

Sharing and Caring for a Rainwater Tank



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Draft learning resource for Galela Amanzi and the Grahamstown community

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Introduction

What is in this booklet? (and what is not)

This booklet provides basic information on how organizations, schools, households and individuals can take care of their rainwater tanks. It is aimed at organizations and schools with water tanks, and it is useful for the maintenance of a rainwater tank.

The stories included in the booklet aim to connect the information provided on water tanks with real stories of how people in Grahamstown use their tanks and how they take care of them. The real life stories are from people using water tanks in the townships of Grahamstown.

Additional information is provided along with success stories from local people about the best methods of sharing and caring for their rainwater tanks.

There is minor information in this booklet about the installation of a rainwater tank. If you are looking for more information, you can read the *'Rainwater Harvesting for Home and Home Food Gardens'* booklet compiled by Nina Rivers, Tim Wigley and Robert Berold at Rhodes University.

How was this booklet put together?

My name is Sibongile Mputhing. I am a student at Rhodes University and a committee member for Galela Amanzi. Galela Amanzi is a student organization at Rhodes that helps provide water tanks to organizations that work in the areas of Grahamstown that are disadvantaged and where water is less accessible and water cut-offs happen often.

To compile this booklet, I spoke to people at two local Grahamstown organisations that use rainwater tanks donated by Galela Amanzi.

The first organization I spoke to was Umthathi training project. Umthathi helps provide communities with the skills, activities and networks needed for healthy living. Umthathi provides seedlings and develops training to help people establish and cultivate food in their school, community or backyard.

The second organisation I spoke to was St Mary's Development Care Centre. St Mary's provides for the basic needs of local children in a safe and caring environment. St Mary's provides meals, school uniforms, educational support, and after school activities for more than 85 children.



Asanda Klaas is a pre-school teacher at Extension 7.

Asanda collects rainwater using the Jojo tank. She uses the water for their vegetable garden and in the house when the water is cut-off.

What is a rainwater tank?

Galela Amanzi has decided to work with only plastic JoJo tanks, this is the reason why this booklet only contains information concerning plastic tanks. There are other types of water tanks,

for example: underground tanks, corrugated iron tanks or ferrocement tanks.

Rainwater tanks are big plastic containers that people use to collect water from their roofs. These containers come in different sizes and colours. The tanks which Galela Amanzi installs are the green or brown 5000-litre JoJo tanks.

[Kaylene Booth, Manager at St Mary's DCC] from St Mary's explains that water tanks are a solution to the water problems in Grahamstown: "The tank is very helpful especially as we have no running water here at the Centre."

One of the children from St Mary's commented: "The tank is where we get water to drink."



What are rainwater tanks used for?

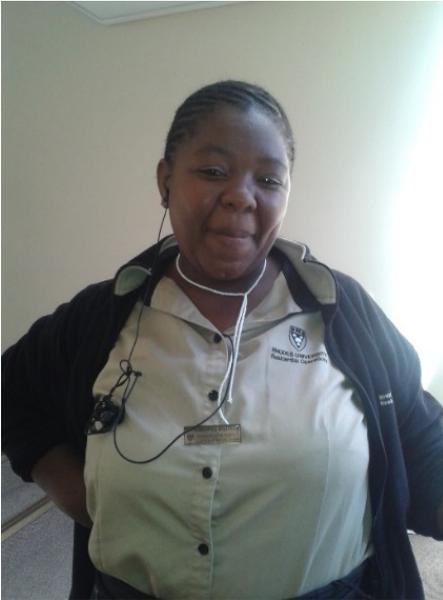


Abongile Jaca from
Lingelihle, a gardener at
Umthathi:

“I am using a water tank
for watering my garden.
The tank is closer to my
vegetable garden than the
tap.”

Rainwater from your roof is a great way to supply water for a range of purposes including washing clothes, flushing toilets and watering your garden. Rainwater tanks can also help you save money on your water bill.

The decision about what to use your rainwater tank for is a matter of personal choice. The use of rainwater to water gardens is common in Grahamstown organizations and schools.



