

State of the Climate 2020 Africa

State of the Climate in Africa 2020 is the second in the series on the continent, following the first report in 2019. The report is a collaborative effort involving the World Meteorological Organization, experts from Africa, other United Nations agencies and the African Union, as well as experts from partner international scientific and technical institutions.

Lead author: Andre Kamga

Climate Indicators



Temperature

Near-surface (2m) air temperature averaged across Africa in 2020 was between 0.45°C and 0.86°C above the 1981–2010 average, ranking 2020 between the third and eighth warmest year on record.



Glacier Mass Balance

If current retreat rates prevail, the African mountains will be deglaciated by the 2040s and Mt Kenya likely even a decade earlier--making it among the first entire mountain ranges to lose their glaciers due to anthropogenic climate change.



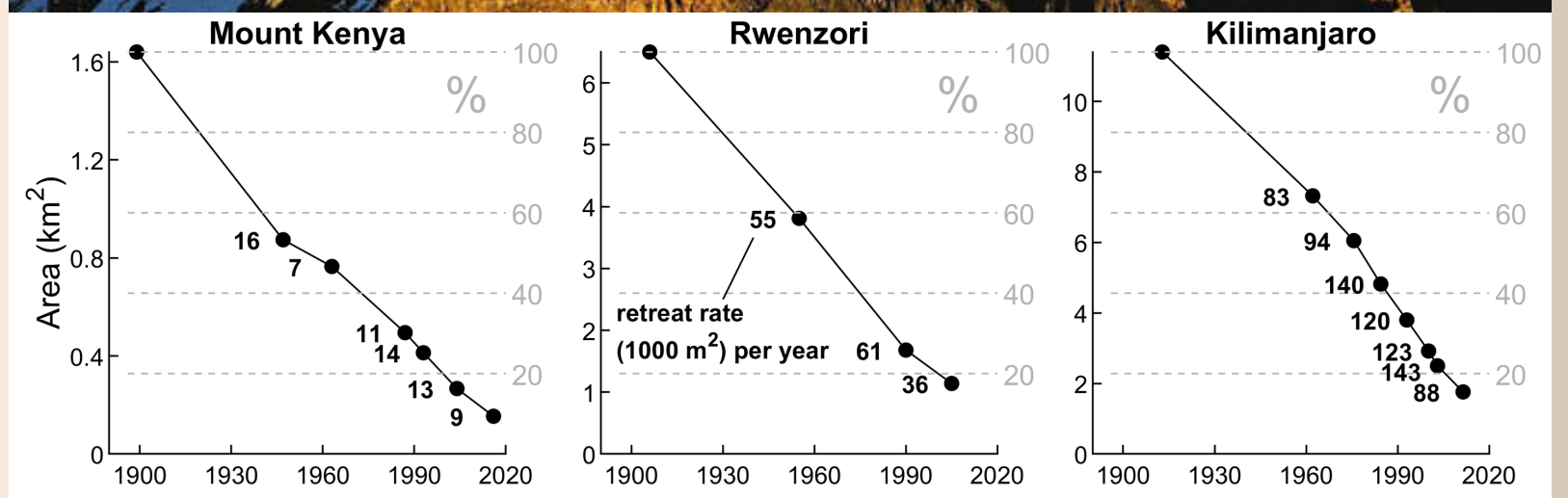
Sea Level Rise

Regional trends around the African continent show that the rates of sea level rise on the Atlantic side of Africa are uniform and close to the global average, and slightly higher than average on the Indian ocean side.



Sea Surface Temperature

Sea surface temperature over the equatorial central Pacific region was close to El Niño thresholds in early 2020 but reached moderate La Niña conditions in October 2020, conditions typically associated with above-average summer precipitation over the Sahel.



Extreme Events



TROPICAL CYCLONES

Tropical Cyclone Gati became the strongest storm ever to hit Somalia. The storm brought heavy rain to the region, with at least nine people killed, tens of thousands displaced and thousands of properties destroyed.



HEAVY PRECIPITATION

Many parts of the continent experienced heavy rainfall, causing the bursting of the Congo River and the Mayo Palar. Other lakes and rivers reached record high levels, including Lake Victoria and the Niger River at Niamey and the Blue Nile at Khartoum.



