

Global Views

COVID-19

Opinion: Protecting East Africa's food supply during COVID-19

Swarms of locusts could wreak havoc on the region's food supply at a time when shutdowns and market disruptions are also threatening to create a food crisis. The Gates Foundation's Rodger Voorhies takes a look at the interventions needed.

By [Rodger Voorhies](#) // 22 April 2020



A man surrounded by a swarm of desert locusts at a ranch in Laikipia, Kenya. Photo by: REUTERS / Baz Ratner

While the world grapples with the [COVID-19](#) pandemic and its devastating impact on people's health and livelihoods, countries in East Africa are facing an additional threat: swarms of desert locusts, which are devouring the crops and pastures that millions

of people depend on for food.

This situation has the potential to wreak havoc on the region's food supply, at a time when shutdowns and market disruptions due to COVID-19 are also threatening to create [a food crisis](#). Neither the virus nor the locust respect national borders, and either one could, on its own, cause people to go hungry. Together, they could spell disaster for millions in East Africa and neighboring regions.

Without an immediate and aggressive large-scale intervention ... millions of people in East Africa could be left without food and income while also having to fend off a dangerous virus.

—
In one day, a single swarm of locusts can consume enough food to feed [35,000 people](#). The infestation now underway is the largest the region has seen in decades. Desert locusts can reproduce rapidly and migrate long distances — up to 150 kilometers a day — destroying farms and pastures along the way.

Likely caused by an [unusual stretch of heavy rains](#) last autumn, the current infestation could lead to a [second wave](#) in the coming months, when the eggs laid by the first wave of locusts hatch. That will happen soon in Kenya, Ethiopia, and Somalia — the countries most acutely affected so far — which are already seeing an increase in the swarms due to the widespread rains that fell in late March. There could be 400 times more locusts by June.

Funding gaps could lead to locust devastation in East Africa

Massive swarms of desert locusts have invaded Ethiopia, Kenya, Somalia, Tanzania, and Uganda. Can responders get enough funds to kill off the insects before the planting season starts in March?

Normally, the desert locust inhabits the relatively arid regions of around 30 countries in Africa, the Middle East, and southwest Asia. But if this upsurge isn't controlled, they could more than double their range and invade up to 60 countries on three continents.

The good news is that we know how to halt this potential

disaster: by stopping the locusts now, before they breed or migrate again. The [United Nations Food and Agriculture Organization](#) is supporting the governments of Ethiopia, Kenya, and Somalia, as well as others in the region, in a response that involves using planes to conduct [aerial spraying](#) and teams of hundreds of people on the ground, surveying the land and spraying locusts by vehicle or by hand. With support from [FAO](#) and other partners, countries in the region have already tackled hundreds of swarms, and are currently treating 143,000 hectares of land.

ADVERTISEMENT



FAO believes that the job can be done with [\\$153 million](#). But while many countries have already stepped up, more is needed. The window of opportunity to mount an effective intervention is closing, and we must act quickly to avoid fighting a two-front battle — the locust infestation and COVID-19 — to protect food supplies in a region already vulnerable to food-related challenges.

Multiple crises converge at once

The locust threat is unfolding at the height of the “long rains” season. Running from March to May, the long rains power a large part of the East African economy. Most people in the region depend on agriculture for both food and income. Farmers rely on the long rains to nourish their fields of maize, beans, potatoes, and other crops, and to provide vegetation for the goats, sheep, cattle, and camels that are often a family’s most valuable assets.

For farmers in East Africa, the shutdowns initiated to slow transmission of COVID-19 could make it difficult to find seeds and fertilizer and transport their harvest to markets, [as farmers in China have encountered](#). East African countries also depend on food imports from places like Europe and North America to meet consumer demand.

Unlike wealthy countries, these nations don't have the resources to blunt the impact of prolonged disruptions in the flow of goods, labor, and services. Without an immediate and aggressive large-scale intervention to combat both the locust infestation and disruptions to the global food trade, millions of people in East Africa could be left without food and income while also having to fend off a dangerous virus.

Most governments in East Africa recognize the need to prioritize locust-control operations and are exempting them from COVID-19 lockdown and movement restrictions so those critical workers can continue surveying and treating locust infestations. That's a critical first step. But countries around the world also need to avoid unnecessary border closures and trade restrictions that disrupt global supply lines both for food and the equipment needed to treat locusts.

