

WATER IN SOUTH AFRICA

South Africa is rich in many resources. It has lots of gold, diamonds and platinum. But the one resource that the country is not rich in is water. In fact, South Africa is one of the 30 driest countries in the world. This is why it is so important that we conserve the little water we have.

South Africa's average annual rainfall is less than 500 millimetres a year, compared with the world average of about 860 millimetres. The driest (western) part of the country receives less than 200 millimetres a year. This classifies South Africa as a semi-arid country. Most rain falls in the narrow belt along the eastern and southern coasts. The wettest part of the country receives an average annual rainfall of more than 2 500 millimetres. The rest of the country receives only about 27% of South Africa's total rainfall.

South Africa is prone to erratic, unpredictable extremes in the form of droughts and floods. Many dams have been built over the years to store water, protect areas from floods, and bring water from areas where there is a lot of water to areas where more water is needed. The country also has a low runoff rate (the water that does not become absorbed by the earth after, for example, a rain storm, but flows across the surface into a river or stream). On average, only some 9% of rainfall reaches the rivers as runoff.

There are few natural lakes in South Africa. We depend mainly on rivers, dams and underground water for our water supply. About 75% of the water flowing from South Africa into the sea occurs along the eastern and southern seaboard where many rivers are short. Flowing from east to west is the largest river in the country, the Orange River, which drains most of the rest of the country. We share this river with Lesotho, Botswana and Namibia.

It is estimated that South Africa's rivers receive about 50 billion cubic metres of water a year, with another six billion

cubic metres stored underground. This means there is about 1 400 m³ of water available per person this year. In South Africa, most water is used for agriculture and irrigation (52%), forestry (4%), industry (4%), and domestic use (10%). About 19% of water is protected for the survival of the environment.

Apart from the erratic rainfall and the low ratio runoff, which affects the reliability and variability of river flow, the average annual potential evaporation is higher than the rainfall in all but a few isolated areas where rainfall exceeds 1 400 millimetres a year.

