

Water shortage in South Africa

Although Australia is the driest inhabited continent on Earth, virtually all its people have access to safe fresh water. This is because Australia is a developed nation with the wealth and expertise needed to construct the facilities needed to ensure this. It is also because Australia has fewer people to share its water resources than continents such as Asia and Africa.

Of the 1.1 billion people in the world who currently do not have access to a safe fresh water supply, some 300 million of them are in Africa. (Some 500 million are in Asia.) The situation shows little sign of improving and, as the graph on the right shows, is forecast to get much worse.

Use the information in this worksheet and in the relevant reference listed below to complete the following activities.

- How many of the African countries listed in the graph had water availability levels below the vulnerable level in 1990?

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- How many of these countries are predicted to have water levels below the vulnerable level in 2025?

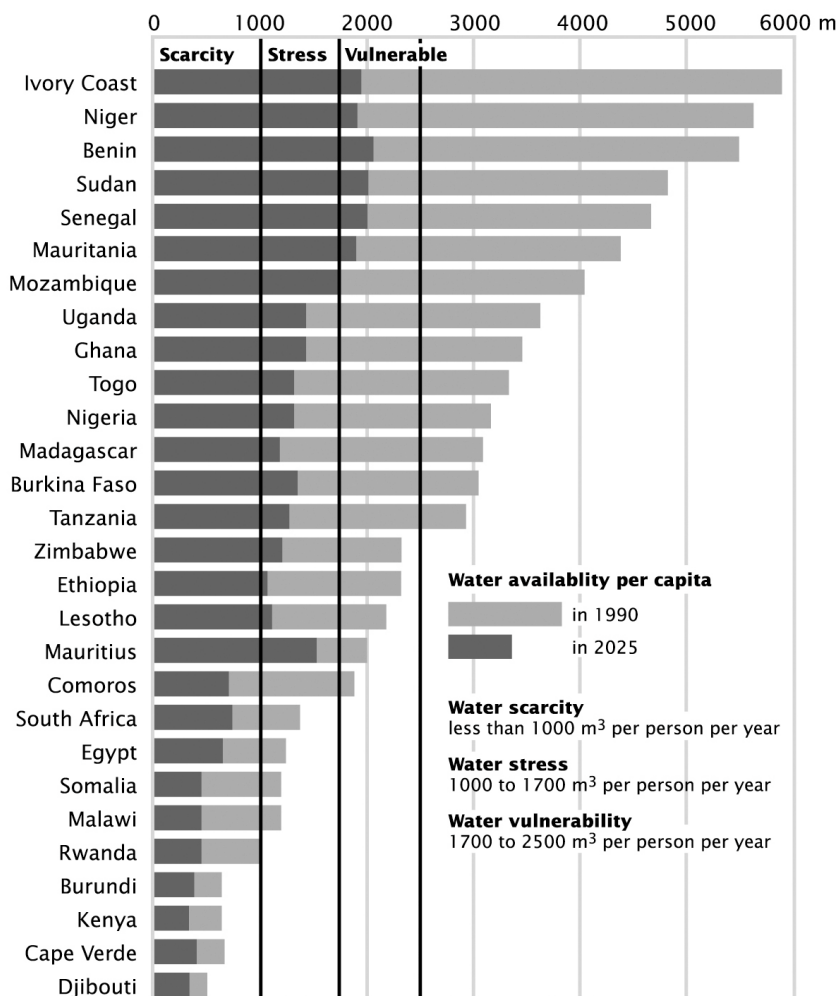
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- Why do you think this trend is occurring?

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- Each Australian currently has access to approximately 25 000 cubic metres (m^3) of water per year. How does this compare with South Africa, both in 1990 and as predicted for 2025?

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Water availability in selected African countries

Graph taken from Vital Climate Graphics Africa first published by the United Nations Environment Programme in 2002. It is also available on the following website: www.grida.no/climate/vitalafrica/english/15.htm

5. Compare water availability in South Africa (both in 1990 and in 2025) with that in Sudan, Mauritius and Kenya. What conclusions can you draw?

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6. Look at the three climographs (on the next page of this worksheet) for the three South African towns/cities of Cape Town, Kimberley and Upington.

- (a) Describe in general terms the climate of each place.

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- (b) Use an atlas to help you draw lines to connect each of these three places and the river closest to them.

Upington

Liesbeek River

Cape Town

Vaal River

Kimberley

Orange River

- (c) Which of these three centres is likely to be most dependent on river water to boost its water supplies? Explain.

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What issues are likely to be significant in a country whose people become increasingly dependent for their survival on the waters of a particular river. You might like to brainstorm this question as a class or respond to it by drawing a mind map.

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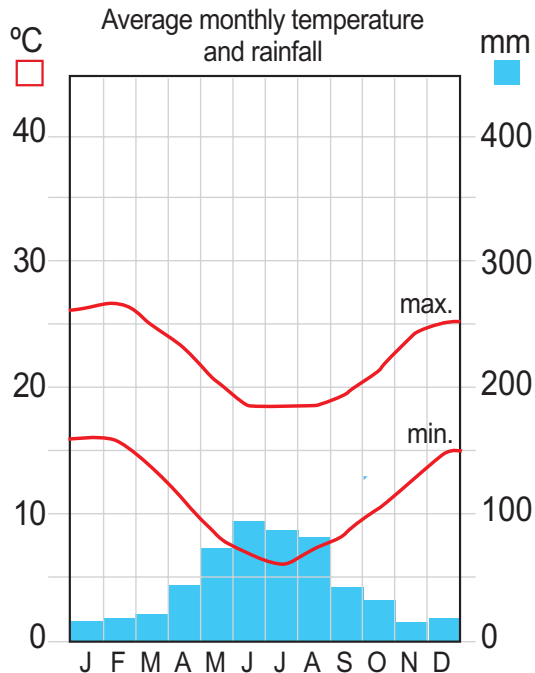
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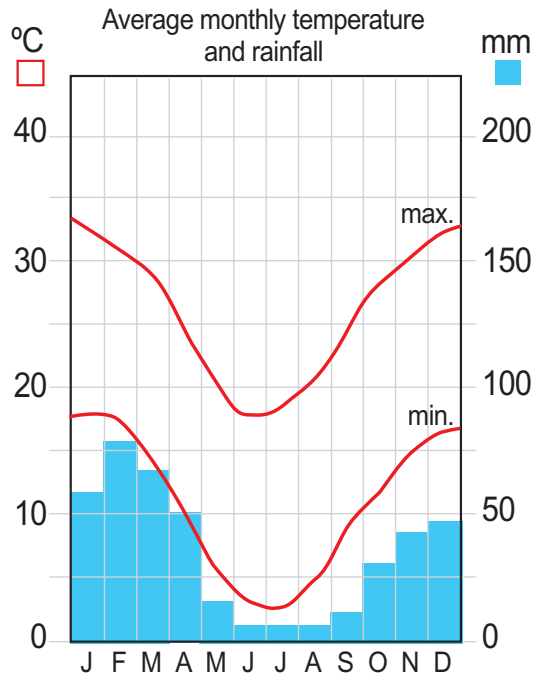
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Cape Town, South Africa



Kimberley, South Africa



Upington, South Africa

