

# Photo essay: Somalia's Changing Climate

Artwork Courtesy of Aisha Barkhad



The photographs presented in this photo essay were captured by Aisha Barkhad in Borama, Awdal region of Somaliland, Somalia in October of 2020 with the Minolta XG-1 (1979) camera and Kodak Gold 200 Speed 35mm film.

Despite contributing only 0.08% towards global emissions, the Federal Republic of Somalia, an equatorial country located in the Horn of Africa, is ranked among the most climate-vulnerable countries in the world today [1].

Typically, Somalia's climate is influenced by the El Niño Southern Oscillation, which causes flooding and a rise in rainfall in El Niño years, and droughts in La Niña years [2]. The country's climate is also contingent upon the Inter-Tropical Convergence Zone and the fluctuating sea surface temperatures of the Indian Ocean [3]. Having experienced prolonged and recurring droughts, flash floods, erratic periods of rainfall, cyclones, and dust storms for decades, the frequency and magnitude, as well as the social, economic, and health-related ramifications of such capricious environmental shifts have changed over the years in Somalia [4].

After severe droughts in 2007, 2011, 2015, and 2016, delayed rains resulted in another prolonged period of drought in 2019, which was followed by intense rainfall and flooding, displacing more than 370,000 people [5]. Coupled with the COVID-19 pandemic in 2020, Somalia saw locust swarms, prolonged and returning droughts, and deluge. More recently, in 2021, between January and August alone, drought displaced 90,000 people, while floods displaced another 59,000 people [6]. Climate change continued to drive locust movement, presenting Somalia with the largest swarm of locusts in 25 years, resulting in a loss of vegetation and food sources, and jeopardizing the main economic sectors revolving around agriculture and livestock farming, which account for 40% of Somalia's Gross Domestic Product [7].

Further, poor urban planning, inadequate public infrastructure, underinvested healthcare systems, and rising and on-going conflict in Somalia have led to growing inequalities and vulnerabilities that are putting more people at risk of severe climate impacts with fewer resources for resilience, adaptation, and mitigation [8].

In the coming years, climate shocks will exacerbate the already high levels of poverty across the country wherein, today, 69% of Somalis live below the poverty line [9].

With one of the world's highest average annual temperatures, Somalia is growing increasingly warm and climate models are predicting up to a 4.3°C increase in mean temperature by the end of the century [10]. Simultaneously, precipitation is projected to increase by 3% by 2050, and rainfall is expected to be less regular and more intense, causing flooding and soil erosion [11]. Importantly, rising temperatures and frequency of precipitation will increase the distribution and prevalence of some of the world's most notorious vector-borne infectious diseases, including malaria. As breeding sites for mosquitoes that transmit malaria and other pathogens become more suitable and expand to reach formerly disease-free regions, vector-borne infectious diseases will afflict new immunologically naïve and vulnerable populations [12].

A degree of culpability may be assigned to climate change for compromising Somalia's fragile governance, services, and peace operations in extraordinary and significant ways. This fragility, which emerged from the amalgam of extreme poverty, deprived health systems, and a changing climate serves to demonstrate a uniquely tragic yet substantial global health challenge that is nowhere better represented than in Somalia.

## REFERENCES

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