Chapter - 1

Crop Production and Management

- In order to provide food to our growing population, we need to adopt certain agricultural practices.
- Same kind of plants grown and cultivated at a place constitute a crop.
- In India, crops can be broadly categorised into two types based on seasons rabi and Kharif crops.
- It is necessary to prepare soil by tilling and levelling. Ploughs and levellers are used for this purpose.
- Sowing of seeds at appropriate depths and distances gives good yield. Good variety of seeds are sown after selection of healthy seeds. Sowing is done by seed drills.
- Soil needs replenishment and enrichment through the use of organic manure and fertilisers. Use of chemical fertilisers has increased tremendously with the introduction of new crop varieties.

• Preparation of Soil:

- (i) Few inches of the top sooil is loosened and turned ploughing/tilling.
- (ii) Weeds are removed from the soil before removed from the soil before sowing the seeds.
- (iii) Ploughed field has big soil pieces (crumbs) which are broken by planks.
- (iv) Field is levelled for sowing.
- Supply of water to crops at appropriate intervals is called irrigation.
- Weeding involves removal of unwanted and uncultivated plants called weeds.
- Harvesting is the cutting of the mature crop manually or by machines.
- Separation of the grains from the chaff is called threshing.
- Proper storage of grains is necessary to protect them from pests and microorganisms.
- Food is also obtained from animals for which animals are reared. This is called animal husbandry.
- **Fertiliser**: The inorganic compounds containing nutrients such as nitrogen, potassium and phosphorus. They are made in the factories. Example: Urea, ammonium sulphate, potash, etc.

- **Cultivator**: Used for ploughing the soil and is driven by a tractor. This helps to save time and labour.
- **Hoe**: Used for loosening the soil and for removing weeds.
- **Irrigation**: Supplying of water to the crop plants from the wells, canals or water reservoirs.

Method of Irrigation:

- (i) Tradition methods of Irrigation: Moat, Chain pump, Dheki, Rahat.
- (ii) Modern methods of Irrigation: Sprinkler system, Drip system.
- **Harvesting**: The cutting and collecting of the matured crops from the fields. Harvesting in our country is either done manually by sickle or by a machine called harvester.
- **Storage**: Harvested food grains normally contain more moisture than required for storage. Large scale of storage of grains is done in silos and granaries to protect them from pest like rats and insects. Farmers store grains in jute bags or metallic bins.
- **Manure**: A natural substance prepared from decomposition of plant and animal wastes (cow dung, animal bones, dead leaves, dead insects and vegetable wastes) by the action of microbes.