

CHAPTER 01

Crop Production and Management

- Fertilisers are chemicals.
- Rich in a particular nutrient.
- Urea, Ammonium sulphate, Super phosphate, Potash, NPK.
- Excessive use of fertilisers has made the soil less fertile.
- Water pollution
- Replenishing the soil with nutrients.
- Crop rotation



S. No	Fertiliser	Manure
1	A fertiliser is an inorganic salt.	Manure is natural substance obtained by the decomposition of cattle dung and plant residues.
2	Fertiliser is prepared in factories.	Manure can be prepared in the fields.
3	Fertiliser does not provide any humus to the soil.	Manure provides a lot of humus to the soil.
4	Fertilisers are very rich in plant nutrients.	Manure is relatively less rich in plant nutrients.

Advantages of manure:

- The organic manure is considered better than fertilisers.

Because,

- It enhances the water holding capacity of the soil.
- It makes the soil porous due to which exchange of gases becomes easy.
- It increased the number of friendly microbes.
- It improves the texture of the soil.

Irrigation:

Supplying water to the crops at regular intervals is called irrigation.

- Water is absorbed by roots.
- Germination of seeds.
- Nutrients dissolved in water are transported.
- Supply of water to crops at regular intervals.
- In summer, the frequency of watering is higher.

Source of irrigation:

- Wells, tube wells, ponds, lakes, rivers, dams and canals.

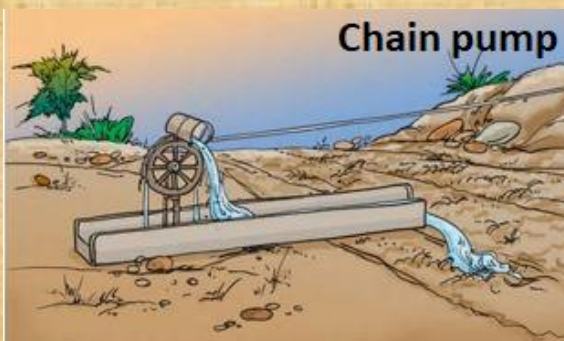


Traditional methods of irrigation:

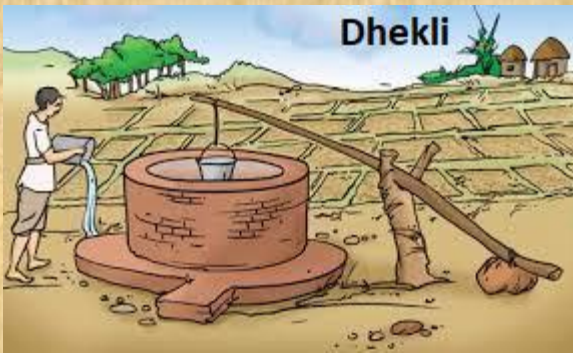
- Water available in wells is lifted up.
- Cattle or human labour cheaper but less efficient.
- The various traditional ways are:
 - ❖ Moat (Pulley – System)



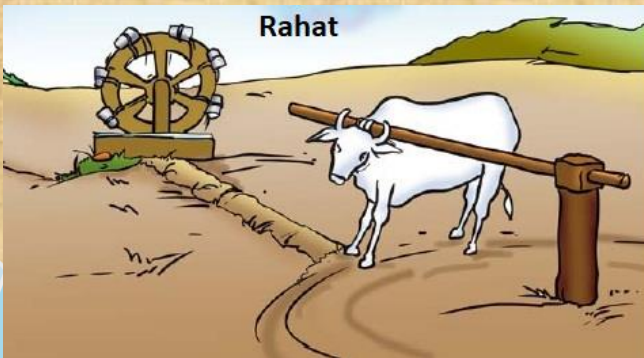
- ❖ Chain pump



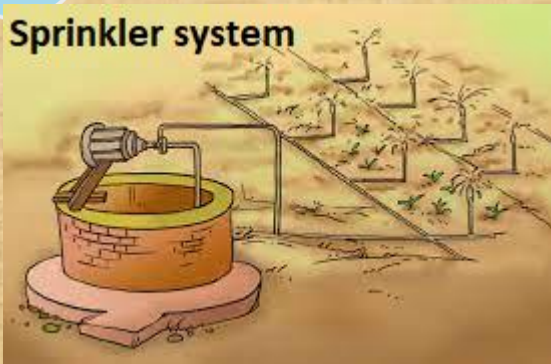
❖ Dhekli



❖ Rahat (Lever system)



Sprinkler system:



- Perpendicular pipes
- Rotating nozzles on top
- Regular intervals
- Sprinkled on the crop

Drip system:

- Water falls directly near the roots.
- Water is not wasted.
- Boon in regions where availability of water is poor.

