FOOD CROPS OF INDIA				
Crops	**Temperature**	**Rainfall**	**Soil**	**Leading Producers**
1. Rice	Not above 35°C	150-300 cm	Clayey or loamy	West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Tamil Nadu.
2. Wheat	10°–15°C (sowing) 21°–26°C (harvest)	80 cm	Well drained loams, and clay loams	Punjab, Haryana, Uttar Pradesh, Rajasthan, Madhya Pradesh.
3. Millets				
(a) Jowar	Not below 16°C	<100 cm	Variety of soils including clayey, sandy	Maharashtra, Madhya Pradesh, Karnataka, Andhra Pradesh and Telangana.
(b) Bajra	25°–30°C	40–50 cm	Sandy loams, black and red soils	Rajasthan, Uttar Pradesh, Gujarat, Maharashtra, Haryana.
(c) Ragi	20°–30°C	50–100 cm	Red, light black and sandy loams	Karnataka, Tamil Nadu, Uttarakhand, Maharashtra and Andhra Pradesh.
4. Pulses	20°–25°C	50–75 cm	Dry, light soil	Madhya Pradesh, Maharashtra, Uttar Pradesh, Rajasthan and Andhra Pradesh.

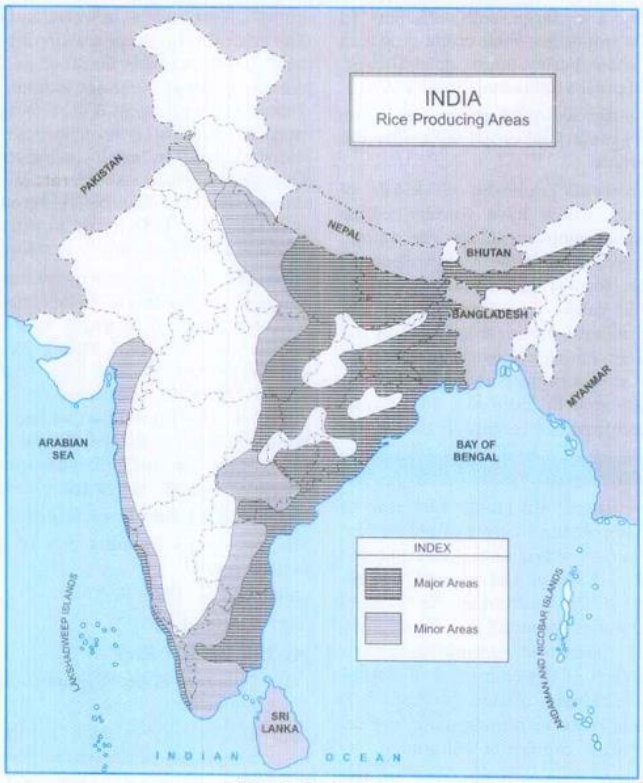
Crop	Temperature	Rainfall	Soil	Leading States
Sugarcane	20°C–26°C	100–150 cm or irrigation facilities with high humidity.	Well-drained rich alluvial, heavy loam or lava soil.	UP, Maharashtra, Tamil Nadu (highest yield hectare), Karnataka, Andhra Pradesh.
Cotton	21°C–30°C but not below 21°C. 200 frost free days	50-75 cm or irrigation facility.	Deep black soil (regur), alluvial soils and laterite soil.	Gujarat, Andhra Pradesh, Maharashtra and Punjab.
Jute	24°C–35°C	Heavy rainfall of 150 cm with 90 per cent of relative humidity.	Light sandy or clayey loams.	West Bengal (70 per cent of the production, over 60 per cent of the area), Bihar, Assam, Odisha.

