOUS TYPES OF CROPS WITH THEIR CLIMATIC CONDITIONS.

Types of Farming

Over years, cultivation methods in India have changed significantly depending upon the characteristics of physical environment, technological know-how and socio-cultural practises.

Farming varies from subsistence to commercial farming.

At present, in different parts of India, the following farming systems are practised:

Primitive subsistence farming

Intensive subsistence farming

Commercial farming

Did you know ?

Agriculture is the largest livelihood provider in rural India.

Primitive Subsistence Farming

This type of farming is still practised in few places in India. It is practised on small patches with the help of primitive tools like hoe, dao and digging sticks, and family or community labour. This type of farming depends upon monsoon, natural fertility of the soil and suitability of other environmental conditions.

It is also called “slash and burn” cultivation. Farmers clear a patch of land and produce crops to sustain their family. When soil fertility decreases, the farmers shift and start cultivating in the same way on a fresh patch of land. This allows nature to replenish the fertility of the soil. Productivity in this type of farming is low as fertilisers or modern inputs are not used.



Intensive Subsistence Farming

This type of farming is practised in areas of high population pressure on land. It is labour-intensive farming, where high doses of biochemical inputs and irrigation are used for obtaining higher production.

Though the right of inheritance leading to the division of land among successive generations has rendered land-holding size uneconomical, the farmers continue to take maximum output from the limited land in the absence of alternative source of livelihood. Thus, there is enormous pressure on agricultural land.

Did you know ?

12% of world's farm land is in India.



Commercial farming

In this type of farming, higher doses of modern inputs like HYV seeds, chemical fertilisers, insecticides and pesticides are used in order to obtain higher productivity. The degree of commercialisation varies from region to region.

For example: Rice is a commercial crop on Punjab and Haryana, but in Orissa, it is a subsistence crop.



Cropping Pattern

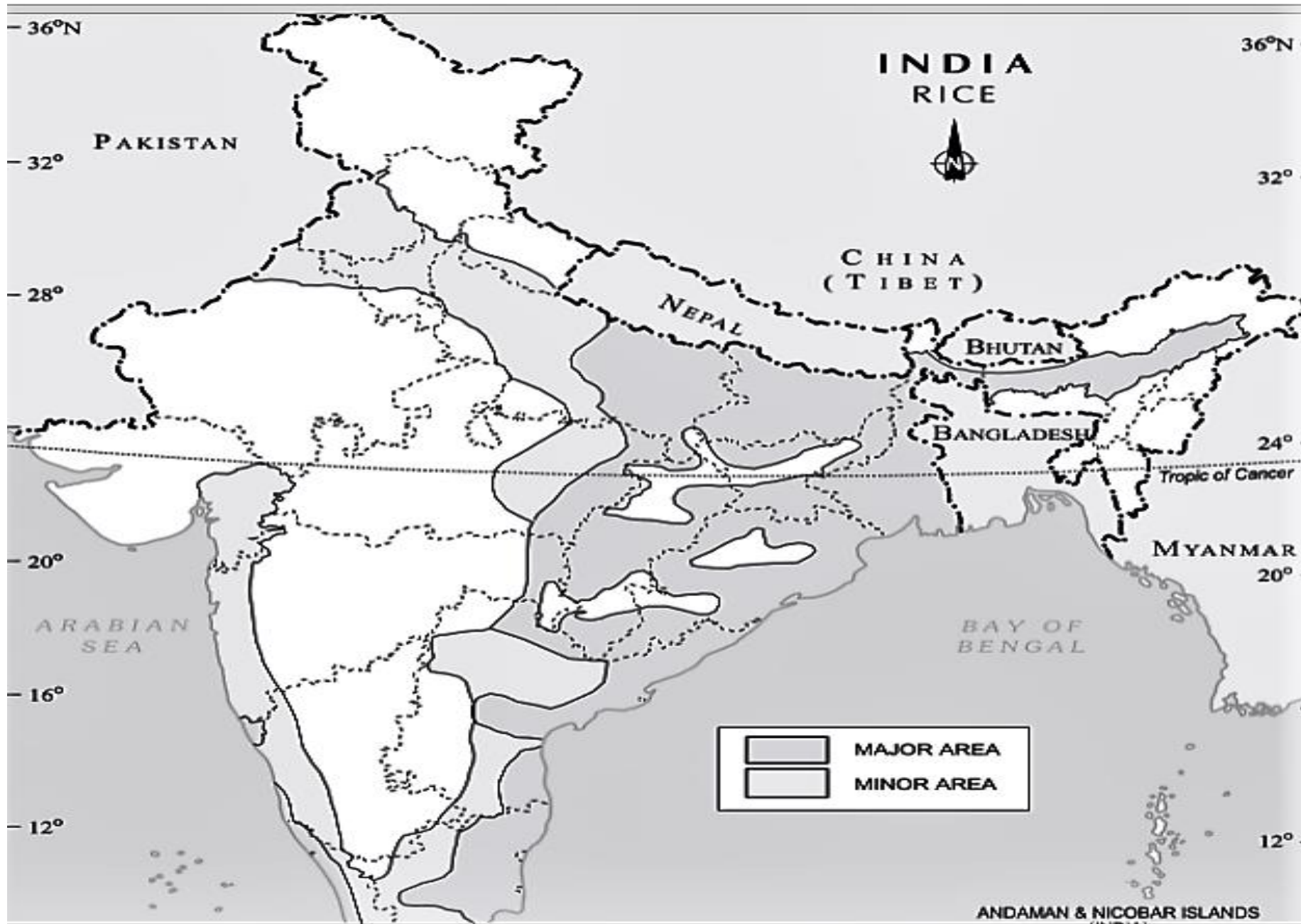
India has three cropping seasons. They are:



