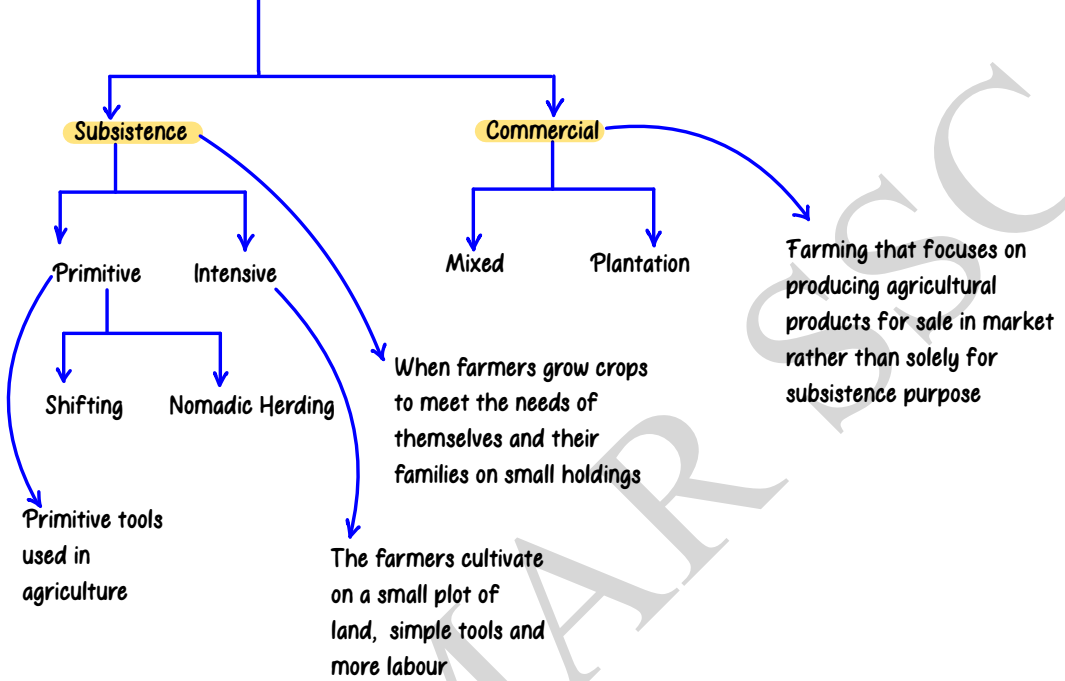


AGRICULTURE



PARMAR

Different types of Cultivations



• Shifting Agriculture: also known as Slash and burn agriculture

Names across the world

- **Brazil**: Roca
- **Vietnam**: Ray
- **Indonesia**: Ladang
- **Sri Lanka**: Chena

Names across India

- **Western Ghats**: Kumari
- **Chattisgarh**: Dipa
- **Rajasthan**: Waltra
- **Jharkhand**: Kuruwa
- **North East**: Jhum

Mixed Farming

- It is a type of farming which involves both the growing of crops and raising of livestock (Agriculture + Livestock)

Plantation Agriculture

- In this single type of crop or plant is grown in a big part of a land → Factory or processing unit connected
 - Eg: Cotton, jute, sugarcane, rubber, tea, coffee
 - Cash crops → Grown to earn the profit in local market
- Grown to earn profit
- Somehow similar

Organic Farming

- Agricultural process that uses biological fertilisers and pesticides acquired from animal or plant waste
- Zero use of artificially made chemicals here

Zero Budget Natural Farming (ZBNF)

- No use of any kind of fertilizers/pesticides

Terrace Farming

- The process of cultivating crops on sites of hills or mountains by planting on graduated terraces carved into the slope
- It is mostly practised in India's hilly regions, such as Himachal Pradesh, Uttarakhand and certain North-Eastern provinces



- Soil conservation is aided
- Reduces soil erosion

Intercropping and Mixed Cropping

- Similarities:** growing two or more crops in the same field

Differences

Mixed Cropping

- Seeds of two different crops are mixed before sowing

Intercropping

- Seeds are not mixed and grown in a row format

Difference Between Mixed Cropping and Intercropping



Mixed Cropping

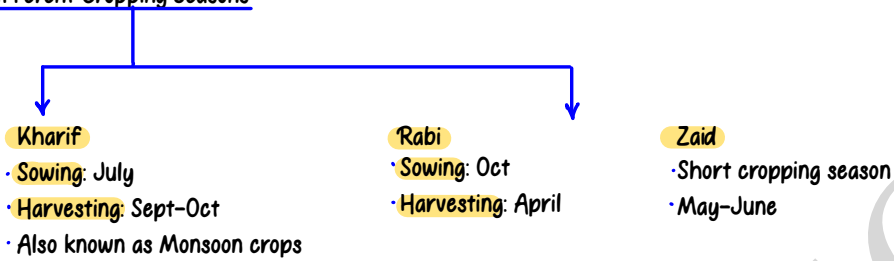
Growing two or more crops in the same field.



Intercropping

Growing two or more crops in the same field in a row format.

