Cropping Patterns and Major Crops of India: Part Two

Major Cash Crops

Sugarcane
- **Temperature**: Between 21-27°C with hot and humid climate.
- **Rainfall**: Around 75-100 cm.
- **Soil Type**: Deep rich loamy soil.
- **Top Sugarcane Producing States**: Uttar Pradesh > Maharashtra > Karnataka > Tamil Nadu > Bihar.
- India is the **second largest producer of sugarcane after Brazil**.
- It can be grown on all variety of soils ranging from sandy loam to clay loam given these soils should be well drained.
- It needs manual labour from sowing to harvesting.
- It is the main source of **sugar, gur (jaggery), khandsari and molasses**.
- **Scheme for Extending Financial Assistance to Sugar Undertakings (SEFASU)** and **National Policy on Biofuels** are two of the government initiatives to support sugarcane production and sugar industry.

**Oil Seeds**

- **Temperature:** Between 15-30°C
- **Rainfall:** Around 30-75 cm.
- **Soil Type:** Loam to clayey loam and well drained sandy loams.
- **Top Oilseeds Producing States:** Madhya Pradesh > Rajasthan > Gujarat > Maharashtra > Uttar Pradesh.
Main oil-seeds produced in India are **groundnut, mustard, coconut, sesame (til), soyabean, castor seeds, cotton seeds, linseed and sunflower**.

Most of these are edible and used as cooking mediums. However, some of these are also used as a **raw material in the production of soap, cosmetics and ointments**.

**Yellow Revolution and Integrated Scheme on Oilseeds, Pulses, Oil Palm and Maize (ISOPOM)** are examples of government initiatives for oilseeds.

- **Groundnut is a kharif crop** and accounts for about **half of the major oilseeds produced** in the country.
- **Linseed and mustard are rabi crops**.
- **Sesamum is a kharif crop in north and rabi crop in south India**.
- **Castor seed is grown both as rabi and kharif crop**.

**Horticulture Crops**

Horticulture is the **branch of agriculture** concerned with **cultivation, production and sale of fruits, vegetables, flowers, herbs, ornamental or exotic plants**.

<table>
<thead>
<tr>
<th>Fruits</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mangoes</td>
<td>Maharashtra, Andhra Pradesh, Telangana, Uttar Pradesh and West Bengal</td>
</tr>
<tr>
<td>Oranges</td>
<td>Nagpur and Cherrapunjee (Meghalaya)</td>
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<tr>
<td>Bananas</td>
<td>Kerala, Mizoram, Maharashtra and Tamil Nadu</td>
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<tr>
<td>Litchi and Guava</td>
<td>Uttar Pradesh and Bihar</td>
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<td>Pineapples</td>
<td>Meghalaya</td>
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<tr>
<td>Grapes</td>
<td>Andhra Pradesh, Telangana and Maharashtra</td>
</tr>
<tr>
<td>Apples, Pears, Apricots and Walnuts</td>
<td>Jammu and Kashmir and Himachal Pradesh</td>
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</tbody>
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- **India is the second largest producer** of fruits and vegetables and it produces both **tropical and temperate fruits**.
- India produces about **13 percent of the world’s vegetables**. It is an important producer of **peas, cauliflower, onions, cabbage, tomato, brinjal and potato**.
- **Golden Revolution, Mission for Integrated Development of Horticulture (MIDH) and Coordinated Horticulture Assessment and Management using geo-informatics (Project CHAMAN)** are government initiatives to help horticulture sector.

**Plantation Crops**

**Tea**

![Major Tea Producing States Map](image-url)
- **Temperature**: Between 20-30°C
- **Rainfall**: Around 150-300 cm.
- **Soil Type**: Deep and fertile well-drained soil, rich in humus and organic matter.
- **Top Tea Producing States**: Assam > West Bengal > Tamil Nadu.
- India is the **second largest producer** of tea.
- It was **introduced in the eastern hill slopes of India by the British**.
- Slopes of eastern hills have **humid climate and evenly distributed rainfall without water logging** which are optimal conditions for **terrace farming** of tea.
- Tea is a **labour intensive industry**. It requires abundant, cheap and skilled labour. Tea is processed within the tea garden to retain its freshness.
- **Tea Development and Promotion Scheme, Wage Compensation Scheme and Tea Boutiques** are few of the government schemes for tea.

