

Crop Production and Management



Crops

Crops are plants grown in large quantities for food.

- ➔ **Kharif Crops:** Grown in the rainy season (June-September). Examples: Paddy, maize, soybean.
 - **Soil:** Alluvial loam with clay subsoil.
 - **Sowing:** Broadcasting, dibbling, drilling, transplantation.
- ➔ **Rabi Crops:** Grown in winter (October-March). Examples: Wheat, gram, pea.
 - **Soil:** Clay loam or black soil.
 - **Sowing:** Broadcasting, dibbling, drilling (after rain).

Agricultural Advances

- ➔ **Green Revolution (1960s):** Boosted crop yield with improved seeds and technology.
- ➔ **Organic Farming:** No chemical fertilizers, pesticides, or weedicides.

Crop Production Steps

- ➔ **Soil Preparation:** Ploughing/tilling to loosen soil.
 - **Tools:** Plough (wooden, animal-driven), hoe (for weeding), cultivator (tractor-driven).
- ➔ **Sowing:** Planting seeds.
 - **Tools:** Traditional (funnel-shaped), seed drill (uniform depth, tractor-driven).
- ➔ **Nutrient Addition:**
 - **Manures:** Organic, improve soil texture, water retention.
 - **Fertilizers:** Inorganic, nutrient-rich but reduce soil fertility in long-term.
- ➔ **Irrigation:** Watering crops via wells, canals, rivers, dams.
 - **Traditional:** Moat, chain pump, dhekli, Rahat.
 - **Modern:**

- **Sprinkler:** Best for sandy soil, uneven land.

- **Drip:** Water directly to roots, prevents wastage.

➔ **Weed Control:** Removing unwanted plants (e.g., *Xanthium*, *Parthenium*).

- **Methods:** Manual (hand, khurpi), mechanical (plough, seed drill), chemical (weedicides like 2,4-D).

➔ **Harvesting:** Cutting mature crops.

- **Threshing:** Separating grains from plants.

- **Winnowing:** Removing husk from grains.

- **Tools:** Sickle, harvester, combine (harvester + thresher).

➔ **Storage:** Prevents spoilage from pests and moisture.

- **Small Scale:** Jute bags, metallic bins.

- **Large Scale:** Silos, granaries.

Animal-Based Food Sources

➔ **Milk:** Cow, buffalo, goat, camel.

➔ **Meat:** Chicken, goat, sheep.

➔ **Eggs:** Chicken, duck.

Animal Husbandry

Rearing animals commercially for food and other products, ensuring proper feeding, breeding, disease control, and care.