

Africa turns air into water

Drought is a big problem in many parts of Africa. In The Sahel region water is difficult to find. Why? Because of climate change. There is less rain and rivers and lakes are dryer. Many people are drinking dirty water. The water is full of bacteria. People, especially young children, fall ill and many die. The UN says 1.8 billion people in the world will not have enough water by 2025. Is there a way to find water?

Beth Koigi from Kenya says yes. She is a scientist and the winner of the Engineering Development Foundation Africa prize and the inventor of Majik Water. Majik Water converts the water in the air into fresh water for washing, drinking and toilets. It uses solar panels to do this. How?

There is six times more water in the air than in all the rivers in the world, she says. When the temperature rises by 1% water evaporates on the ground, but increases 4% in the air. So the answer to drought is to take water from the air.

Majik water comes from Swahili. Maji is Swahili for water. K is for kuna. Kuna is Swahili for "harvest". Majik Water uses a chemical called a silicon gel. These chemicals draw water from the air. Solar panels heat the gels and turn the air into water. In this way you can make 10 litres of filtered water per day.

Beth is one of Africa's top scientists and inventors. She is finding simple ways to solve one of Africa's biggest problems – clean water.

Majik water is not just important in Africa. As global warming gets bigger, the world gets warmer. It is difficult in many countries to find enough water. So there is a danger of drought. It is not just in the Sahel in Africa but in California in the United States and in Australia.

This is important. We usually think that western technology can help Africa, for example, electricity and air-conditioning. However, we can use nature to develop new technologies. Now technologies developed in Africa can help the world.

New words for this article

drought	no water
climate change	the planet gets hotter.
solar panel	a metal panel; you use it to collect heat from the sun.
to evaporate	to become air
to convert	to change into something different
to heat	to make hot
filtered water	clean water
silicon gel	a chemical to collect water from the air

Comprehension Questions

- 1 Who is Beth Koigi? Where is she from?
- 2 What prize did she win?
- 3 What does she do to change air into water?
- 4 What does she use?
- 5 How much filtered water can she make every day?

Reading comprehension questions

- 1 She is a scientist. She is from Kenya.
- 2 She won the Engineering Development Foundation prize.
- 3 She converts air into water.
- 4 She can make 10 kl a day.
- 5 She uses solar panels.

Answers