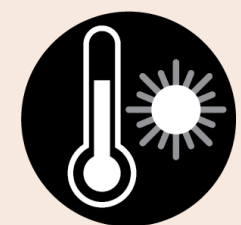
FLOODS

Flooding was extensive across many parts of East Africa, with the Sudan and Kenya the worst affected: 285 deaths were reported in Kenya, and 155 deaths and over 800 000 people affected were recorded in the Sudan.



DROUGHT

Long-term drought continued to persist in parts of Southern Africa, particularly the Northern and Eastern Cape Provinces. In Morocco, dry conditions persisted and the rainy season was one of the four driest years since 1981.



HEAT WAVES

Anomalies of monthly mean temperature reached +3.5°C in Algeria and +4.0 °C in Morocco. In Tunisia, 2020 was the third hottest year since 1950, after 2016 and 2014, with an average temperature of 20.2 °C and a positive anomaly of 0.9 °C.

Impacts

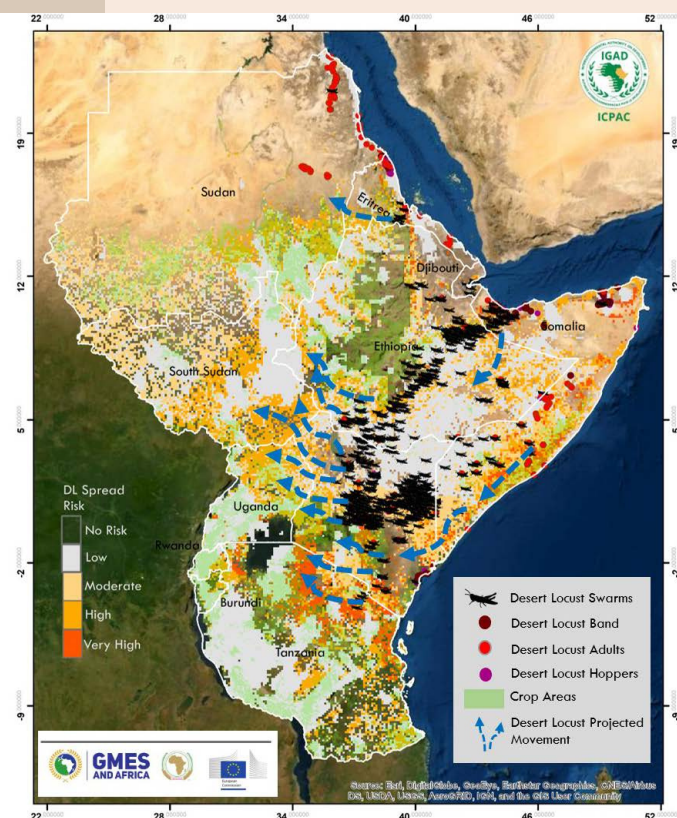
FOOD SECURITY & SOCIOECONOMIC DEVELOPMENT

Africa is exceptionally vulnerable to climate variability and change compared with many other regions. Almost half of the population in sub-Saharan Africa live below the poverty line and depend on weather-sensitive activities, such as rain-fed agriculture, herding and fishing, for their livelihoods.

In 2020, approximately 98 million people suffered from acute food insecurity and needed humanitarian assistance in Africa, almost a 40% increase from 2019.

DISPLACEMENT

Approximately 12% of all new displacements worldwide occurred in the East and Horn of Africa regions, with over 1.2 million new disaster-related displacements. An estimated 1.25 million people were displaced in Burkina Faso, Mali and Niger, countries already facing conflict and food insecurity, as well as forced internal and cross-border population movements.



Climate Policy

Rapid implementation of African adaptation strategies will spur economic development and generate more jobs in support of economic recovery from the COVID-19 pandemic. Overall, Africa will need investments of over US\$ 3 trillion in mitigation and adaptation by 2030 to implement its NDCs, requiring significant, accessible and predictable inflows of conditional finance. Pursuing the common priorities identified by the African Union Green Recovery Action Plan would facilitate the achievement of the continent's sustainable and green recovery from the pandemic while also enabling effective climate action.