A variety of food and non food crops are grown in different parts of the country depending upon the variations in soil, climate and cultivation practices

- ▶ Rice cultivation :: It is the staple food crop .
- ▶ second largest producer of rice in the world after China.
- ▶ high temperature, (above 25° C) and high humidity with annual rainfall above 100 cm. In the areas of less rainfall, it grows With the help of irrigation.
- ▶ plains of north and north-eastern India, coastal areas and the deltaic regions.

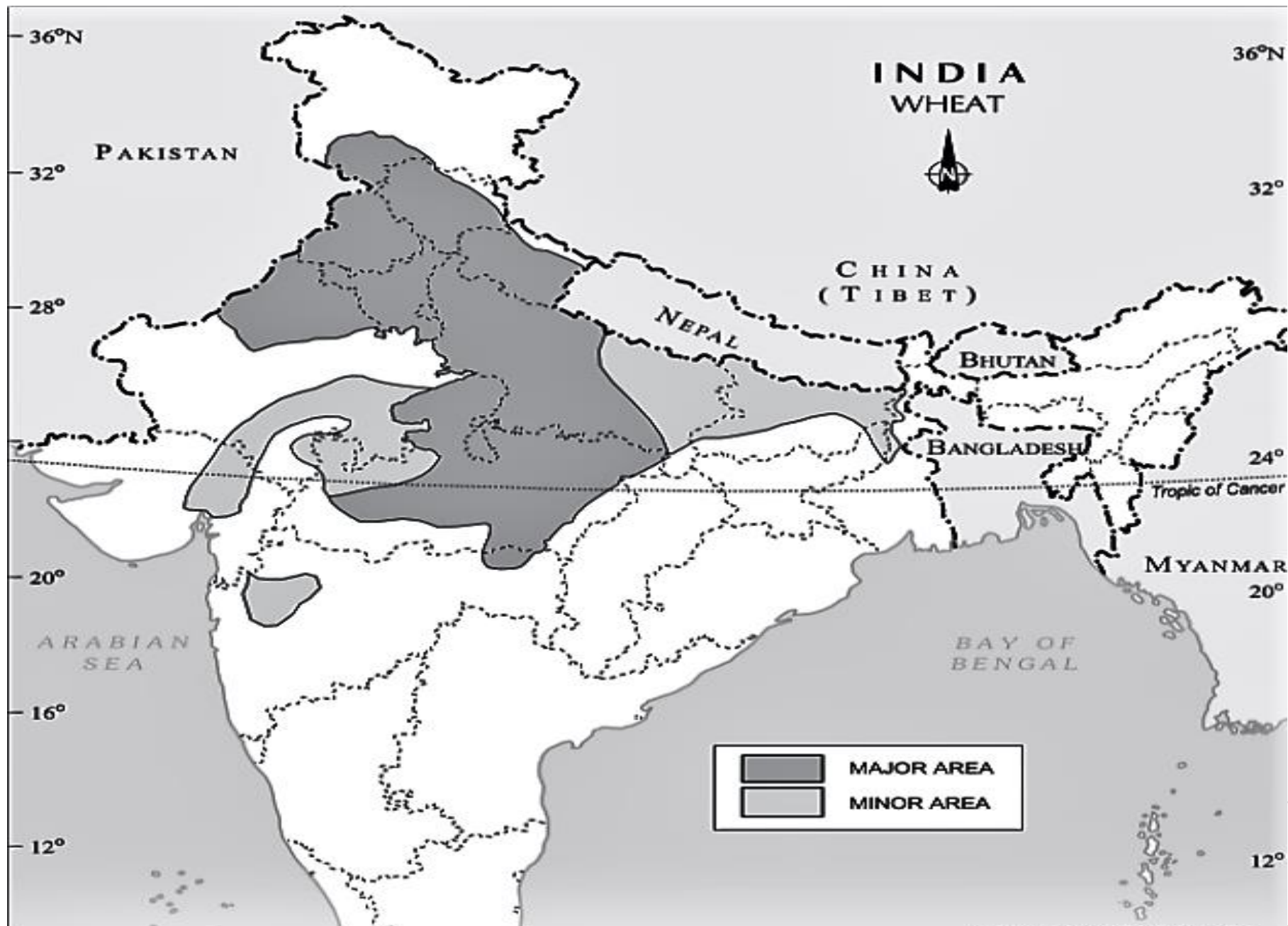




Wheat :

