

CHAPTER: 10 INDIA: AGRICULTURE RESOURCE

GEOGRAPHY



AMIT ACADEMY
ANKLESHWAR

CLASS 10TH • GSEB

Types of Farming

Based on Rainfall, Irrigation, Production & Economic Return

1. Subsistence Farming

- Small Farmers
- Traditional Methods



3. Wet Farming

- Heavy Rainfall
- Crops: Rice, Sugarcane



4. Shifting (Jhoom) Farming

- Slash & Burn
- Temporary Cultivation



2. Dry Farming

- Low Rainfall
- Crops: Jowar, Pulses



5. Plantation Farming

- Large Estates
- Crops: Tea, Coffee



6. Intensive (Commercial) Farming

- High Production
- Cash Crops



AMIT ACADEMY
ANKLESHWAR

Farming Methods

1. Organic Farming

• No Chemical Fertilizers & Pesticides



• Natural Manure (Cow Dung, Compost, Vermicompost)



• Herbal Remedies (Cow Urine, Neem, Buttermilk)



• Healthy & Chemical-Free Food



• Protects Soil & Environment



2. Sustainable Farming



• Crop Rotation



• Limited Chemicals



• Biological Pest Control

• Water Conservation

3. Mixed Farming



• Animal Husbandry



• Poultry Farming



• Fish Farming



• Sericulture

• Extra Income for Farmers



Agricultural Products of India

1. Kharif Crops (Monsoon Crops)

- Sowing: June - July
 - Harvesting: Oct - Nov
- Rainy Season



Paddy (Rice)



Maize



Cotton



Groundnut

Also: Jowar, Millet, Sesame, Mung

2. Rabi Crops (Winter Crops)

- Sowing: Oct - Nov
 - Harvesting: Mar - Apr
- Winter Season



Wheat



Gram



Mustard



Linseed

Also: Barley, Mustard

3. Zaid Crops (Summer Crops)

- Time: Mar - June
 - Summer Season
- Irrigated Crops



Watermelon



Cucumber



Muskmelon



Vegetables

Also: Maize, Groundnut

 75% of cultivated land used for food grains

 50% of total agricultural production

Major Food Grains

- Rice
- Wheat
- Coarse Grains
- Pulses

1. Paddy (Rice)

 **Most Important Food Crop**

 **2nd in the World**
(After China) 

Hot & Humid Climate

More Than 100 cm Rainfall

Grown in States:

- West Bengal
- Tamil Nadu, Andhra Pradesh,
- Bihar, Odisha



Requires More Water & Labour



Sprinkler Irrigation

1. Second Most Important Crop After Rice



2. A Rabi Crop Grown in Cool Climate



3. : Loamy or Black Soil & 75-100 cm Rainfall



4. Mainly in Punjab, Haryana & Western U.P.



2. Wheat

“Wheat Bowl of India”
“King of Grains”



6. Used to Make



Rotli



Bread



Sweets & Biscuits

1. Jowar

Coarse Grains

3. Maize

2. Millet (Bajra)



- Third most important grain after rice and wheat
- Grown in dry regions
- Kharif and Rabi crop
- Major States:
Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Gujarat

- Grain of Labourers
- Low rainfall & Sandy soil
- Major States:
Rajasthan, Gujarat, Uttar Pradesh, Maharashtra

- A Kharif Crop
- Food, Fodder & Industry
- Mainly in:
Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh
- In Gujarat:
Panchmahal, Dahod, Sabarkantha, Aravalli



4. Pulses

AMIT ACADEMY
ANKLESHWAR

1 Main source of protein for vegetarians.

2 **Examples:** tuver, mung, gram, peas, udad, masur.



Tuver



Mung



Gram



Peas



Udad



Masur

3

- **Kharif pulses:** tuver, mung, udad
- **Rabi pulses:** gram, peas, masur

4 Pulses increase nitrogen in soil, so they improve soil fertility.

5 **Major states:** Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra, etc.

6 **In Gujarat:**

- Tuver – Vadodara
- Mung & math – Kachchh
- Udad – Patan



Sesame (Til) **Oil Seeds** **Mustard**

1 Important part of Indian diet

2 Ancient Usage of Til Oil



3 Kharif Crop in North India
Rabi/Zaid Crop in South India



4 Highest Oil Content Among Oil Seeds



5 Gujarat 1st in Til Production
Banaskantha Leads



6 Largest Exporter of Til in the World

AMIT ACADEMY
ANKLESHWAR



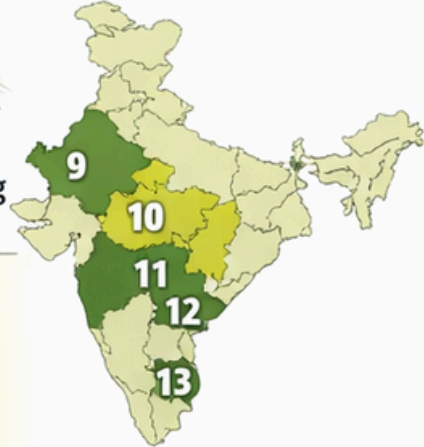
7 Rabi Crop of North India



8 Edible Oil & Medicinal Uses

9 Major Producing States:

- 9 Rajasthan
- 10 Uttar Pradesh
- 11 West Bengal
- 12 Gujarat
- 13 Madhya Pradesh