Ntombikhaya Bikitsha is from Fingo location.

“At home we have a rainwater tank and we pay for services. When we use the tank, we are saving money because the services include water, so not using the tap water saves us some money.”

People generally use rainwater tanks for water security. They want to know that during a water crisis they will always have water. The rainwater tanks are used as a back-up plan for organizations, schools and households. Some use tanks on a daily basis for drinking and other uses.

People working at Umthathi mainly use the rainwater for watering their vegetable gardens. Community members own vegetable plots at Umthathi, they come in almost every day to water and tend to their gardens. People use watering cans to collect water from the tanks to use on their gardens.

How much water is in our tank?

To check how much water you have in your tank, do the following:

1. Knock on the tank with your knuckle starting from the bottom and moving upwards towards the top of the tank.
2. If there is water where you knock, you will hear a dull flat sound. If there is no water where you knock, you will hear a hollow sound that rings.

Where the sound changes from the dull flat sound to the hollow ringing sound is where your water level is.

How can you receive a tank from Galela Amanzi?

Galela Amanzi tanks are installed by an external contractor, Jon Lisher of Quaflow guttering company. Galela Amanzi does a follow up after the installation to make sure the tank was installed properly.

Requirements to receive a tank from Galela Amanzi:

1. The tank must be used in support of a vegetable garden.
2. You need to provide motivation why the tank is needed.

Wellington Dywilli:



“I would like to have a rainwater tank, especially now in my situation, we have not had water for the past four days.”

Why is it important to take care of your water tank?

It is important to take care of your rainwater tank for health reasons and to make sure that the tanks lasts for a long period.

The JoJo tank has a guarantee of 5 years, but if you take very good care of it and protect it from fire and strong winds, your tank could last up to 10 years.

“Our first tank here at Umthathi is almost 3 years old, we got it from our very first sponsors.” [Xoliswa Maaotla, Umthathi]

If you take good care of your tank and keep it clean, then the water inside the tank will stay clean and healthy to drink. If you neglect your tank, the water can get contaminated by harmful substances and drinking such water can make you sick.

What are people say they already doing?

At Umthathi and St Mary's they know that it is important to care for their tanks. Umthathi is very organized and everyone is dedicated to their work. People in the Umthathi project appreciate everything they have and want to look after their tanks so they work well and provide clean water for a long time.

“We feel very blessed to have a tank from Galela Amanzi. We show our appreciation by taking good care of our tanks. In my culture, the Xhosa culture, if someone gives you something and you do not take care of it, then that is an insult to him or her. We do not want to insult Galela Amanzi. Sipiwo Frank who works at the nursery cleans the gutters and the roof regularly. We do not have lot of big trees, but dirt still is trapped in the gutters. To be honest, we have not done anything else besides this. [Xoliswa Maaotla, Umthathi].

At St Mary's they recently cleaned their tank, which was donated to them in October 2012 by Galela Amanzi.

“I did not know that you could actually get inside the tank and clean it until I saw the young men doing it. What we have always done is to clean our gutters and the roof. After receiving the JoJo plastic tank, we thought of the idea of getting inside the tank and cleaning it.” [Kaylene Booth, St Mary's DCC]

Mud and dirt inside the tank

When Galela Amanzi went to check the rainwater at Andrew Moyake School in Grahamstown, one of the teachers told us that there was mud inside the tank and this was making the water dirty. We went to the tank and opened the tap, the water was brown in colour.

The teacher said that the water is dirty due to the gutters and the roof not having been cleaned regularly. The children also open the lid at the top of the tank and do not properly close it, and this could be another reason why there is mud in the tank.

“Children are very curious. If they see something closed, they will want to open it and see what is inside,” said the teacher.



St Mary’s has a similar challenge, their tank is situated next to a playground which is an open dry field. On windy days, this area is very dusty and Kaylene says that some of the dust could be going inside the tank. When they cleaned the tank, they found dirt inside.

Basic installation and maintenance

To correctly use your tank, make sure it is installed properly. Make sure that the tank is not very close to the ground, so you can easily place a bucket or your watering can under the tap.

