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Climate Change and Africa's Enduring Instability

Arid conditions in the Sahel and large-scale flooding in East Africa will help sustain Africa's reputation for socio-political volatility and state failure. To manage the chaos in the worst-affected regions, argues Fawzia Sheikh, greater international participation will be necessary to boost the Continent's resiliency.

By Fawzia Sheikh for ISN

Africa has long been viewed through the lens of environmental disaster. Ethiopia's drought in the 1980s, for example, enlightened many Westerners about the consequences of a climate-sensitive continent. Yet projections indicate even more arduous times ahead as the planet warms and spurs a race for scarce resources. The situation raises questions about the need to strengthen susceptible states now, rather than postpone action until problems spiral out of control.

There is one caveat, experts swiftly point out: A shifting climate is what the security community describes as a threat multiplier. Most serious scholars specializing in the subject are careful not to assert that climate change causes conflict, noted Francesco Femia of the Center for Climate & Security, but rather that it intensifies existing political, economic and social factors that may erupt into conflict or violence. The likelihood of security-related problems following major climatic changes is "certainly higher in Africa", due to the number of vulnerable countries experiencing tension between groups, he said.

The nature of environmental "stresses" facing countries is contingent upon their geography but often is manifested in scarce rainfall or a deluge, according to Femia's colleague Caitlin Werrell. After an extended drought, a sudden downpour prevents the ground from absorbing water and results in flooding, Werrell said, adding that the arrival of early or late rains hits the agrarian cycle.

Timing is critical in this corner of the world. In sub-Saharan Africa, where [subsistence agriculture dominates](#), 95 percent of farmed land depends on rainfall because of limited water storage capacity. An altered climate risks aggravating current water challenges like drought, shortages and floods and makes it critical to develop solid water management techniques, according to the Pentagon. The upshot of such environmental decline will be curtailed food and water sources prompting population movements that escalate the chances of clashes with other groups in struggling countries.

The statistics outlining the briskly changing climate, however, are already dramatic. For instance, East Africa experienced [seven episodes of flooding](#) each year between 2000 and 2006, a rise from less

than one event per year in the 1980s. Moreover, drought in the Greater Horn of Africa region has increased from once in six years to once in three years. And extremely arid conditions in North Africa have been the norm for five to six years every decade, compared to one drought every 10 years typical at the beginning of the twentieth century.

Charting potential weakness

By mid-century, the Sahel belt will bear the brunt of this kind of weather, Joshua Busby of the University of Texas-Austin told the ISN. The zone stretches from western to eastern Africa and separates the Arab states in the north from their sub-Saharan counterparts in the south. Busby and a team of academic researchers created an online mapping tool to gauge vulnerability throughout the continent based on physical, socio-economic, demographic and political insecurities.

What they found was that Somalia is a problematic state due to physical exposure to climate hazards such as droughts, floods, fires and cyclones. The country's key hindrances also include high population densities and low household and community resilience because people lack access to services, education and health care, courtesy of "a government that can't provide for them in times of need", he added. Last year, the war-afflicted country saw its [worst drought in 60 years](#), a situation now labeled an emergency situation, short of a famine, implicating 2.5 million Somalis.

According to climate models, threatened areas also include South Sudan, Niger, parts of Mali, northern Democratic Republic of the Congo, northern Nigeria, sections of Mozambique and Malawi, and pockets of West Africa along the coast such as Guinea. While the northernmost states of the continent and South Africa (including a few of the latter's neighbors) will face climatic problems, Busby argued these regions may have "more capability to respond to them".

The University of Texas academic's work analyzes whether certain ethnic groups in these fragile, environmentally at-risk nations may be denied access to services following a climate-related disaster, as opposed to security professionals who often focus on actual conflict dynamics. In some instances, Busby said, citizens may be actively politically discriminated against because of their ethnicity or ignored. "In either case, governments may not expend services to them in times of need," he noted, adding that the literature is inconclusive about whether this treatment conceivably "triggers some mobilization on the part of affected populations to try to express grievances violently". In some cases, he added, people "hunker down" following disaster and channel energies into survival, not violence.

Another question not yet fully explored is the relationship between crop failures in one part of the world and a food importing territory like Africa. In particular, Busby questioned the effect of drought in the U.S. Midwest on food price spikes in the developing world and the likelihood of subsequent political activity there. The Arab Spring is partially attributed to increased food costs stemming back to drought conditions in Russia and China, according to Werrell.

