

*Recycled water has to be treated to a sufficiently high level to make it suitable for consumption*

# Recycling: A solution to water shortages



In the run-up to the World Water Day, *New Vision* is publishing daily features highlighting key issues in the sector and what the public can do to save the environment and water resources.

Today Jacky Achan looks at the practice of recycling water



When water is recycled, streams and wetlands like the one above are saved from industrial pollution

## TIPS

Recycling water involves doing simple things that will ensure effective water use and low water bills. These include:

- Save water after washing vegetables or food. Use it to water plants in the garden or flushing the toilet.
- Reuse Excess Drinking Water. When water remains in a cup, glass or tumbler instead of pouring it away, you can use it to water house plants
- Left over sweetened drinks such as tea can be used on garden plants but not house plants
- When you watering potted plants some water usually overflows. Collect this water using a pot tray and use it to water other plants.

## Adapted from online sources

agriculture purposes or domestic use. Experts say by the time water is put back to use, it has passed through all the treatment processes and may be cleaner than regular drinking water because it has fewer impurities. And if it has to be put in the drinking water system, it also undergoes the normal drinking water treatment process. Namibia, known to receive the least rainfall of any country in sub-Saharan Africa, is one of the success stories in the world for pumping its recycled water directly into drinking water



Singapore is also known for using recycled water for electronic chip manufacturing that demands higher quality water than drinking water.

So, in recycling water, industries ensure they use it efficiently and also get maximum benefits by reusing the same water after treating it.

## FUTURE PLANS

Water recycling has been adopted as one of the strategic directions for efficient water use in the country. Though there has been no serious effort towards water recycling in Uganda, it is going to be one of the key aspects introduced in the revised water production policy, according to Tindimugaya. "When we do not have water we normally look for alternative sources but if we recycled the available water we would not be looking for alternative sources."

Therefore we are revising our water production policy to ensure we adopt water recycling as an efficient use of water in the country," Tindimugaya states. He says with water becoming limited, especially during the dry season promoting recycling will control water use, ensure efficient use and also address challenges posed by climate change.

Tindimugaya says as Uganda thinks of efficient use of available water, it must think of water recycling as a practice that needs to be widely adopted to ensure sufficient water supply and use for Uganda.

communities to be sensitised.

He said the sensitisation process would ensure hygienic practices in order to maintain a safe water chain

Commonly known among Ugandans is the practice of recycling bottles and plastics but, not so many people are familiar with the practice of water recycling and reuse, which is common in communities that face limited water supplies.

Fortunately for Uganda, we have always had abundant water and "we have been in the practice of wasting water by using and discarding it" Callist Tindimugaya says.

Tindimugaya, who is a commissioner in the directorate of water resource management, says water recycling is almost unknown to Ugandans save for a few industries that have embraced the practice.

But with the current pressure on available water resources as a result of climate change, Tindimugaya says we can not afford to get water, use it and throw it away.

As we prepare to mark World Water Day on March 22, a recent UN report estimates that about half of the global population could be facing water shortages by 2030.

In Uganda, as of June 2017 rural water supplies reduced to 85% from 86% in June 2016 and 88% in June 2015, whereas access to drinking water in urban areas stagnated at 71%. This is according to the 2017 Water and environment sector performance report by the Ministry of Water and Environment.

Tindimugaya says: "This is the time to start water recycling, especially with such statistics cropping up," Minister of Water and environment, Sam Cheptoris, while presenting this report emphasised the need for

## Fact file

Water has no substitute



**97%** of global water resources is sea water

Water can be depleted if mismanaged

Only **3%** of the world's water is fresh water.

Of this,

**87%** is inaccessible

Only **1%** of Uganda's budget is allocated to the water sector. In **22 yrs**, Uganda's water per capita will have dropped from the current **2,300** cubic metres to less than **1,000** cubic metres per person.

including Nile and Uganda breweries are doing it.

The industries reuse water which comes out as waste water. Instead of disposing this water, it is instead recycled cleaned and put back to use. So the water is utilised beyond its primary use.

Tindimugaya says recycled water has plenty of use beyond industries. It can among others be used for

## Understanding water recycling

According to the Environmental Protection Agency (EPA), the earth naturally reuses its water however; water recycling uses technology to speed up the water reuse process. Water recycling is the process of taking wastewater and treating it so that it can be reused for both for commercial and home purpose.

Recycled water has to be treated to a sufficiently high level to make it suitable for human consumption.

According to EPA, water recycling also reuses wastewater for purposes such as irrigation, toilet flushing or filling up a groundwater basin.

The common form is industrial recycling where an industrial facility will reuse water on site for processes such as cooling.

But importantly, water recycling water prevents water from being removed from natural habitats, such as the wetlands that rely on it for survival.

For Uganda, the few industries doing it are minimising wastewater being discharged back to its source which would then cause pollution to the water body and the environment.

Tindimugaya says without treating the wastewater, we end up polluting our water sources and environment and consequently spend a lot of money cleaning the polluted water and the environment.