- Second most important cereal crop. It is the main food crop, in north and north-western part of the country.
- This rabi crop requires a cool growing season and a bright sunshine at the time of ripening.
- It requires 50 to 75 cm of annual rainfall evenly distributed over the growing season.
- There are two important wheat-growing zones in the country - the Ganga-Satluj plains in the northwest and black soil region of the Deccan. The major wheat-producing states are Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and parts of Madhya Pradesh





SUGARCANE

- ▶ Sugarcane: It is a tropical as well as a subtropical crop.
- ▶ It grows well in hot and humid climate with a temperature of 21°C to 27°C and an annual rainfall between 75cm and 100cm.
- ▶ Irrigation is required in the regions of low rainfall.
- ▶ It can be grown on a variety of soils and needs manual labour from sowing to harvesting. India is the second largest producer of sugarcane only after Brazil



TEA

- Tea cultivation : Plantation agriculture.
- It is introduced in India initially by the British.
- The tea plant grows well in tropical and sub-tropical climates endowed with deep and fertile well-drained soil,
 - rich in humus and organic matter.
- Tea bushes require warm and moist frost-free climate all through the year.
- Frequent showers evenly distributed over the year ensure continuous growth of tender leaves.
- Tea is a labour intensive industry. It requires abundant cheap and skilled labour.
- Major tea-producing states are Assam, hills of Darjeeling and Jalpaiguri districts, West Bengal, Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttaranchal, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country



COFFEE

- ▶ India produces about four per cent of the world's coffee production.
- ▶ Indian coffee is known in the world for its good quality.
- ▶ The Arabica variety initially brought from Yemen is produced in the country.
- ▶ This variety is in great demand all over the world. Initially its cultivation was introduced on the Baba Budan Hills and even today its cultivation is confined to the Nilgiri in Karnataka, Kerala and Tamil Nadu.



Jute cultivation

: Golden fibre.

Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year. High temperature is required during the time of growth. West Bengal, Bihar, Assam, Orissa and Meghalaya are the major jute producing states. It is used in making gunny bags, mats, ropes, yarn, carpets .



Cotton

- Cotton grows well in drier parts of the black cotton soil of the Deccan plateau.
- It requires high temperature,
- light rainfall or irrigation,
- 210 frost-free days and bright sunshine for its growth.
- It is a kharif crop and requires 6 to 8 months to mature.
- Major cotton-producing states are-
Maharashtra, Gujarat, Madhya Pradesh,
Karnataka, Andhra Pradesh, Tamil Nadu,
Punjab, Haryana and Uttar Pradesh.



- Rubber:
 - It is an equatorial crop, but under special conditions, it is also grown in tropical and sub-tropical areas.
 - It requires moist and humid climate with rainfall of more than 200 cm
 - Temperature above 25° C.



Technological and Institutional Reforms

- ▶ Agriculture which provides livelihood for more than 60 per cent of its population, needs some serious technical and institutional reforms
- ▶ Thus, collectivization consolidation of holdings, cooperation and abolition of zamindari, etc.
- ▶ The right of inheritance had already lead to fragmentation of land holdings necessitating consolidation of holdings. The laws of land reforms were enacted but the laws of implementation was lacking or lukewarm
- ▶ The Government of India embarked upon introducing agricultural reforms to improve Indian agriculture in the 1960s and 1970s.
- ▶ The Green Revolution based on the use of package technology and the White Revolution (Operation Flood) were some of the strategies initiated to improve the lot of Indian agriculture. But, this too led to the concentration of development in few selected areas. Therefore, in the 1980s and 1990s, a comprehensive land development programme was initiated, which included both institutional and technical reforms.
- ▶ Provision for crop insurance against drought, flood, cyclone, fire and disease, establishment of Grameen banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some important steps in this direction.
- ▶ Kissan Credit Card (KCC), Personal Accident Insurance Scheme (PAIS) are some other schemes introduced by the Government of India for the benefit of the farmers.
- ▶ Moreover, special weather bulletins and agricultural programmes for farmers were introduced on the radio and television.
- ▶ The government also announces minimum support price, remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.

Challenge faced by Indian farmers.

Why are farmers committing suicides in several states of the country?

- ▶ Today, Indian farmers are facing a big challenge from international competition and our government is going ahead with reduction in the public investment in agriculture sector particularly in irrigation, power, rural roads, market and mechanisation.
- ▶ Subsidy on fertilisers is decreased leading to increase in the cost of production.
- ▶ Moreover, reduction in import duties on agricultural products have proved detrimental to agriculture in the country.
- ▶ Farmers are withdrawing their investment from agriculture causing a downfall in the employment in agriculture.