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# GEOGRAPHY

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— R K JAIN —

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# ICSE GEOGRAPHY

**Class 10**

**Chapter 16: India-Agriculture**  
**(Crops III- Cotton and Jute)**

## COTTON

Cotton fibre is the basic raw material for the **cotton textile industry**. The oil extracted from **cotton seed** is used in vanaspati industry. The cotton seed is also used as fodder for dairy cattle.

### CONDITIONS FOR GROWTH OF COTTON

Cotton is mostly grown in the tropical and subtropical areas as kharif crop, but in the irrigated areas cotton is also grown as a rabi crop.

- ❖ Cotton needs uniformly high temperature ranging between 20 °C and 30 °C.
- ❖ Cotton needs enough rainfall from 50–100 cm annually, in the early stages of growth.
- ❖ Cotton is grown successfully in areas that receive less rainfall with the help of irrigation.
- ❖ Frost is most harmful for cotton plant and it needs at least **210 frost-free days** in a year.

### TYPES OF COTTON

On the basis of **length**, **strength** and **structure**, the cotton fibre can be of the following three types:

1. **Long staple cotton** with a fibre length of about 30 mm is the longest and the finest variety of cotton produced mostly in Gujarat, Maharashtra, Punjab, Haryana, Madhya Pradesh and Tamil Nadu.
2. **Medium staple cotton** has the fibre length between 20 mm and 25 mm. It accounts for about 40 per cent of the total cotton produced in India. The medium staple cotton is mostly produced in Rajasthan, Punjab, Tamil Nadu, Madhya Pradesh, Uttar Pradesh, Karnataka and Maharashtra.

3. **Short staple cotton** with a fibre length of less than 20 mm is the inferior quality of cotton, produced mostly in Uttar Pradesh, Andhra Pradesh, Rajasthan and Haryana. It is widely used for making cheap variety of cloth and also for **blending** it with wool.

## METHODS OF CULTIVATION

The sowing and harvesting time for cotton are not the same in all parts of India. These vary from region to region, depending upon the environmental conditions.

- ❖ In Punjab and Haryana, cotton is sown in April – May and harvested in December – January. This is the frost-free period in these states.
- ❖ In Peninsular India, cotton is sown up to October and harvested up to May. In this region, the winter is free from frost.

## AREAS OF COTTON CULTIVATION

India has the largest area under cotton cultivation in the world but it is the third largest producer of cotton, after China and USA.

There are three main cotton growing regions in India. These are:

1. **Northern:** Punjab, Haryana and Rajasthan
2. **Central:** Gujarat, Madhya Pradesh and Maharashtra
3. **Southern:** Karnataka, Telangana, Andhra Pradesh and Tamil Nadu

India – Cotton and Jute producing areas





## Bt COTTON

Bt stands for *Bacillus thuringiensis*, the bacterium whose toxin is produced by Bt cotton. The first Bt cotton was tested and adopted in USA in 1995. China adopted Bt cotton in 1997. India adopted Bt cotton in 2002. Initially it showed encouraging results

## JUTE

Jute is the second most important fibre crop in India, after cotton. Jute is in great demand due to its cheapness, softness, and strength and lustre of its fibre. Jute is widely used in the making of gunny bags, ropes, strings, carpets, cloth and various decoration materials. At present, jute is facing tough competition from synthetic fibres and plastic.

## CONDITIONS FOR GROWTH OF JUTE

- ❖ Jute is a tropical plant and needs hot and humid climate.
- ❖ The average annual temperature should be between 25 °C and 35 °C.
- ❖ Jute grows well in the regions of heavy rainfall, that is regions receiving about 125 to 200 cm rainfall annually.
- ❖ Small amount of pre-monsoon rainfall is helpful in the initial growth of jute plant.



Jute plants

## METHODS OF CULTIVATION AND PROCESSING

- ❖ Jute is a kharif crop and is sown in February on lowlands and from March to May on uplands.
- ❖ It takes about 8 to 10 months for the crop to mature.
- ❖ The seeds are sown either through broadcast or put in the shallow furrows.
- ❖ In recent years, line sowing of seeds by drill method is becoming popular.
- ❖ On maturing, the jute plant is generally uprooted or cut close to the ground.
- ❖ The mature plant of jute grows up to a height of about 2 metres to 4 metres.

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Jute fibre

- ❖ The mature plant of jute grows up to a height of about 2 metres to 4 metres.
- ❖ On maturing, the jute plant is generally uprooted or cut close to the ground.
- ❖ Bundles of jute stems are kept in water for about 3 weeks for retting.



- ❖ The warm water generally quickens the retting of the jute stem.
- ❖ After retting, the bark of the stem is peeled off and the fibre is taken out.
- ❖ After this, stripping, rinsing, washing and cleaning are done and the jute fibre is dried in the sun and pressed into bales.
- ❖ The jute processing is done by human labour.
- ❖ Plenty of cheap labour is easily available in the densely populated jute-producing belt.

## AREAS OF JUTE PRODUCTION

After Independence in 1947, India suffered a setback in the production of jute because about 75 per cent of the jute-growing areas went to East Pakistan (now Bangladesh). Most of the jute mills remained in India. Serious efforts were made to increase the area under jute cultivation to feed our starving jute mills. Currently, India accounts for about 56 per cent of world jute production as compared to only 25 per cent produced by Bangladesh.

Five states in India, which include **West Bengal, Bihar, Assam, Andhra Pradesh** and **Odisha**, produce about 90 per cent of the total jute of India.

West Bengal is the largest producer of jute in India. Almost every part of the state produces jute, but its production decreases in the sub-Himalayan region, Ganga delta in south and rocky ground in the west. The entire jute production is consumed in the jute mills of India.

Bihar is the second largest producer, but lags far behind West Bengal. Bihar has recently surpassed Assam, which is now the third largest producer. Most of the jute producing areas are in the Brahmaputra and Surma valleys in Assam.

THANK YOU