Cropping Patterns and Major Crops of India: Part One

Two-thirds of India’s population is engaged in agricultural activities. It is a primary activity, which produces food grains and raw materials for industries. India is geographically a vast country so it has various food and non-food crops which are cultivated in three main cropping seasons which are rabi, kharif and zaid.

Major crops can be classified into:

- **Food crops** - Rice, Wheat, Millets, Maize and Pulses.
- **Cash crops** - Sugarcane, Oilseeds, Horticulture crops, Tea, Coffee, Rubber, Cotton and Jute.

### Cropping Seasons

<table>
<thead>
<tr>
<th>S. No</th>
<th>Cropping Season</th>
<th>Time Period</th>
<th>Crops</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rabi</td>
<td>Sown: October-December&lt;br&gt;Harvested: April-June</td>
<td>Wheat, barley, peas, gram, mustard etc.</td>
<td>Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Uttar Pradesh</td>
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<tr>
<td>2.</td>
<td>Kharif</td>
<td>Sown: June-July&lt;br&gt;Harvested: September-October</td>
<td>Rice, maize, jowar, bajra, tur, moong, urad, cotton, jute, groundnut, soybean etc.</td>
<td>Assam, West Bengal, coastal regions of Odisha, Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Maharashtra</td>
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<tr>
<td>3.</td>
<td>Zaid</td>
<td>Sown and harvested: March-July (between Rabi and Kharif)</td>
<td>Seasonal fruits, vegetables, fodder crops etc.</td>
<td>Most of the northern and northwestern states</td>
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</tbody>
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### Major Food Crops

**Rice**
- **Temperature**: Between 22-32°C with high humidity.
- **Rainfall**: Around 150-300 cm.
- **Soil Type**: Deep clayey and loamy soil.
- **Top Rice Producing States**: West Bengal > Punjab > Uttar Pradesh > Andhra Pradesh > Bihar.
- It is the *staple food crop of majority* of Indian people.
- India is the *second largest producer of rice in the world* after China.
- In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year. These are *Aus, Aman and Boro*.
- **National Food Security Mission, Hybrid Rice Seed Production and Rashtriya Krishi Vikas Yojana** are few government initiatives to support rice cultivation.

*Wheat*
- **Temperature:** Between 10-15°C (Sowing time) and 21-26°C (Ripening & Harvesting) with bright sunlight.
- **Rainfall:** Around 75-100 cm.
- **Soil Type:** Well-drained fertile loamy and clayey loamy (Ganga-Satluj plains and black soil region of the Deccan)
- **Top Wheat Producing States:** Uttar Pradesh > Punjab > Madhya Pradesh > Haryana > Rajasthan.
- India is the second largest producer after China.
- This is the second most important cereal crop and the main food crop, in north and north-western India.
- Success of **Green Revolution** contributed to the growth of Rabi crops especially wheat.
- **Macro Management Mode of Agriculture, National Food Security Mission and Rashtriya Krishi Vikas Yojana** are few government initiatives to support wheat cultivation.

*Millets (Nutri-Cereals)*
- **Temperature**: Between 27-32°C
- **Rainfall**: Around 50-100 cm.
- **Soil Type**: Can be grown in inferior alluvial or loamy soil because they are less sensitive to soil deficiencies.
  - **Jowar**: Rain-fed crop grown in the moist areas with less or no irrigation.
  - **Bajra**: Sandy soils and shallow black soil.
  - **Ragi**: Red, black, sandy, loamy and shallow black soils. (dry regions)
- **Top Millets Producing States**: Rajasthan > Karnataka > Maharashtra > Madhya Pradesh > Uttar Pradesh
  - **Jowar**: Maharashtra > Karnataka > Madhya Pradesh > Tamil Nadu > Andhra Pradesh.
  - **Bajra**: Rajasthan > Uttar Pradesh > Gujarat > Madhya Pradesh > Haryana.
- These are also known as **coarse grains**, which have **high nutritional value**. Ragi is very rich in
- Iron, calcium, other micro nutrients and roughage.
- Jowar is the third most important food crop with respect to area and production.
- National Agricultural Insurance Scheme, Initiative for Nutritional Security through Intensive Millets Promotion are examples of government’s efforts to support millet production.

Maize

- **Temperature**: Between 21-27°C
- **Rainfall**: High rainfall.
- **Soil Type**: Old alluvial soil.
- **Top Maize Producing States**: Karnataka > Maharashtra > Madhya Pradesh > Tamil Nadu > Telangana
- India is the seventh largest producer worldwide.
- It is used both as food and fodder.
- Use of modern inputs such as High-Yielding Variety seeds, fertilisers and irrigation have
contributed to the **increasing production** of maize.
- **Technology Mission on Maize** is one of the government’s initiatives for maize.

**Pulses**

- **Temperature**: Between 20-27°C
- **Rainfall**: Around 25-60 cm.
- **Soil Type**: Sandy-loamy soil.
- **Top Pulses Producing States**: Madhya Pradesh > Rajasthan > Maharashtra > Uttar Pradesh > Karnataka.
- India is the **largest producer** as well as the **consumer** of pulses in the world.
- These are the **major source of protein** in a vegetarian diet.
- Major pulses grown in India are **tur (arhar)**, urad, moong, masur, peas and gram.
- Being **leguminous crops**, all these crops except arhar help in restoring soil fertility by **fixing nitrogen from the air**. Therefore, these are mostly grown in rotation with other crops.
National Food Security Mission for Pulses, Pulses Development Scheme and Technological Mission on Pulses are few of the government’s plans to support pulses production.

NOTE: Cash Crops will be covered in the Cropping Patterns and Major Crops of India: Part Two.