Crop Production – Mind Map

Crop Production & Management (central node)

Animal husbandry
- fishes — prawns — fisheries
- chickens — poultry
- animal farming
  - goats, sheep
  - cows, buffalos

Crop
- same kind of plants
  - cultivated at one place
  - in a large scale
- patterns
  - crops sown in
    - Rabhi — winter season — Oct-March — wheat, gram, pea etc
    - Kharif — Rainy season — June-Sep — Paddy, maiz, soya etc
- practices
  - 1. preparation of soil
  - 2. sowing
  - 3. adding manure
  - 4. irrigation
  - 5. protecting from weeds
  - 6. harvesting
  - 7. storage

Practices (left — green branch)

4. Irrigation
- to absorb nutrients — plants has 90% water
- at different intervals
- supply of water
- sources
  - reservoirs, dams etc
  - ponds, tanks, canals
  - wells, tube wells
- methods
  - traditional
    - moat, dhekli, rahat, chainpump
    - cheaper but less efficient
  - modern
    - sprinklers — water sprinkled — economical & efficient
    - drip — water drop by drop

5. protecting
- from weeds
  - undesirable plants/weeds — effect growth of plants
  - weeding
    - removal of weeds
      - manual — by khurpi
      - control weeds
      - weedicides — dilute with water before spray

6. harvesting
- cutting crop
  - can be done by sickle or harvester
  - after it is mature
- removing grains
  - from chaff is "threshing"
    - winnowing — manually
    - combine — by machine

7. storing
- to keep grains safe
  - from insects, rats, moisture & micro organisms
- to reduce moisture
  - before storing
  - dried in sun
- grains in
  - jute bags, metal bins
  - for large storage
  - silos & granaries

Practices (right — blue branch)

1. soil preparation
- turn soil & loosen it
  - nutrient rich soil to top
    - tilling
    - ploughing
- implements
  - plough — wooden shaft — drawn by bulls
  - hoe — to remove weeds — has bent iron blades
  - cultivator — tractor driven — saves time & labour
  - (grip, handle, beam, bent plate, rod)

2. sowing
- select quality seeds
  - damaged float on water
  - funnel filled with seeds — traditional method — pierced into soil
  - seed drill — using tractors — sowed uniformly

3. manure
- fertilisers
  - added to soil — for healthy growth
  - cause water pollution
  - man made rich in — short term benefits — nutrients ex: urea, potash
- organic decomposition
  - of animal wastes
  - long term benefits — ex: cowdung, urine
- advantages
  - improve soil texture
  - water holding capacity
  - makes it porous
  - increase microbes