

Cotton Crops

Cotton crops are soft, fluffy stable fiber that is used extensively in the textile industry. The fiber is made of almost pure cellulose and contains few traces of waxes, fats and water.

Cotton is one of the most important cash crops in India and it plays a crucial role in the industrial and agricultural economy. Direct cotton in India provides direct livelihood to 6 million farmers and indirectly employs about 40-50 million people in its allied processes such as trade and processing.

This article will give further details about the cotton crop within the context of the IAS Exam.

Cotton Cultivation in India

There are ten major cotton growing states in India. They are divided into three zones:

1. North Zone
2. Central Zone
3. South Zone

The north zone consists of:

1. Punjab
2. Haryana
3. Rajasthan

Central zone consists of:

1. Madhya Pradesh
2. Maharashtra
3. Gujarat

South zone consists of:

1. Andhra Pradesh
2. Telangana
3. Karnataka
4. Tamil Nadu.

Other states also include Orissa, Uttar Pradesh, West Bengal and Tripura.

There are four cultivated species of cotton viz. *Gossypium arboreum*, *G. herbaceum*, *G. hirsutum* and *G. barbadense*. Perhaps, India is the only country in the world where all the four cultivated species are grown on a commercial scale.

How is cotton cultivated?

Cotton is grown in tropical & subtropical conditions. a minimum temperature of 15°C is required for better germination at field conditions. The optimum temperature for vegetative growth is 21-27°C & it can tolerate temperature to the extent of 43°C but temperature below 21°C is detrimental to the crop. Warm days of Cool nights with large diurnal variations during the period of fruiting are conducive to good boll & fibre development.

Cotton is grown on a variety of soils ranging from well drained deep alluvial soils in the north to black clayey soils of varying depth in the central region and in black and mixed black and red soils in the south zone. Cotton is semi-tolerant to salinity and sensitive to water logging and thus prefers well drained soils.

When is the Cotton crop cultivated?

The sowing season of cotton varies considerably from tract to tract and is generally early (April-May) in northern India and is delayed as it proceeds down south (monsoon based in southern zone). Cotton is a Kharif crop in the major parts of the country viz. Punjab, Haryana, Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat, Maharashtra and parts of Andhra Pradesh & Karnataka.

In these areas, the irrigated crop is sown from March-May and the rain fed crop in June-July with the commencement of the monsoon. In Tamil Nadu, the major portion of the irrigated and rain fed crop is planted in September-October, whereas the sowing of the rain fed crop in the southern districts is extended up to November.

In parts of Karnataka and Andhra Pradesh, desi cotton is usually sown in August-September. In addition, summer sowings in Tamil Nadu are done during February-March. The sowings of cotton in the rice fallows of Andhra Pradesh and Tamil Nadu extend from the second half of December to the middle of January.

The time available for land preparation following the harvest of wheat is limited in the north zone. Pre-sowing irrigation is undertaken after the harvest of wheat. The land is worked upon with tractor-drawn implements, then levelled & planked before preparing ridges upon which sowing is done.

In the central and southern zone of India where cotton is a rainfed crop, deep ploughing is recommended to destroy perennial weeds once in 4 years. The field is prepared by repeated harrowing with a blade harrow prior to the onset of pre-monsoon rains. Sowing is undertaken on ridges & furrows in drylands for moisture conservation & weed management.

Cotton is commonly flood irrigated although irrigation by furrow or alternate furrow method is more effective and water saving. Drip irrigation is becoming popular particularly in the hybrids for central and southern zones. Cotton needs to be irrigated at 50-70% depletion of available soil moisture. On sandy loam soils of northern zone 3-5 irrigations are commonly given. On red sandy loam soils of Tamil Nadu with low water retention capacity, 4-13 light irrigations may be done.

Frequently Asked Question about Cotton Crops

Where are cotton crops grown?

In India, cotton is grown in 9 major cotton growing States viz. Punjab, Haryana and Rajasthan in the Northern zone, Gujarat, Maharashtra and MP in the Central zone and Andhra Pradesh, Karnataka and Tamil Nadu in the Southern zone. Besides, cotton is also grown in Orissa.

What are the 4 types of cotton?

The four types of cotton are:

- *Gossypium hirsutum* – upland cotton, native to Central America, Mexico, the Caribbean
- *Gossypium barbadense* – known as extra-long staple cotton, native to tropical South America
- *Gossypium arboreum* – tree cotton, native to India and Pakistan
- *Gossypium herbaceum* – Levant cotton, native to southern Africa and the Arabian Peninsula

What is Kapas crop?

Kapas, also known as seed cotton, is unginned cotton which is white fibrous substance (lint) that covers the seed obtained from a cotton plant. Ginning is a process that separates lint (1/3rd in weight) from the seed (2/3rd in weight).

Candidates can refer to the following links for further government exam preparation as well as other links which will help the candidates.