**Coffee**
- **Temperature:** Between 15-28°C
- **Rainfall:** Around 150-250 cm.
- **Soil Type:** Well drained, deep friable loamy soil.
- **Top Coffee Producing States:** Karnataka > Kerala > Tamil Nadu.
- India is the **seventh largest producer**.
- **Coffee was initially brought from Yemen and introduced on the Baba Budan Hills.**
- **Hills with well-defined shade canopy, comprising evergreen leguminous trees** provide the optimal condition for coffee cultivation that is why it is mainly concentrated in the hilly regions.
- **Indian variety of coffee ‘Arabica’ is famous worldwide.**
Various Integrated Coffee Development Projects and schemes have been launched by the government to support coffee production.

**Rubber**

- **Temperature**: Above 25°C with moist and humid climate.
- **Rainfall**: More than 200 cm.
- **Soil Type**: Rich well drained alluvial soil.
- **Top Rubber Producing States**: Kerala > Tamil Nadu > Karnataka.
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- It is an equatorial crop, but under special conditions, it is also grown in tropical and sub-tropical areas.
• Rubber is an important **industrial raw material**.
• **Rubber Plantation Development Scheme and Rubber Group Planting Scheme** are examples of government led initiatives for rubber.

**Fibre Crops**

**Cotton**

- **Temperature**: Between 21-30°C
- **Rainfall**: Around 50-100cm.
- **Soil Type**: Well drained black cotton soil of Deccan Plateau.
- Top Cotton Producing States: Gujarat > Maharashtra > Telangana > Andhra Pradesh > Rajasthan.
- India is believed to be the original home of the cotton plant. Cotton is one of the main raw materials for cotton textile industry.
- Cotton needs 210 frost-free days and bright sun-shine for its growth.
- It is a kharif crop and requires 6 to 8 months to mature.
- Silver Fibre Revolution and Technology Mission on Cotton are the government initiatives for increasing cotton production in India.
- Cotton has been genetically modified into BT Cotton to fight environmental stress and pest attacks.

**Jute**
- **Temperature:** Between 25-35°C
- **Rainfall:** Around 150-250 cm
- **Soil Type:** Well drained alluvial soil
- **Top Jute Producing States:** West Bengal > Bihar > Assam > Andhra Pradesh > Odisha. It is mainly concentrated in eastern India because of the rich alluvial soil of Ganga-Brahmaputra delta.
- **India is the largest producer of jute.**
- **It is known as the golden fibre.**
- **It is used in making gunny bags, mats, ropes, yarn, carpets and other artefacts.**
• Due to its **high cost**, it is losing market to synthetic fibres and packing materials, particularly nylon.
• **Golden Fibre Revolution and Technology Mission on Jute and Mesta** are two of the government initiatives to boost jute production in India.

### Changing Cropping Patterns of India

- Cropping pattern is a **dynamic concept** because it changes over space and time. It can be defined as the proportion of area under various crops at a point of time. Sometimes a number of **crops are cultivated in combinations and rotations over a period**.
- In India, the cropping pattern is **determined by rainfall, climate, temperature, soil type, technology and socio-economic conditions of the farmers**.
- These changes in the cropping pattern mainly occurred due to **increase in the prices of crops**. After independence a lot of changes had been recorded in the cropping pattern in India.
- **Green Revolution** also led to changes in the cropping patterns. Rice was introduced to Punjab, Haryana and Uttar Pradesh.
- Cultivation of food crops has become very **remunerative and productive due to the introduction of new technologies in Indian agriculture**.
- Farmers are more **intensively moving towards cultivation of cash/commercial crops** such as oilseeds, fruits, vegetables, spices, etc. **from the traditional non-cash/non-commercial crops** such as cereals and pulses.
- Farmers have changed their crop patterns in order to **reap the benefits of economic expansion** as well.
- **Climate change** has affected the Indian monsoon due to which cropping patterns are also changing.
- **Population explosion and urbanisation** has led to **land conversion, boosting intensive farming** and has brought changes in cropping patterns.

• At the beginning of the present century, nearly **83 percent** of the total cultivable land of India was put under **food crops** and the remaining **17 percent** was put under **non-food crops**. But in 1944-45, there was a **change in the cropping pattern** in India and area under **food crops came down to 80 percent** and the area under **non-food crops** slightly **increased to 20 percent**.
• Among all the food crops, the **largest increase** in area since 1950-51 has already been recorded by **wheat cultivation** which shows an **increase of 132 percent by 1987-88**. But in the case of both **rice and pulses**, the **increase** in area has been restricted to **only 23 percent**; **Coarse cereals** have recorded only **marginal increase of 11 percent by 1987-88**.