

Irrigation for increased crop production

Unpredictable weather conditions are on the rise and farmers must resort to irrigation in case of prolonged droughts when crop production can prove very difficult.

Due to the favourable climatic conditions we have enjoyed in Uganda irrigation sounds a new idea among farmers but in other countries such as Egypt crop production has never been possible without it.

Irrigation and water conservation are among the strong measures being taken to increase agricultural production for a fast growing population amid climate change conditions.

For plants to grow well there has to be sufficient supply of water in the soil all the time.

Normally this need is fulfilled by rain but when there is inadequate rainfall and insufficient water within the rooting zone of the crops they wilt and die.

To sustain plant growth during times of rain scarcity the farmer must artificially supply water into the root area of the crops.

The water may have to be carried in containers and poured over the root area of the crops such as young coffee or passion fruit seedling or it may be carried in pipes to be sprinkled over the crops.

In situations where irrigation water is scarce, the water is put into containers like plastic bottles or cans which may be placed slightly above the rooting area of the plant.

A tiny hole is made at the bottom of the container to allow small drops of water out of it into the ground to keep the plant's root area moist. This kind of irrigation is referred to as drip irrigation.

The farmer must closely monitor the amount of water in each container and ensure that more water is made available when the containers are dry.

Some farmers put fertilizers in the water to enhance soil fertility. In other cases of drip irrigation the water is supplied through pipes to the plants where a small nozzle lets out drips of water into the plants' root area.

It is important to ensure that the water used for irrigation does not contain plant damaging chemicals or high salt concentrations. Drip irrigation does not support waterlogging.