

Every year, International Water Day is celebrated on 22 March. This year, the theme was 'Coping with Water Scarcity'.

When we think of water scarcity, we usually think of drought, especially in a country such as South Africa, which remains one of the 30 driest countries in the world. But the lack of rain is only one reason why people might not have enough water.

WHAT IS THE DIFFERENCE BETWEEN WATER SCARCITY AND DROUGHT?

While arid and drought-stricken areas suffer the most, people everywhere can be affected by water scarcity, even those living in areas with plenty of rainfall or freshwater. Water scarcity occurs when the ways in which we use and distribute water cannot fully meet the demand from households, farms, industry and the environment.

Global water use is increasing at more than twice the rate of population

growth and more people than ever are learning first hand about coping with water scarcity. While three-quarters of the Earth is covered by water, only a small fraction of it is available as freshwater. In addition, this water is spread unevenly, in other words, some areas

might have more freshwater while others have less.

WHAT CAUSES WATER SCARCITY?

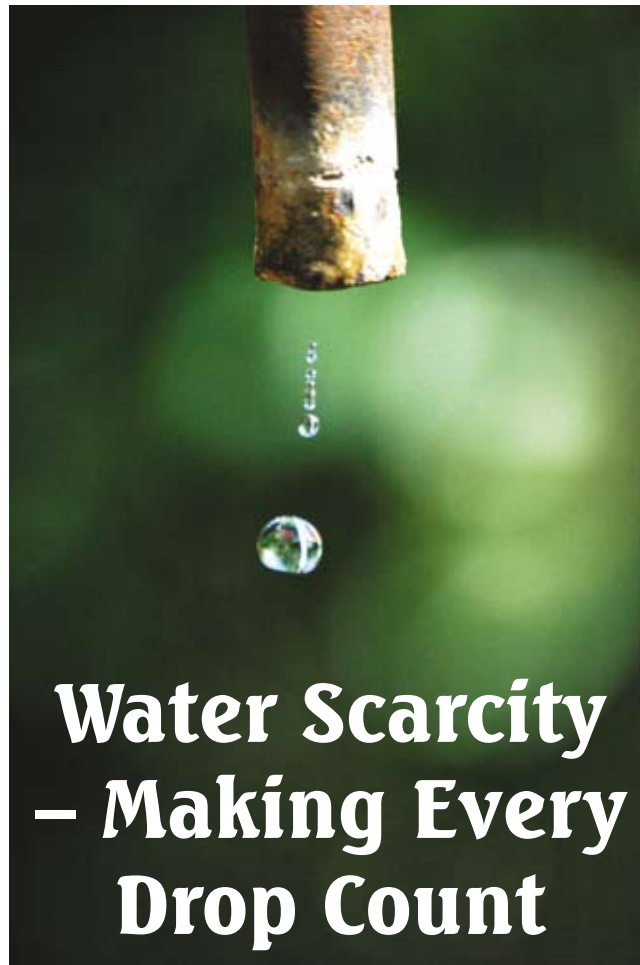
Anything that causes water shortages, contaminates freshwater supplies, damages the facilities that carry water to people, or keeps significant numbers of people from receiving clean water can lead to water scarcity. Major factors include drought, a lack of water near people's homes, high water tariffs, and the overuse of lakes, waterways and aquifers. Other causes range from flooding to poorly-placed dams.

Even climate change is said to increase water scarcity in some areas. Many experts point to the rising level of the Earth's seas, the rapid melting of glaciers, the frequency and ferocity of hurricanes, floods and drought as

consequences of climate change. All of these can threaten the amount or safety of a community's water supply, as they destroy crops, contaminate freshwater bodies and damage water facilities.

In South Africa, a number of factors, ranging from poverty and a subsequent lack of access to potable water to increased demand for water from industry and mining, are stressing the water system. This poses a challenge to public health, agriculture (food production), and the environment. This is in addition to the country's physical water scarcity (i.e. South Africa generally receives less than 500 mm of rain a year compared to the world average of 860 mm a year).

Through various programmes, the government, mainly through the



Water Scarcity – Making Every Drop Count



Courtesy SA Tourism

South Africa, with its erratic rainfall, is prone to water scarcity.



The exponential growth of cities around the world can lead to water scarcity.

Department of Water Affairs & Forestry, has made much progress in bringing clean water to even the country's poorest citizens. These initiatives include the Masimbambane and Water Reallocation programmes, which aims to make water available to communities for domestic (such as drinking) and productive (such as farming) purposes. The country remains on track to meet the United Nations Millennium Development Goals of halving the proportion of people without access to safe water by 2015.

At the same time, stricter regulations have been instituted for issuing permits to use water. Other issues being addressed include increasing urbanisation, industry and the continued need for irrigation.

WEBSITES

- www.worldwaterday07.org
- www.unwater.org
- www.unesco.org/water/wwap/wwd2/

SHOULD PEOPLE MOVE TO URBAN AREAS TO GET BETTER ACCESS TO WATER?

Living in a town or city is no guarantee of access to water. Many people, especially the poor who come from rural areas, end up living in informal townships where they often have to share communal standpipes. Those who don't have access to piped water often have to purchase water from private vendors at a high price. Water supplies are also threatened by urban pollution such as sewage spills, storm-water runoff and wastewater from industries.

WHY SHOULD PEOPLE GET INVOLVED IN THIS ISSUE?

Water scarcity already affects every continent and more than 40% of the people on our planet. The situation is being made more acute by population growth, urbanisation and the increases in domestic and industrial water use by people who live in more developed areas. Water is intricately linked to every aspect of our lives. We need to improve the use of the world's water and to protect the environment.

WHAT CAN I DO?

Actively support government, non-governmental organisations, private foundations and companies which make it a priority to conserve, recycle and protect water resources, and deliver affordable water to people at every level of the community. Do your part to use water more efficiently, reduce pollution and protect the environment. Support funding initiatives that help to make these objectives possible. Everyone needs water and everyone needs to take responsibility.

HELP FOR TEACHERS

In support for learning and teaching about water and water-related issues, the Water Research Commission and Share-Net (a project of the Wildlife and Environment Society of South Africa) have developed a series of lesson plans on water.

These lesson plan packs, from Grade R to Grade 10, are linked to the national curriculum. Each pack contains five lessons, with each lesson focusing on a different learning area – these can either be used as they are, or adapted to suit the local context. Each lesson is concluded with a rubric of criteria to assess the learners. Learning Outcomes and Assessment Standards covered during each lesson are given in the summary at the beginning of the pack.

The lesson packs can be downloaded from www.environmentalrolelearn.org.za or www.wrc.org.za. Alternatively, contact Share-Net at Tel: (033) 330-3931; Fax: (033) 330-4576; E-mail: sharenet@future.net.co.za