

# Managing water wisely on African farms

Water is a scarce resource and one needs to have a systematic approach in order to utilize the resource for better growth of crops in the farm.

For effective utilization of water, one has to first assess the volume of water available then know how to use it effectively for crop production. The more water in the soil the less air available to the roots. Various sources of water include river water, rain water, borehole water and run off water stored in dams.

## Methods of irrigation

When planning to use water, one should consider the method they are going to use and the volume of water available. Drip irrigation is the most efficient however, it is not the cheapest.

Furrow irrigation requires a lot of water but they easily cause soil erosion, water logging and soil leaching. Soil leaching is the loss of nutrients in the roots to other zone areas.

## Monitoring

Monitoring helps one to know how much water is going into the crop, at what rate and how long it will be needed by the crop. Assessing the plant helps to indicate whether the crop needs more water.

One can also assess the water level in the roots by taking a scope of soil and squeezing it between the hands to make a ball. Drop the ball to the ground and if the ball holds, the soil has adequate water. If the ball breaks, it means that

water is not adequate for utilization by the crop.

## **Disadvantage of pumping**

Pumping water is expensive in terms of the electricity usage and the power to drive the pumps.

It weighs down the nutrients deeper into the soil.

## **Benefits of utilizing water**

Using resources wisely ensures that crops are sustainably maintained for a long period of time. It also improves the crop yields and ensures good profit to the farmers.