

What is irrigation and its importance?

Irrigation is the artificial application of water to soil, in the correct amounts and frequency, for optimal soil infiltration and plant growth. To be effective soil type (sand, silt, clay), vegetation, size of the area to be **irrigated**, water pressure and local conditions should be considered.

What is the Practice of Irrigation?

Irrigation is the method in which a controlled amount of water is supplied to plants at regular intervals for agriculture. It is used to assist in the growing of agricultural crops, maintenance of landscapes, and vegetation of soils in dry areas and during periods of inadequate rainfall.

What is irrigation Management?

Irrigation water management primarily aims to control the volume and frequency of **irrigation** water applied to crops, so as to meet crop needs while conserving water resources. Competition for water resources for agricultural and other uses is increasing.

What is Canal Irrigation?

An open **canal**, channel, or ditch, is an open waterway whose purpose is to carry water from one place to another. Channels and **canals** refer to main waterways supplying water to one or more farms. Field ditches have smaller dimension and convey water from the farm entrance to the **irrigated** fields.

What are sources of irrigation?

The **sources of water** for irrigation can include surface **water** sources, **groundwater** sources, **municipal water** supplies, and other **agricultural** and industrial process **wastewaters**.

What is Flood irrigation?

Flood irrigation is an ancient method of irrigating crops, very simply, water is delivered to the field by ditch, pipe, or or some other means and simply flows over the ground through the crop. Although **flood irrigation** is an effective method of **irrigation** it is certainly not efficient compared with other options.



What is surface irrigation?

Surface irrigation is defined as the group of application techniques where water is applied and distributed over the soil **surface** by gravity. It is by far the most common form of **irrigation** throughout the world and has been practiced in many areas virtually unchanged for thousands of years.



What is Furrow irrigation?

Furrow irrigation is a type of surface **irrigation** in which trenches or “**furrows**” are dug between crop rows in a field. Farmers flow water down the **furrows** (often using only gravity) and it seeps vertically and horizontally to refill the soil reservoir. Flow to each **furrow** is individually controlled.

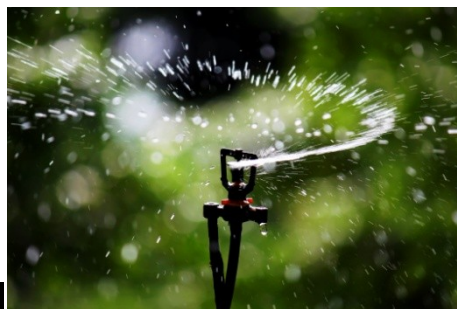


What are different types of irrigation?

Drip/trickle **irrigation** systems are methods of micro irrigation wherein water is applied through emitters to the soil surface as drops or small streams. The discharge rate of the emitters is low so this **irrigation** method can be used on all soil **types**. Drip/trickle **irrigation**. Subsurface **irrigation**.

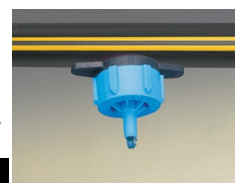
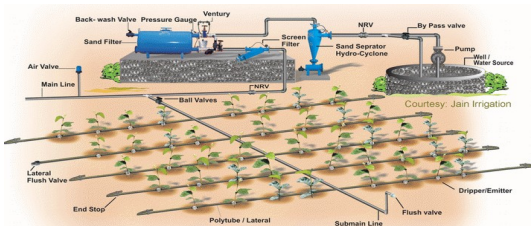
What is Sprinkler Irrigation?

Sprinkler irrigation is a method of applying **irrigation water** which is similar to natural rainfall. **Water** is distributed through a system of pipes usually by pumping. It is then sprayed into the air through **sprinklers** so that it breaks up into small **water** drops which fall to the ground.



What is drip irrigation?

Drip irrigation is a form of **irrigation** that saves water and fertilizer by allowing water to **drip** slowly to the roots of many different plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes, tubing, and emitters.



What is subsurface irrigation?

Subsurface irrigation is a highly-efficient **watering** technique that reduces outdoor water use by 30 to 40 percent. The system consists of drip **irrigation** tubing planted about five inches below the surface. The water goes straight to your lawn's roots, and it doesn't blow away or run down the sidewalk.

Soil Moisture

Soil moisture is a key variable in controlling the exchange of water and heat energy between the land surface and the atmosphere through evaporation and plant transpiration.

What is Duty Irrigation?

The term **duty** means the area of land that can be irrigated with unit volume of **irrigation** water. Quantitatively, **duty** is defined as the area of land expressed in hectares that can be irrigated with unit discharge, that is, 1 cumec flowing throughout the base period, expressed in days.

Cropping intensity

Cropping Intensity Index refers to the changes in the **cropping intensity of crop** compared to a given base year. **Cropping intensity** is the number of times a **crop** is planted per year in a given agricultural area. It is the ratio of effective **crop** area harvested to the physical area.

Multiple cropping

In agriculture, **multiple cropping** is the practice of growing two or more crops in the same piece of land during a single growing season. It is a form of polyculture.