Crop	Temperature	Rainfall	Soil	Leading States
Groundnut	20°C to 25°C	50 to 100 cm	Sandy loams, loams and well-drained soils.	Gujarat, Telangana and Tamil Nadu.
Mustard and Rapeseed	10°C to 20°C	25 to 40 cm	Loams. Heavier loams (for mustard). Light loams (for rapeseed).	Uttar Pradesh, Rajasthan, Punjab, Madhya Pradesh and Haryana.
Soyabean	13°C to 24°C	40 to 60 cm	Friable loamy, acidic soils.	Madhya Pradesh, Rajasthan and Maharashtra.
Sunflower	26°C to 30°C	Less than 50 cm	Well-drained loamy soils.	Bihar, Maharashtra, Andhra Pradesh and Karnataka.
Sesamum	21°C	40 to 60 cm	Well-drained light loamy soil and black cotton soil.	Uttar Pradesh, Rajasthan, Maharashtra, Madhya Pradesh, Odisha, Gujarat, Karnataka, Andhra Pradesh, Telangana and Tamil Nadu.
Cotton Seeds	21°C to 30°C	50 to 75 cm	Black soils.	Gujarat, Andhra Pradesh, Telangana, Maharashtra and Punjab.
Linseed	15°C to 20°C	45 to 75 cm	Alluvial soils, clayey loamy soils and deep black soils.	Madhya Pradesh and Uttar Pradesh.
Castor Seeds	20°C to 25°C	50 to 75 cm	Red sandy loams in Peninsular India and light alluvial soils in the Plains.	Gujarat, Andhra Pradesh, Telangana and Rajasthan.

Important Cash Crops of India

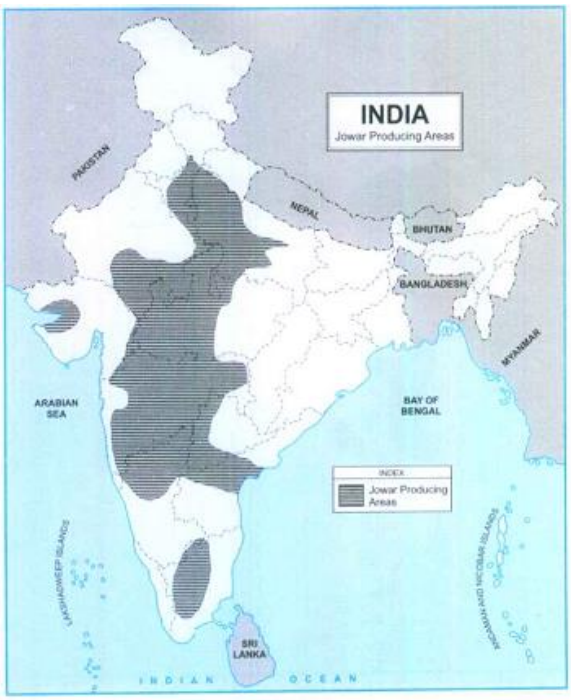
Crops	Temperature	Rainfall	Soil	Distribution
Tea	24°C-30°C	at least 150cm	forest soil; rich in humus and iron.	1. Assam: the Brahmaputra valley, Surma valley 2. West Bengal: the Duars, Darjeeling 3. Tamil Nadu: highest yield per hectare 4. Kerala
Coffee	15°C-28°C but does not tolerate frost or heat	150-200 cm	well drained, friable loamy soil, rich in vegetable mould.	1. Karnataka 70.4 % of total production; 2. Kerala 21.7 % of total production; and 3. Tamil Nadu 5.8 % of total production.
Rubber	25°C-35°C	152-200 cm	rich well drained alluvial or laterite soils.	1. Kerala: Kottayam, Ernakulum, Kozhikode and Kollam. 2. Tamil Nadu 3. Karnataka

Soil	Formation	Areas	Characteristics	Crops
Alluvial Soil	Deposition of sediments by rivers.	Inland alluvium in Punjab, Haryana, U.P., Bihar, West Bengal, parts of Gujarat and Rajasthan. Deltaic alluvium in the deltas of Ganga-Brahmaputra, Mahanadi, Godavari, Krishna and Kaveri. Coastal alluvium along the coastal strips of the Peninsula.	Loamy. Coarse and dry in upper reaches of the river and gets finer and moist as the river flows down. Rich in minerals especially Potash and Lime. Poor in Nitrogen and Humus.	Large variety of Rabi and Kharif crops; rice, wheat, sugarcane, cotton, gram and oilseeds; jute in Ganga-Brahmaputra delta.
Black Soil	Residual soils formed by weathering of lava rocks.	Deccan lava tract. Maharashtra, Madhya Pradesh, Gujarat, Andhra Pradesh, Karnataka, Rajasthan, Uttar Pradesh and parts of Tamil Nadu.	Clayey. Black in colour. Rich in lime, Magnesium. Poor in Phosphorous, Nitrogen and Organic matter. Very fertile.	Cotton, cereals, oilseeds, citrus fruits and vegetables, tobacco, and sugarcane.
Red Soil	Prolonged weathering of crystalline rocks. Differs on the basis of parent rock material and climatic conditions.	Plateau region of Peninsular India extending northwards along Konkan coast. Tamil Nadu, Karnataka, Andhra Pradesh, South-East Maharashtra, Chhattisgarh, parts of Odisha, Jharkhand, Bundelkhand, Meghalaya, Mizoram, Manipur, Telangana and Nagaland.	Loamy or Sandy. Red in colour due to large amounts of iron-oxides Deep and fertile in lowland; thin and poor in highlands. Poor in Nitrogen, Phosphorus, Potassium and Organic matter.	Vegetables, rice, ragi, tobacco, groundnut and potatoes.
Laterite Soil	Due to leaching in areas of heavy rain.	Highland areas of Peninsular plateau. Patches in Madhya Pradesh, Odisha, Maharashtra, West Bengal, Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu.	Coarse and porous. Red due to Iron Oxide. Poor in Lime, Nitrogen and Magnesium. High acidity and low moisture retention.	Tapioca, cashewnuts. With manure ragi, rice, sugarcane, tea, rubber and coffee.