2 Oil-Cake Used as Fodder & Manure



EDIBLE OILS

AMIT ACADEMY
ANKLESHWAR

1

Coconut



- Plantation crop of hot and humid coastal areas.
- Grown in Kerala, Karnataka, Tamil Nadu, Andaman–Nicobar and coastal Gujarat.
- Coconut oil is used as edible oil, especially in South India.
- Coconut water is a healthy drink.
- Improved short-height, high-yield varieties are developed.



2

Castor (Divela)



- Grown as both *kharif* and *rabi* crop.
- India is the largest producer of castor in the world.
- About **80%** of India's castor is produced in **Gujarat**.
- Major districts: Banaskantha, Patan, Sabarkantha, Rajkot, Junagadh, Amreli.



3

Other Edible Oils

Oils from cotton seeds, sunflower, rice bran, and maize are also widely used.

Cotton Seed Oil



Sunflower Oil



Rice Bran Oil



Maize (Corn) Oil



BEVERAGE CROPS

AMIT ACADEMY
ANKLESHWAR

1

Tea

- Grown in tropical and temperate climates.
- Needs sloping land, 200 cm rainfall, and 20–30°C temperature.
- Major producers: Assam, West Bengal, Tamil Nadu, Karnataka.
- Assam and West Bengal produce about 75% of India's tea.
- India is one of the top tea exporters in the world.



2

Coffee

- Grown on mountain slopes under shade trees.
- Needs 150–200 cm rainfall and 15–28°C Temperature.
- Major producer: Karnataka, Kerala, Tamil Nadu.
- Coorg (Karnataka) is a famous coffee-growing region.



3

Cocoa

- Cocoa seeds are used to make chocolate and beverages.
- Needs hot, humid climate and heavy rainfall.
- Major producers: Kerala, Karnataka, Andhra Pradesh, Tamil Nadu.



CASH CROPS OF INDIA

AMIT ACADEMY
ANKLESHWAR

1

Cotton

- A kharif crop and an important cash crop of India.
- India ranks second in the world in cotton production and export.
- Cotton is called ‘White Gold’.
- Cotton seed oil is used as edible oil; oil-cake is used as animal feed.
- Needs black soil, hot and humid climate, 20-35°C temperature, and 30-70 cm rainfall.
- Major states: Gujarat, Maharashtra, Telangana, Punjab, Haryana, Rajasthan, Tamil Nadu.
- Gujarat ranks first due to use of BT cotton.
- Gujarat ranks first due to use of BT cotton.



Cash crops are grown mainly for sale and profit.



One of the Major Cash Crops of India

India Ranks 2nd After Brazil



Used to Make:

• Sugar



• Jaggery (Gur)



• Ethanol



2. SUGARCANE

AMIT ACADEMY
ANKLESHWAR

Ideal Conditions:



• Fertile Soil



• 21~27°C Temperature

• 75~100 cm Rainfall



Uttar Pradesh

Largest Area



Maharashtra

Highest Production



1. Largest Producer

India is the Largest Producer of Jute in the World.



2. Golden Fibre

'Golden Fibre'



3. Uses

Gunny Bags, Ropes, Mats, Handicrafts.



4 Growing Conditions

Fertile Delta Soil,
Hot & Humid climate
Heavy Rainfall.



5. Main Regions

West Bengal,
Assam,
Bihar,
Odisha.



