Collect rainwater from your roof

Did you know that your roof could catch plenty of water for you? Most parts of South Africa do not get much rain. If you can catch all the rain that falls on your roof, you will have water for your gardens and fields, livestock and household later in the season.

It does not matter what the roof is made of. Water collected from thatched roofs is often discoloured and is usually contaminated, so it should not be used for drinking. Use this water only for watering plants. Tile or metal roofs give the cleanest water.

How to collect rainwater

It is easy to collect water from your roof. Place a container below the roof in which to catch the rainwater. You will also need a gutter to direct the water to the container.

You can use metal sheets or wood to make gutters.

- If you use a metal sheet, cut the sheet in long thin rectangles. Fold the rectangular sheet of metal along its length to form a gutter.

- If you use a piece of wood, hollow it out along its length, or attach two planks of wood together lengthways in a “V” shape. Water will flow along this groove. Apply tar or wax to the joint so that water will not be lost through the joint.
Use wire or rope to tie the gutters to the edges of your roof. Place the gutters on a slope so that the water will flow from one gutter to the next. Again, use wax or tar at the joints between the gutters to reduce water loss. Use a few poles to support the gutters. You will need stronger poles or more poles especially when heavy rain falls.

Rain that falls on the roof will collect in the gutters. Then it will flow from the gutters into the container you have placed under the roof.

You may install a pipe to channel the water from the lowest point on the gutter into a storage container.

Do not worry if algae grow in the storage container. Algae will not harm your plants. Cover the rainwater container to prevent evaporation and contamination, and to discourage mosquitoes from breeding there.

Direct rainwater to a pit

Rather than storing the water in containers for future use, you may direct rainwater collected from the roof to a pit. Plant vegetables around this pit. Put some small stones, compost or other mulch in the pit. The stones will let the rainwater soak slowly into the soil. The mulch will act as a sponge to absorb all the water and supply it to the plants around the pit.

By collecting rainwater from your roof, you can make the most of any rain that falls.

For further information on the subject, contact Mr Chris Stimie at the Institute for Agricultural Engineering, Private Bag X519, Silverton 0127 or telephone him at (012) 842 4000