

### **g. Methods of Irrigation:**

Free or uncontrolled flooding: this is used for filling the field and irrigation the Paddy crops. It's easy in irrigation and less expensive.

Check bed methods: in this methods, first of all irrigation channels and beds of small size are made. The size of bed depends upon type of soil, slope, crop and source of irrigation.

Border strip method: in this method, beds are made in the form of long strips. When irrigation water is fully flooded in one strip then water is allowed to fill in next strip subsequently.

Basin methods: this method is generally used in the garden trees. The trees are surrounded by circular, rectangular or square basins for the purpose of irrigation and are connected with main irrigation channel.

Ring methods: By this method, there is no direct contact of the stems with the water and the tree become safer. The water is accumulated in circular ring like structure. There is an irrigation channel between the two lines of trees, which is connected with one tree.

Ridge and furrow method: Commonly used in sugarcane and potato corps.

Sprinkling irrigation: it is a system in which water is sprayed on the crops and soil as a fine spray. The equipment consists of a pump which pumps water and conveys it to different parts of the field through PVC pipes. The fine spray is achieved by use of sprinkler heads which are nozzles that produce a fine spray by rotating all rounds.

Drip or Trickle Irrigation: it involves the slow application of water drop by drop as the name signifies, to the root zone of a crop. The method was invented in Israel and is now being tried in other countries. In this method, water is used very economically, since losses due to deep percolation and surface evaporation are reduced to minimum. This method is very much suited to arid regions and is being followed for irrigating the orchard crops at present.

**6. Source: Book; Agriculture Operation, Dayalbagh Educational Institute**