Different Cropping Seasons



Kharif crops	Rabi crops	Zaid crops
1. Rice	1. Wheat	1. Rice
2. Sugar-cane	2. Barley	2. Maize
3. Jute	3. Gram	3. Melons
4. Cotton	4. Mustard	4. Groundnut
5. Tobacco	5. Linseed	5. Water melons
6. Maize	6. Pea	6. Cucumber
7. Soya bean	7. Rapeseed	• Fodder crops
8. Groundnut	8. Castor	

- Leguminous plants
- Millets

Different Types of Crops

Cotton

- It requires black soil
- Fibre crop and also known as Silver Fibre
- Requires: 210 frost free days
- Kharif crop

Jute

- Golden fibre
- Topmost producer: India (West Bengal)
- Topmost exporter: Bangladesh
- Nor-westers good for growth of jute

Coffee

- Coffee bowl of the world: Brazil (topmost producer)
- India (topmost producer): Karnataka



- Soil: laterite
- Blossom showers help in growth of coffee

Rice

- Also known as paddy before processing
- Sowed in swampy areas → Methane gas is produced
- **Requires:** high rainfall and temperature
- **Varieties:**
 - Aus:** grown in March
 - Aman:** Jan-Feb
 - Boro:** Oct
- Staple crop

→ India's most consumed staple crops:
Rice and Wheat

Tea

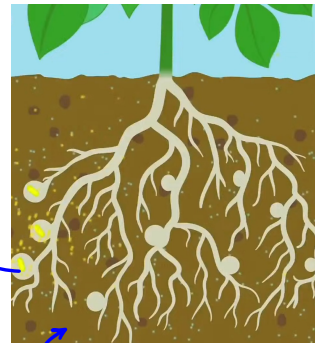
- Grown in acidic soil
- Moderate rainfall
- Required shadow
- **India (Topmost producer):** Assam
- **In the world (topmost producer):** China

Leguminous crops

- Nitrogen fixing bacteria reside in their roots
- Kharif crops
- **Eg:** Pulse, Rajma, Soyabeans (top producer: MP)

No rhizobium
reside in their
roots

Rhizobium bacteria



N
P
K

Macronutrient

Millets

- Also known as Superfoods/Sri Anna
- **Eg:** Bajra, Ragi (finger millets), Jowar (Sorgum)
- **Topmost producer:** Rajasthan

AGRICULTURAL REVOLUTION IN INDIA

REVOLUTION	RELATED TO
Black Revolution	Petroleum Production
Blue Revolution	Fish Production
Brown Revolution	Leather, Cocoa
Golden Fibre Revolution	Jute Production
Silver Fibre Revolution	Cotton Production
Golden Revolution	Horticulture, Honey, Fruit Production
Silver Revolution	Egg Production
Green Revolution	Food Grain Production
Grey Revolution	Fertilizers
Red Revolution	Meat & Tomato Production
Yellow Revolution	Oil Seed Production
White Revolution	Dairy, Milk Production
Round Revolution	Potato Production

Green Revolution (wheat revolution)

• **1st in:** Mexico + Latin America

• **Term:** William Gaud

Father

• **World:** Norman Borlaug (USA)

• **India:** M S Swaminathan

Spectacular increase in production of food grains

PL-480 variety of wheat (imported from USA)

In India → Increase in wheat production

Introduction in High Yielding Variety seeds + Technology

It was introduced in two phases

3rd FYI

1960s

1970s

In 1st phase → Introduced in Punjab, Andhra

Estd: FCI, CACP in 1965

Demerits of Green Revolution

- Groundwater levels ↓
- Soil alkalinity ↑ → Gypsum can be added to reduce soil alkalinity and if the soil is acid then lime can be added

White Revolution (1970–96)

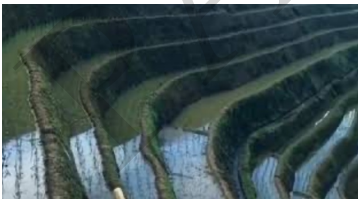
- Also known as "Operation Flood"
- Reduced scarcity of milk production in India
- **Father:** Dr. Varghese Kurien

Different Cultures in Agriculture

- **Horticulture:** Culture of Garden crops
- **Viticulture:** Grapes
- **Aquaculture:** Aquatic plants and animals
- **Pisciculture:** Fishes
- **Sericulture:** Silk
- **Apiculture:** Bees
- **Silviculture:** Forest management
- **Hydroponics:** technique of growing plant using water-based nutrient solution rather than soil

Soil Conservation Methods

- **Contour Bunding/Ploughing:** a land management practice for marginal, sloping and hilly land where the soil productivity is very low. It involves placement of the lines of stone along the natural rises of a landscape
- **Mulching:** the process of covering the top soil, with plant material, such as leaves, grass, crop residue, etc
↳ Retains soil moisture
- **Shelter belts:** Planting rows of trees on one side of an area that prevents the wind from eroding the soil



Contour Bunding



Mulching



Shelter belts



One Liners (MCQ)

- "Agriculture Census" is conducted in India at an interval of 5 yrs
- The technique of watering plants by making use of narrow tubes which deliver water directly at the base of the plant is called: Drip Irrigation
- The word agriculture is derived from the latin words Ager and Culture, where "Ager" means soil
- According to 2009 data by National Institute of Hydrology, 51.09% of land is used for agriculture

One of the adverse effects of DDT is that it can kill beneficial insects like honeybees

PARMAR SSC