In sprinkler method of irrigation, water is used in the form of sprinkles in which water falls on the plants like rain drops. **Component of Sprinkler Irrigation** In sprinkler system, the main part is water pump, main pipe, side pipe, water lifting pipe and sprinkler.

Process of Sprinkler System Water is sent in pipe at high pressure due to which water falls on the crop through sprinkler. Main pipe is connected with side pipe. In the side pipe, water lifting pipe is connected.

The length of water lifting pipe, which is also known as ‘riser pipe’ depends on the length of crop because the height of the riser pipe will always be more that the height 0f the crop. Normally its height should be equal to maximum height of the crop. The head of the sprinkler is revolving which is fitted in the riser pipe.

Sprinkler sprinkles the water on the crops of whole area. Due to high pressure, water travels longer distance for irrigation.

Benefits from Sprinkler Irrigation: There are many benefits of Sprinkler irrigation which are detailed below:

- In surface irrigation, 15-20% water remains unused in reaching the water to the field.
- In canal water, this loss is increased to 30-50%. In surface irrigation, water is not uniformly distributed in the field whereas in sprinkler irrigation, the irrigated area is increased by 1.5-2 times. It means, this method saves 25-50% water.
- When the water is sprinkled like rain water, there is no water logging as a result, loss of water is reduced due to drainage because water absorption capacity is higher than water sprinkled.
- In the areas where the surface is not uniform, surface irrigation is not possible. In these areas, sprinkler irrigation is blessings.
- Sprinkler irrigation is suitable for sandy clay and Bundelkhand area. This method is also best suited for high slopes and un uniform area. In these places, surface irrigation is not possible.
- This method maintains appropriate level of moisture in the soil due to which the growth, yield and quality of the crop is good.
- In this method, soluble fertilizers, insecticides, pesticides and weed herbicides can be used easily with irrigation water.
- As the temperature rises due to sprinkler irrigation, loss due to frost is reduced.
- In areas of scarcity of water and limited water, the method can cover 2-3 times more than the ground water irrigation.

Maintenance and Precautions

Check the sprinkler before and after its use. If precaution is taken, the life of sprinkler is increased viz., the water used in irrigation should be fresh and free of sand and excess soluble elements. After the use of fungicides/weed herbicides etc, the whole system should be cleaned with fresh water.

Check the plastic washer regularly and change when required. Keep the rubber seal clean. Clean the other parts after use and store in a dry place.