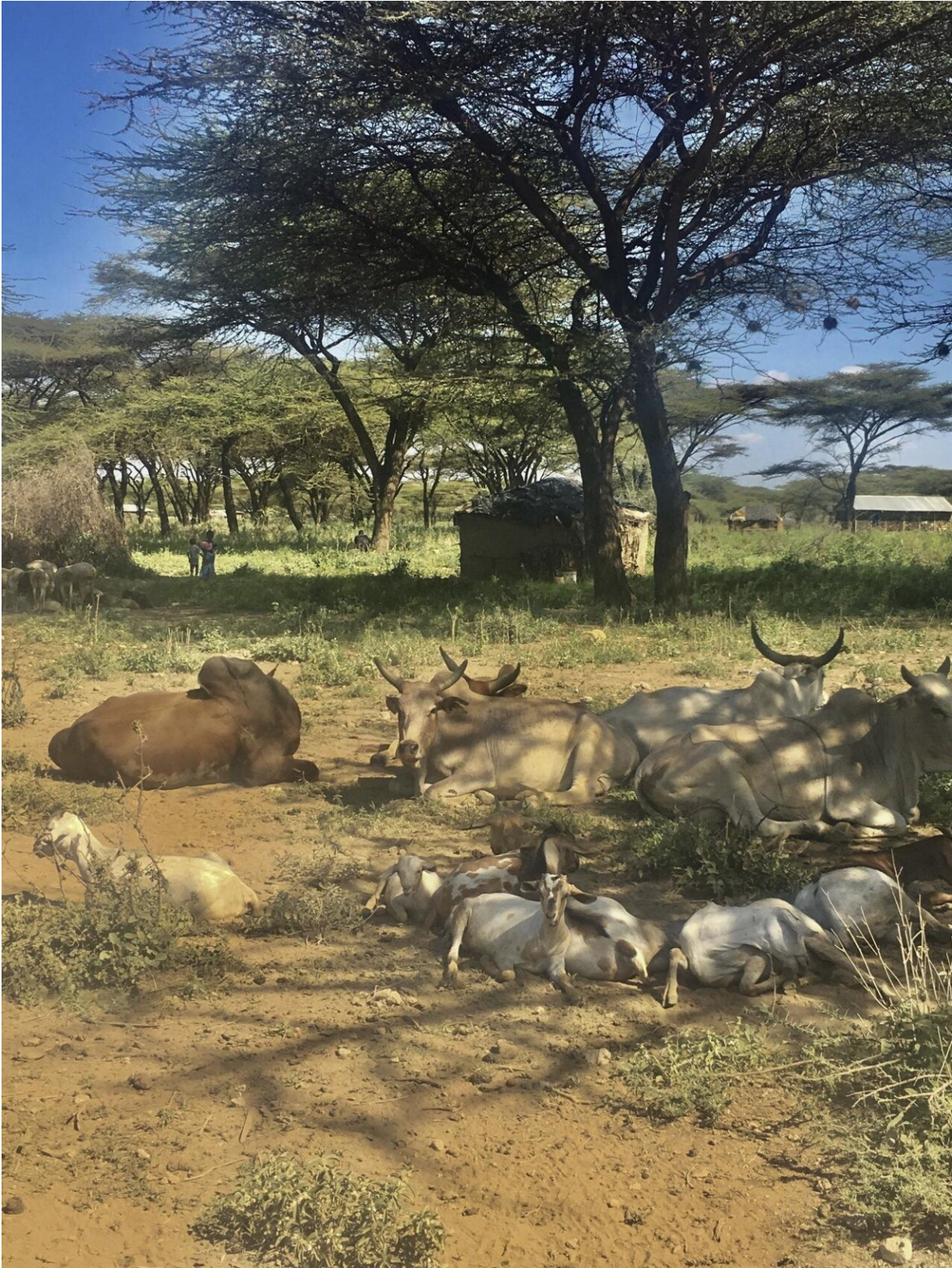


For East Africa's pastoralists, climate change already fueling violence, hunger

May 11 2022, by Daniel Strain



Cows and goats lay out in the sun in a village in Isiolo County, Kenya. Credit: Sarah Posner

In 2008 and 2009, a severe drought swept through much of Kenya and Tanzania. Nomadic herders, or pastoralists, such as the Maasai people in Tanzania, pushed south in search of greener expanses, bringing tens of thousands of cattle with them.

What happened next was largely unprecedented: Locals from a region of Tanzania called Manyara, who were also Maasai, evicted the newcomers, beating some so badly they ended up in the hospital.

Terrence McCabe, professor of anthropology at CU Boulder, has lived and worked with pastoralist groups in the region for more than 30 years. For him, that sudden and shocking violence was a symbol of a changing East Africa—a warning sign that people such as the Maasai may not be able to move across the landscape as freely as they used to. Survey results from the last two years in central Kenya show that life for pastoralist peoples may be getting even worse. Herders are struggling to feed their families in the midst of a pandemic, a historic locust invasion and drought after drought.

"Traditionally, pastoralists have been able to deal with uncertainty in their environment through mobility," said McCabe. "The less mobile you are, the less able you are to cope with a changing climate."

What became known as the "Manyara drought" also might look like a textbook case of something scientists have worried about for years: Could warming temperatures around the world push already-[vulnerable people](#) toward armed conflict?

East Africa is undoubtedly getting hotter. [A report from the World Meteorological Organization](#), for example, suggests Mount Kenya, Africa's second tallest peak at 17,000 feet, might lose all of its glaciers to melting by the 2030s. Those soaring heat waves will likely deliver more of the kinds of drought that forced the Maasai from their homes in 2008.