A rainwater tank requires little maintenance to keep it functioning and healthy. The JoJo tanks are fitted with a ladder inside which makes it easy for you to climb in and out. A tank must be cleaned out every year.

Base area

It is a good idea to have your tank supported by a flat and level base. Keep the base area free from overgrowing weeds and plants. Inspect the base every 6 months to check for any movement or damage to the concrete-slab or tank stand.

Tank Lid

It is a good idea to keep leaf build-up, soil and sticks off the lid of your tank. Keep your tank lid clean and tightly closed at all times.

Inlet leaf strainer

This is a fine stainless steel mesh, the water passes through this strainer as it enters your tank and is located on the top of your

tank. If your tank has a strainer, it should be cleaned regularly to make sure it does not become blocked.

Sediment build up inside

Over time your tank will build up a sediment layer on the bottom of the tank which is normal. This layer build up is dust that settles out of the water that has run off your roof and gutters. This is harmless and natural. It should not be disturbed or removed until the build-up reaches the tap of the tank (approximately 20 mm thick). This doesn't happen quickly and usually takes many years depending on the location and environment. A good option is to wait for your tank to be empty. When empty, open the bottom valve and remove the inlet strainer. You can then use a hose through the inlet to stir-up the sediment and allow it to run out. This will not do a 100% job but will remove most of the build-up.

Smelly water

Some people who have a lot of leaves in their gutters can sometimes have a smell from their tank. This is best dealt with by first ensuring the gutter and leaf strainer are clean and then by placing a small amount of chlorine in the tank to kill off the bacteria causing the smell. It is best to use the tablets from a pool supplier, but ensure that you check with them the correct

amount for your tank capacity. The chlorine will disinfect the water and then after a week or so most will be evaporated out of the water. This tablet can also be bought from the pharmacy.

First Flush Diverters

If you have a first flush diverter installed, occasionally unscrew the cap at the base of the diverter and remove the filter. Wash the filter with clean water. There is also a flow restrictor inside the cap which should be removed and washed. Re-fit the flow restrictor, filter, and screw the cap back on. Remember that regular maintenance will improve the water quality and extend the life of your system.

[PTJ green plumbing]

Who is responsible for taking care of a shared water tank?

Galela Amanzi installs rainwater tanks, but leaves the responsibility for the use and care of the tanks to the owners. This can cause some conflict sometimes.

The story below shows why it is important to think carefully about who is responsible for and who has access to the water tank.

Galela Amanzi donated a tank to the Sun City community, the tank was installed at Sun City Crèche where the community garden and the schools garden are next to each other. Everyone was happy to receive the tank and seemed to be working together in harmony until one day when we received a phone call from Sheila, a member of the Sun City community.

After the tank had been put up there was very little progress in the garden. There was planting once, but not much monitoring, and after the first harvest was picked there was nothing done . There were a lot of weeds and the garden was left desolate. The correctional services also came to help at some point.

The tank belongs to the Sun City community, but the property is the school's. Mrs. Nortji (Sun City Crèche) said they were closing their gates because there were seedlings being stolen out of the garden. Also, people that used the community hall misused the

garden and pulled potatoes and carrots from the ground, leaving them scattered on the floor.

Galela Amanzi had to mediate. Galela Amanzi called a meeting with all the people involved. At the meeting, Sheila said that it was not fair that the gates were being closed because the water tank belonged to the community not just the school.

Galela Amanzi stated that we expect things to be taken care of by the community. There are 19 members of the Sun City community development group (garden group), and we think that it is a good place to start, and both parties should look into it.

One other requirement to receive Galela Amanzi tank is that there must be a person who will look after the tank and be responsible for the garden.

Where can I find out more?

Contact Galela Amanzi project coordinator on
galela.amanzi.ru@gmail.com / manosa.nthunya@gmail.com or
phone Anje Niemandt on 079 253 6152

Visit <http://www.ru.ac.za/communityengagement/svp/studentinitiatives/galelaamanzi>

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