Tobacco

1. Kharif Crop

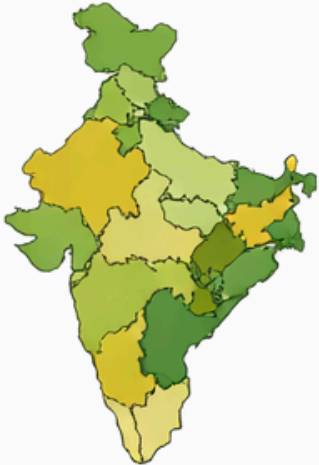


2. Growing Conditions

- Sandy Loamy Soil
- Moderate Temperature
- About 100 cm Rainfall



3. Major Producers



- Gujarat
- Andhra Pradesh
- Uttar Pradesh
- Karnataka

5. Sikkim Banned Tobacco



Tobacco is Injurious to Health



1. Latex from Rubber Trees



2. Uses of Rubber



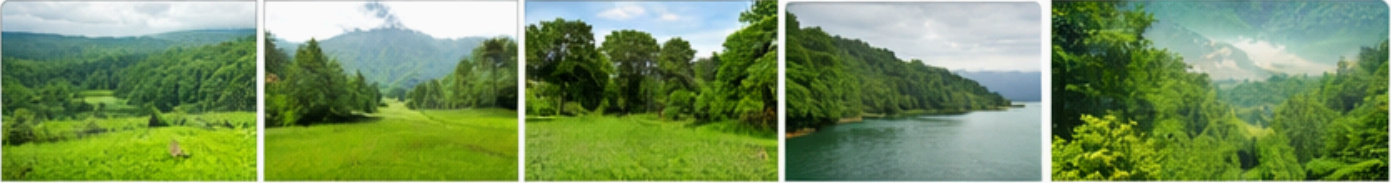
3. Climate Requirements



Rubber

AMIT ACADEMY
ANKLESHWAR

4. Major Producers



Kerala

Tamil Nadu

Karnataka

Assam

Tripura

1. Gujarat's Production Rank



- Gujarat ranks first in world in cumin, fennel, and isabgul production



2. India's Leading Spices

- Coriander, Fenugreek
- Mustard
- Dill (Suva)
- Ajwain



3. India's Contribution

- India contributes about 35% of the world's total spice production
- High Demand Worldwide:
Black Pepper, Cinnamon, Clove



Medicinal Condiments and Spices

4. Medicinal Plants



Ashwagandha Tulsi Aloe Vera

- India leads in production and export

4. Medicinal Plants



Tulsi Aloe Vera White Musli Galo

5. Aromatic Crops



Mint Menthol Palmarosa
Lemongrass

AMIT ACADEMY
ANKLESHWAR

Fruits, Vegetables, and Flowers

AMIT ACADEMY
ANKLESHWAR

1. 2nd in Fruit Production
(After China)



2. Major Fruits

Banana, Mango, Apple, Grape, Pear, Orange



3. Key Banana States

Tamil Nadu, Gujarat, Maharashtra



4. Apple Producing States

Jammu & Kashmir, Himachal Pradesh



5. Leading Grape Regions

Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh



6. Flowers Cultivation

Rose, Mogra, Sunflower, Galgota



1. Traditional Tools



2. Modern Machines



AMIT ACADEMY
ANKLESHWAR

Modern Farming and Technical Reforms

3. Chemical Fertilizers



4. Hybrid & BT Seeds



5. Insecticides & Pesticides



6. Drip Irrigation



7. Greenhouses

1. Modern Irrigation Methods



2. Use of Fertilizers & Bio-Tech Seeds



3. Agricultural Guidance through Media



4. Govt Websites & Mobile Apps



**Technical Reforms
in Agriculture**

5. Farmer Training Centres



5. Gram Sevaks in Villages



7. Agricultural Fairs



6. Farmer Training Centres



9. ICAR & DARE (National Level)



AMIT ACADEMY
ANKLESHWAR

AMIT ACADEMY
ANKLESHWAR

Institutional Reforms in Agriculture

1. Abolition of
Landlordism



2. Land to the
Tiller



3. Land Ceiling Act



7. Open Auction
System



4. Kisan Credit Card
& Bank Loans



5. Crop Insurance Scheme



6. Compensation for Crop Loss



8. MSP & Infrastructure



1

NAFED



National Agricultural
Co-operative Marketing
Federation of India

AMIT ACADEMY
ANKLESHWAR

Organizations Supporting Farmers

2

GROFED



Gujarat Co-operative Oil
Seeds Growers' Federation

3

NDDB



NDDB

National Dairy
Development Board

National Dairy
Development Board

3

NDDB





1. Started in 1960s
Due to Food Shortage



2. High Yield Seeds, Fertilizers & Irrigation



3. Increase in Wheat & Paddy
Production

AMIT ACADEMY
ANKLESHWAR

Green Revolution in India



4. From Import to Surplus Stock



5. Food Self-Sufficiency Achieved



6. Reduced Drought Impact

7. Self Reliance in Food Grains



9. Decline in Pulses & Cereals

10. Need for New Green Revolution

Role of Agriculture in Indian Economy

AMIT ACADEMY
ANKLESHWAR



1. Main Occupation in India



5. Agricultural Exports



2. 50% of Population Employed



6. 2nd in Global Production



3. 17% of India's GDP



4. Major Crops: Rice, Wheat, Sugarcane, Cotton & More



7. Agro-Based Industries



Food Security and Buffer Stock



1. National Stability
& Independence



2. Green
Revolution



3. Population Growth
36 Cr to 125 Cr

3. Population Growth
36 Cr to 125 Cr

4. Rise in Food
Production



5. Buffer Stock
of Grains



6. Proper Storage
& Less Wastage



7. Food Security Act
& Helping the Poor



Impact of Globalization on Indian Agriculture



1. International Market Access



5. BT Seeds & High Costs

2. Faster Import & Export



6. Increased Crop Production



3. Export of Indian Products



6. Impeded Fruits in India



7. Competition from Imports



Second Green Revolution Planning

8. Patent & Tech Innovations



AMIT ACADEMY
ANKLESHWAR