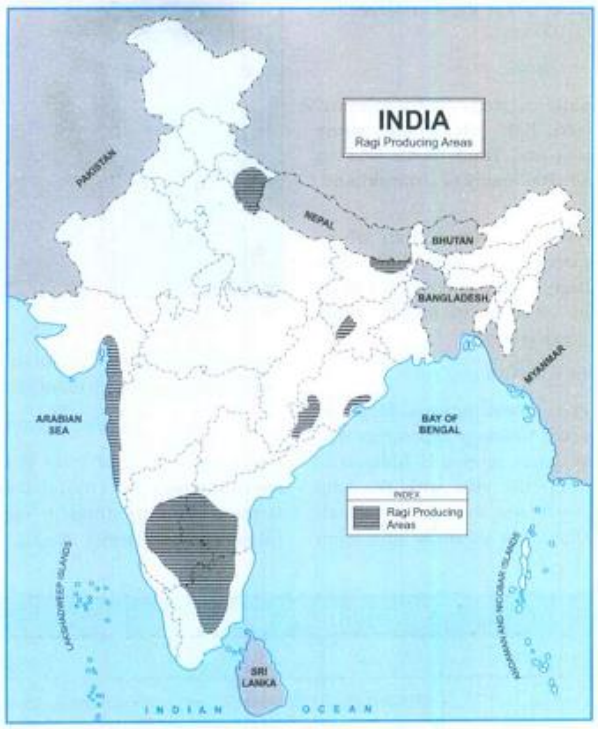
Rice Producing Areas

Wheat Producing Areas



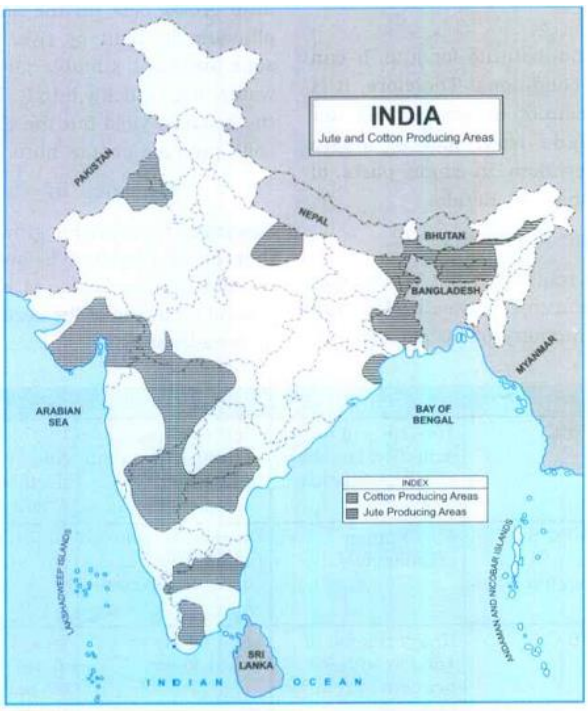
Jowar Producing Areas

Bajra Producing Areas



Ragi Producing Areas

Sugarcane Producing Areas



Cotton and Jute Producing Areas

Tea Producing Areas

Coffee Producing areas

Rubber Producing Areas