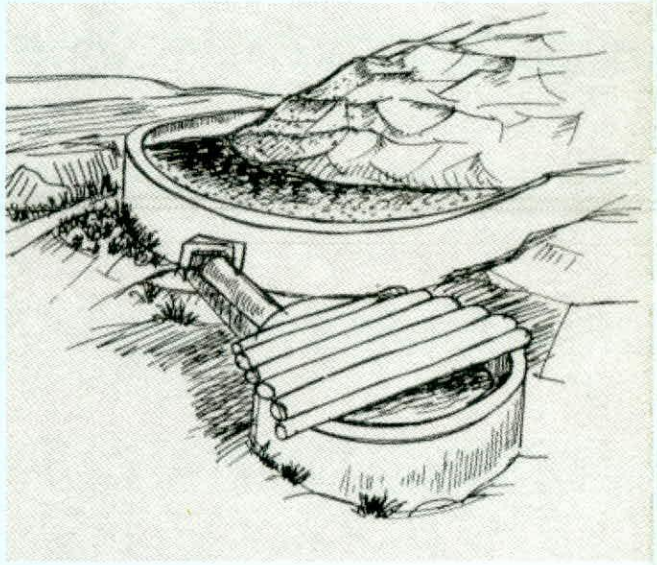


Harversting water from rock surface

Other dams

Water can also be trapped from springs, rivers, lakes, streams, ponds or rain and collected in a reservoir. This water can then be used for irrigation.

NARO

CAB INTERNATIONAL

IDRC International Development Research Centre

CRDI Centre de recherches pour le développement international

For more information contact

your subcounty extension officer

or

Agricultural Technology Research Institute
13 km Bombo Roaad, P. O. Box 7144 Kampala
Tel: 041-566161, Email: aeatri@starcom.co.ug

WATER HARVESTING FOR IRRIGATION



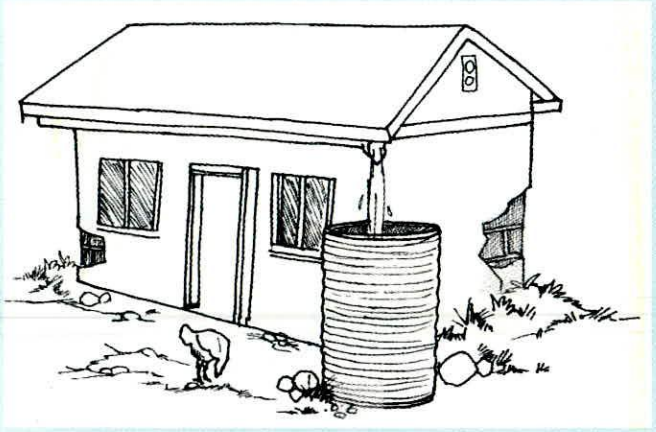
What is water harvesting?

Water harvesting is an active and deliberate effort to collect water in adequate quantities for irrigation and other uses. There is need to collect water for irrigation because of inadequate rainfall, prolonged droughts or rain failure. Rain water is collected during the rainy season in amounts more than is required immediately whenever required. The harvesting of water has too parts – how to get the water and where to store the water. Water is a key component to soil fertility. Despite soils having enough nutrients, lack of water makes them unproductive.

Where to get and store the water

House roof

Rain water harvested from roof tops can be stored in plastic tanks, clay pots, drums, corrugated iron tanks, concrete / brick tanks, (underground and above ground). This water is good for domestic use but could be used for irrigating crops (homegardens)



Water harversted froom house top to tanks

Tree trunks

Rain water is harvested from big tree trunks using banana fibre tied around the tree trunk and directed to a large clay pot. This water can be put to domestic use or for irrigating crops.



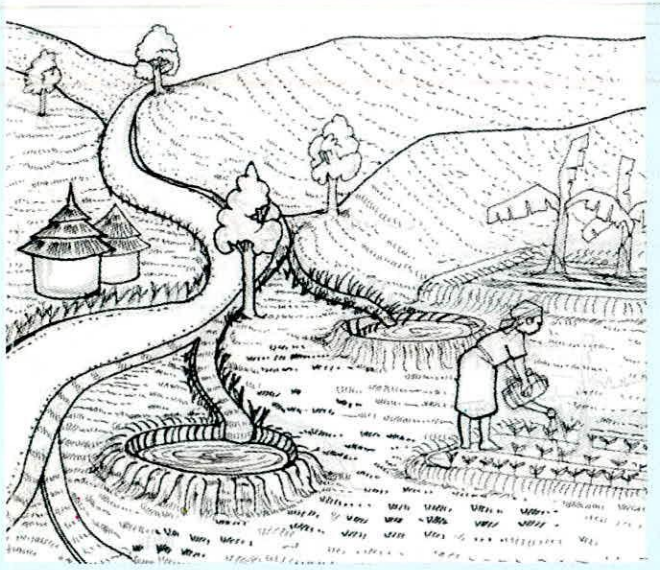
Water harvesting from a tree trunk

Valley dams

Valley dams are big open water reservoirs found between valleys. They are common in semi-dry areas. These dams are constructed by excavating soils in a valley. Rain water is collected from run-off, spring water, seasonal streams directed into the valley dam. This water is commonly used for livestock but could be used for irrigation.

Trenches

Rain water is diverted using channels from various sources such run-off to earth dams or infiltration ditches. This water is mainly used for irrigation or for livestock.



Harvesting water by trenches and directed to infiltration diches

Rock surfaces

Rain water can be collected from bare rock surfaces by constructing a concrete or stone embarkment around the rock. This water is channeled through a pipe to a storage tank (drum, concrete, rock or brick). This water can be put to domestic use, for livestock or for irrigation purposes.