Sliding from peace to war

Rather than groundless theories, quite a bit of evidence exists of the connection between a changing climate and conflict, particularly at the sub-state level between herders and agricultural communities, Femia told the ISN. Darfur is typically cited as the archetype. The 2003 genocide was a complex affair in which Sudanese President Omar al-Bashir was held responsible for exploiting land-related tensions between Arab and African communities and nomadic (cattle herders) and sedentary (agricultural) societies, in addition to tapping pro-government Arab Janjaweed militias to attack non-Arab villagers in Darfur, he said. The conflict was not triggered by environmental pressure, he noted, but regional drought was a further catalyst.

In similar scenarios of violence, security specialists have determined links between climate change and armed conflict among pastoralists -- known as [range wars](#) -- over rights to water and grazing land for cattle in East Africa. This swath of the continent is especially susceptible to drought and livestock diseases associated with a transforming climate.

Moreover, one ground-breaking study published last year proposed that [climate cycles heighten the risk of civil war](#). By studying the warming El Niño weather phenomenon in the tropical areas of South America, Africa and the Asia-Pacific region between 1950 and 2004, Princeton University researchers discovered there is double the likelihood of armed conflict during hotter years.

International implications

Around the world, fears about the security implications of global warming have taken root. Last summer, the UN mulled the idea of a [so-called 'green helmets' force](#) to contend with the potential mad scramble for dwindling natural resources. Femia and Werrell, of the Center for Climate & Security, also point to the United Kingdom's issuing of several assessments on the subject as well as the instituting of a climate and security envoy. Additionally, they say both the UK and Germany have raised the matter during UN Security Council meetings, and that the European Union recognizes the climate change securitization framework.

By far, the "most robust interest" has emanated from the U.S., UK and Canadian governments, said Busby, of the University of Texas. Washington is especially focused on states like Sudan and South Sudan, whose relationship is fraught with contention, and the lingering international crisis of Somalia, he added. Protracted conflict in the region and terrorism taking hold in the ungoverned spaces of Somalia, nearby to troubled parts of the Middle East, are lingering worries. Essentially, the prospects of state failure and weakened inter-state relationships trouble Western policymakers. [Water wars](#) may become one manifestation of state-on-state conflict. While it is argued that water tensions typically inspire cooperation between countries, competition for the increasingly precious commodity may eventually escalate to the use of water as a weapon by upstream states against their regional neighbours.

On the ground, climate change in the developing world will put an "increasing strain" on U.S. humanitarian response resources and, by extension, on security institutions to offer support, David Waskow of Oxfam America argued. Augmenting preparedness and disaster-risk reduction in overseas communities will lay the foundation for "the resilience to be there in a more fundamental, underlying way," Waskow noted, rather than for international players to come in "at the last minute in an emergency". Oxfam America [recommends](#) improved cross-departmental planning within the U.S. government, including those associated with security, development and climate, in order to assess the probable environmental changes and repercussions.

Nurturing homegrown capacity

In Africa's case, the global community should prioritize teaching the local population how to enhance technologies and expertise related to assessing and siphoning resources from its water basins instead of relying on erratic rainfall. While private companies such as Coca-Cola operate a [joint program](#) with NGOs like the World Wildlife Fund and Nature Conservancy to address climate-related issues concerning clean water, other industry players with a heavy water footprint need to be engaged in the education of local water and agricultural specialists.

Sub-Saharan Africa will not be the worst-affected by environmental changes -- [climate projections](#) show that the North African-Mediterranean strip holds this distinction -- but African states lack the broader tools to contend with future catastrophe. As it may be difficult to prevent future global

warming, bolstering governments on the continent to provide a safety net for citizens, nurturing stable political and social institutions and boosting women's reproductive rights in order to limit rapid population growth are key.

In an age of international austerity, such a wish list may be too challenging to fulfill. Yet unless there is greater traction on this issue, with more countries meaningfully involved, those that manage to skirt the most dramatic impacts of a shifting climate will end up rushing to Africa's rescue in one way or another – including playing host to global warming migrants who suddenly appear on their doorsteps.

For additional reading on this topic please see:

[African Developments: Competing Institutional Arrangements for Climate Policy](#)
[Links Between Climate Change, Conflict and Governance in Africa](#)
[Climate Change: Drivers of Insecurity and the Global South](#)

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