



Source: www.mg.co.za



Drought Affects Everyone

How We can Make a Difference

In late 2015, five of South Africa's provinces were declared drought disaster areas, including KwaZulu-Natal

South Africa is a dry country with an average annual rainfall of 464mm, which is about half the world average of 860mm. Our rainfall is also erratic and we currently find ourselves in one of the **most severe droughts in recorded history**. In many areas, water is being rationed, there is no grass to be grazed and livestock are dying. In game reserves, even animals that once typically adapted to drought conditions are dying. This brief information document explains what droughts are, the impacts they have, what government is doing and how we can make a difference.



Source: www.cdn.24.co.za

Take an active stance

- **Be a responsible water-wise citizen**

Reduce water use at home and at work – every drop counts.

- **Participate in water sharing initiatives**

For example, the *East Coast Radio Breakfast* team, together with *The Gift of the Givers*, have launched the **#WaterShare** Project. With this initiative, over one million litres of water has been donated so far and transported to areas in KwaZulu-Natal that have been severely affected by the drought.

- **Report any illegal water connections, as well as water pipe bursts or leaks immediately**

Do not rely on other people to report; take the initiative yourself. You can report leaks, faults and illegal activities via the eThekweni Municipality call centre (080 131 3013) and the Msunduzi Municipality call centre (080 000 1868).

Useful Websites for Further Reading

- Department of Water and Sanitation - www.dws.gov.za
- Water Research Commission - www.wrc.org.za
- eThekweni Municipality- www.durban.gov.za
- Msunduzi Municipality - www.msunduzi.gov.za



Global climate is characterised by dry periods called El Niño (years receiving below average rainfall) and wet periods known as La Niña (years receiving above average rainfall).

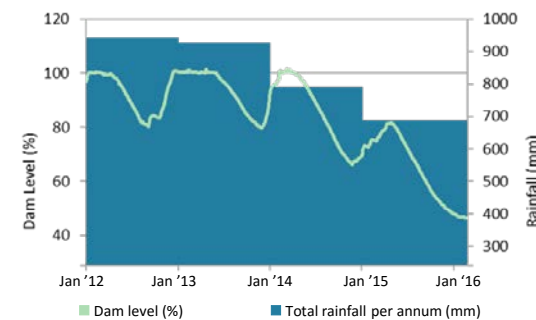
What is a Drought?

A drought occurs when we encounter below average rainfall over an extended period of time. It is a normal feature of South Africa's climate, although its duration and geographic extent can vary widely. When coupled with climate change, drought conditions are expected to worsen. Importantly, droughts do not end with a single heavy rainfall event as it takes a prolonged period with multiple rainfall events to finally break a drought.

No matter who you are and where you live in the province, drought affects everyone

The impact that reduced rainfall in 2014 and 2015 has had on Midmar Dam (main water supplier to Pietermaritzburg and parts of Durban), is illustrated in the adjacent graph. The dam level has dropped to approximately 46 percent (green line), whilst total rainfall per annum has decreased steadily over time (blue columns). This shows that the ongoing drought has intensified, and water shortages are a reality.

The impact of drought on the water levels of Midmar Dam



Source: Umgeni Water



Drought Impacts and Losses can Include:



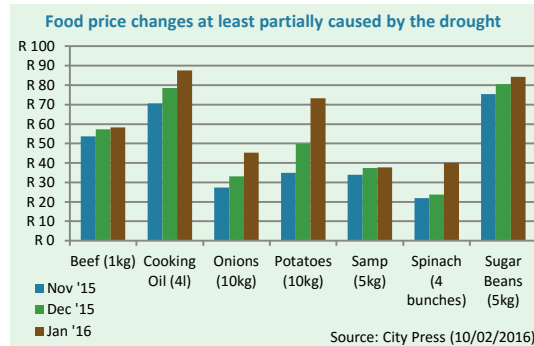
Key Impacts of Droughts

- **Reduced water flow in river channels causes reduced dam levels, poor water quality and increases the likelihood of water shortages**

Water rationing is already happening in the uMngeni River Catchment. As people may not have a constant supply of potable water, they may use water from untreated sources. This may result in outbreaks of gastro-intestinal diseases. These reduced flows can also negatively impact natural ecological systems.

- **Reduced production of crops, which threatens food security**

In 2016, we will have to import maize due to poor local production. The adjacent graph shows how much the price of food has increased over the last three months. These price increases have affected people's ability to buy staple food crops, and so threaten to increase the level of poverty. Significant food inflation is expected in 2016.



- **Higher levels of unemployment in the agricultural sector and drought-affected industries**

This results in the lowering of living standards, particularly for subsistence farmers and their communities, whilst agricultural debt has risen substantially and currently sits at R117 billion.



- **Increase in the mortality rates of livestock and wildlife**

Prolonged drought conditions may also result in more insect infestations and plant diseases.

- **The increased potential for fire hazards**

Particularly in winter in KwaZulu-Natal.

- **Increased threat to electricity supply**

Coal power stations use a lot of water, and water shortages may result in a reduced ability to supply electricity.

- **Less water available for heavy industries**

This may result in reduced production and could lead to job losses.



We Can Make a Difference

Be a responsible citizen

There are a number of ways in which **we can save water**, both at home and at work.

Rainwater Harvesting



While not safe as drinking water, rain water can be used for **irrigation, flushing toilets, washing cars, filling pools and washing pets**

Full Loads



Only wash a full load of dishes or laundry to **save water and electricity**

Remove Exotics



Replace exotic garden plants with indigenous species, which **use less water and are more suitable to drought conditions**

Close the Tap



Save every drop by closing the tap while cleaning vegetables and brushing your teeth

Repair Faults



Fix leaking toilets, pipes and drains. A leaking toilet can waste as much as **200 litres of water per day**

Wash Wisely



Only wash cars when absolutely necessary, and use a **bucket instead of hose pipe**

Shower not Bath



Shower, instead of bathing, for a **short period** and install a **low-flow showerhead**

Brick in Toilet Tank



Substantially reduce water use as toilets use more water than is necessary, and flushing can be unnecessary

Water at Night



Do not water your garden during daylight hours, as **this water often evaporates**

Save Electricity



Eskom uses 3% of South Africa's water. Saving electricity will **ease the burden on the utility**

Keep it Clean



Do not pour oil or pollutants down the drain to prevent **unnecessary waste entering the water system**

Do Not Refill



Save unnecessary water use by not refilling your swimming pool

Further handy hints on how to save water can be found at www.jototanks.co.za/water-facts