But recent research in Kenya by McCabe and other CU Boulder scientists suggests the links between [climate change](#) and violence aren't so simple.

A warming climate can increase the risk of bloodshed in arid regions, the researchers have found. But other factors like poverty, [food insecurity](#) and oppressive governments may play a bigger role in fueling violent clashes. The team's findings suggest that the fate of people such as the Maasai likely hinges on tackling these challenges together.

"We don't think climate change has been a major factor in the risk of violence up until now," said John O'Loughlin, a professor of geography who has collaborated with McCabe for nearly a decade. "But we're really uncertain of the future."

Big data meets local insight

O'Loughlin has spent his career digging into some of the world's most intractable conflicts—a pursuit that has taken him from the streets of Kyiv to the grasslands of Kenya's Isiolo County.

In a [paper](#) published in the *Proceedings of the National Academy of Sciences* in 2014, he and his colleagues pored through a massive dataset of violent events in Africa. They captured everything from crime in cities such as Nairobi to civil wars engulfing entire nations from 1980 to 2012.

The team found in sub-Saharan Africa, warming temperatures did seem to be associated with an increased risk of violence—the connection was small, but it was there.

O'Loughlin was intrigued by the results but not quite satisfied.

"Those kinds of [big-data](#) studies can show you statistical relationships," he said, "but they can't get into why people engage in violence or seek other options."

He decided to join forces with McCabe.

The anthropologist, who joined CU Boulder in 1989, remembers being glued to his TV set as a child. He liked watching nature programs, especially ones showing Africa, with lions sunning themselves on rocks and herds of wildebeest stampeding across the terrain.

"My mother could remember me watching these wildlife shows and saying, 'I want to work there,'" McCabe said.

He got his chance as a young researcher in the remote rangelands of northern Kenya in the 1980s. There, he discovered an East Africa very different than it looked on TV.

It was full of people—the Maasai, yes, but also diverse groups such as the Turkana and their traditional enemies, the Samburu. Many depend on cows for their survival, raising herds for meat and milk and crossing over miles of territory to keep them fed.

From time to time, some of these communities also turn outlaw.

Sarah Posner, a graduate student working with O'Loughlin, remembers driving into a remote Turkana village in central Kenya in 2019. The

locals were unexpectedly on edge: Just the night before, members of another ethnic group had snuck over a nearby mountain range in the dead of night, injuring several herders and making off with nearly 100 cattle.

"People were pretty frightened and didn't want to come out of their houses," Posner said.

But could climate change make that kind of activity more common? To get at this answer on a local level, O'Loughlin and McCabe worked together to recruit a team of Kenyan researchers. They surveyed people across the country from its Indian Ocean coastline to Lake Victoria to the west. Jaroslav Tir, a professor of political science at CU Boulder, also contributed to the research.

They reported their results in a series of studies. The team discovered that people who had fled their homes to escape droughts, including some pastoralists, were [more than three times more likely](#) to be victims of violence than Kenyans who had stayed put. But it was complicated: In many pastoralist communities, traditional elders often meet with leaders from nearby communities, even sworn enemies, to hash out their differences. Those kinds of leaders [seem to significantly reduce the risk](#) that disagreements will devolve into bloodshed, even in the midst of severe droughts—decreasing the support for violence among Kenyans by as much as 76%.

"You can have the same environmental circumstances affect two different communities in basically the same way," McCabe said. "But in one community, it leads to interethnic violence, and in the other, it doesn't for a wide range of reasons."

Changing landscape

He worries, however, that East Africa's pastoralists may be losing their ability to adapt to the increasingly rapid changes around them.

The Tanzanian government, for example, recently announced plans to evict tens of thousands of Maasai from their homes to expand Ngorongoro Conservation Area—a popular site for tourists on safari and trophy hunters. The move will further squeeze pastoralists out of the lands where they have herded cattle for centuries. At the same time, many young people in these communities have begun to abandon cows entirely. Instead, they've turned to cultivating farms, or "shambas," of crops such as maize, which are even more vulnerable to the whims of rain cycles.

Climate change on its own may not be able to drive people to violence, O'Loughlin said, but it could be the final straw for communities barely hanging on.

"When people live on the margins already, it doesn't take much to push them over the edge to take desperate measures," he said.

In the end, O'Loughlin noted climate change is all about one thing: change.

To capture that constant, he and his colleagues launched a second survey in 2020. They returned to Kenya and spoke with more than 500 people from Isiolo County, a mostly rural area, home to diverse ethnic groups from Turkana herders to Somali Muslims. The team called back those Kenyans on their cellphones several a times a year through April 2022—tracking how the region's weather and living conditions in households shifted over time. The survey was funded by a seed grant from the Research & Innovation Office at CU Boulder.

Posner, who was part of the survey team, said that the initial results

reveal that life is already getting harder for these traditional pastoralists. Roughly 69% of respondents reported the seasons had changed "a lot" in the past five years. A plurality, or 37%, said those changes had made the living conditions in their households worse. Pastoralist peoples were among those who were most likely to report not having enough food to eat.

She said the results show why it's so urgent for researchers to talk to people such as East Africa's pastoralists about their daily lives. These same communities, she said, are the ones who are feeling the first and worst effects of a changing planet.

"Climate change is becoming extreme in Kenya, and it is [becoming] more and more relevant to those who are on the brink of complete destitution," she said. "It's hard to be hopeful these days."

Provided by University of Colorado at Boulder

Citation: For East Africa's pastoralists, climate change already fueling violence, hunger (2022, May 11) retrieved 22 June 2024 from <https://phys.org/news/2022-05-east-africa-pastoralists-climate-fueling.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.