

# Changing face OF AFRICA

All five regions in Africa have been experiencing an increase in temperature. This trend is likely to worsen in the coming decades. There has also been a decline in precipitation indicating less rainfall, which could make the continent even more food insecure

## Legends

Desertification vulnerability

Climate Change Vulnerability Index 2017

Medium risk High risk Extremely high

## Western Africa

- » Temperatures across West Africa have risen rapidly over the last 50 years. Average annual temperature has increased by about 2° C over the last century
- » By the end of the current century, temperature increase could be between 3° C and 6.4° C relative to the 1961-1990 baseline, much higher than the global average
- » Precipitation is likely to reduce marginally by around 7 per cent by the end of the 21st century
- » A significant increase in the temperature of hottest days and coolest days has been observed in some parts. While an increase in drought in the region has also been observed, there is likely to be an increase in the frequency of hot days in the future

## Central Africa

- » While observations are scarce, climate models suggest an increase of 0.6° C in the 20th century
- » Climate projections indicate that temperature could rise up to 5° C, compared to the 1960-2000 baseline values
- » Changes and projections regarding precipitation in the central African region and the Congo basin remain highly uncertain due to the lack of observational climate data
- » Although data is scarce and projections are highly uncertain, countries in the central African region are considered to be among the most vulnerable due to poor socio-economic indicators, lack of governance framework and low levels of infrastructural development

## Northern Africa

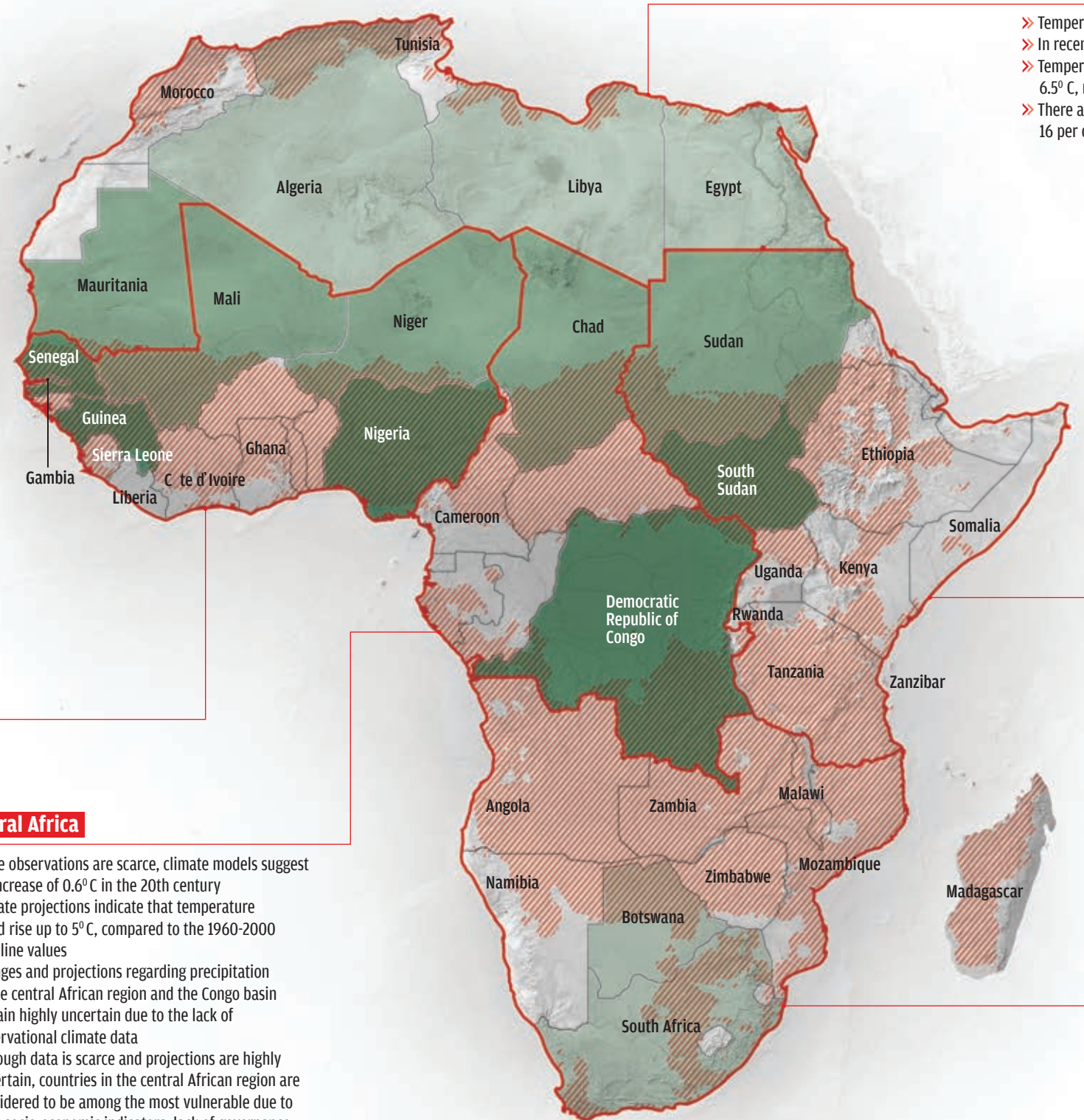
- » Temperature increases of about 2° C have been observed over the 20th century
- » In recent decades, temperature has increased by about 0.16° C per decade
- » Temperature increase by the end of the century is likely to be between 3.3° C and 6.5° C, relative to the 1961-1990 baseline, and higher than the global average
- » There are no clear trends in precipitation. However, it is likely to decline by around 16 per cent by the end of the century

## Eastern Africa

- » The equatorial and southern parts of eastern Africa have experienced a significant increase in temperature since the early 1980s. Temperature in the region increased by 1.5-2° C in the 20th century
- » Projected maximum and minimum temperatures over equatorial eastern Africa show a significant increase in the number of days warmer than 2° C above the 1981-2000 average by the middle and end of the 21st century. Temperature is likely to be between 2.7° C and 5.4° C above the 1961-1990 baseline by the end of the century
- » Precipitation in eastern Africa is highly variable, however temperature and pressure in the Indian Ocean and the Mediterranean Sea have caused a significant decline in rainfall since the mid-20th century. As a result, there has been an increase in the number of droughts

## Southern Africa

- » Southern Africa has experienced increases in temperatures of up to 2° C over the last century. The most rapid heating has been observed post-1980
- » Temperature is expected to continue to increase through the century, and is likely to be anywhere between 2.8° C to 6.3° C above the 1961-1990 baseline
- » Western parts of southern Africa, from Namibia to Angola and the Congo, received less summer rain in the second half of the 20th century, while other southern countries like Botswana, Zimbabwe and western parts of South Africa have also had modest decreases in rainfall



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Data source: Assessment Report 4, IPCC, and Climate Change Scenarios for the Congo Basin

by Van Garderen, Ludwig F

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