A holistic approach to protecting lives

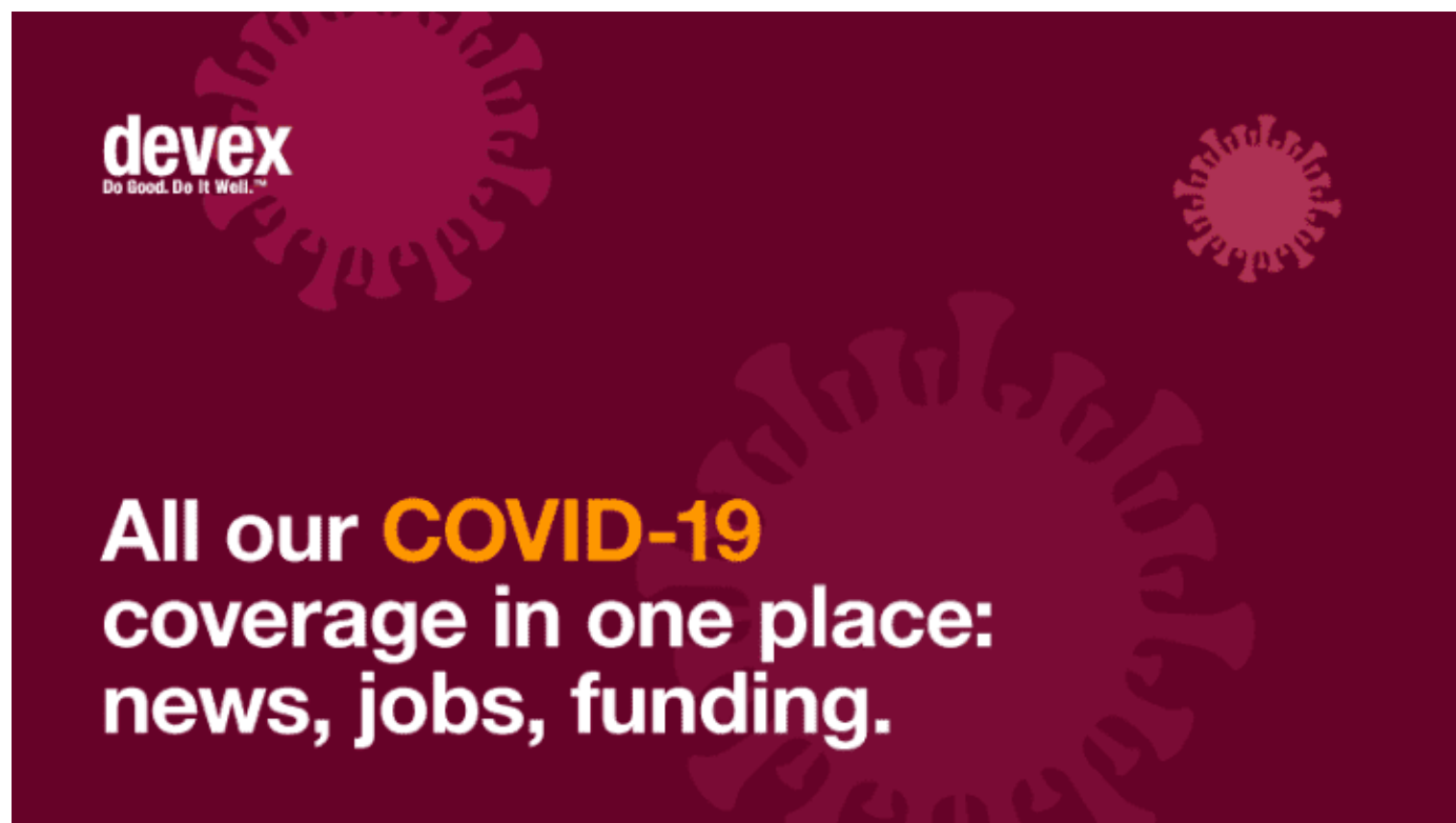
One of the strategies being used to limit COVID-19 infections in the region is disease surveillance. This type of surveillance also can be an effective way to anticipate and target impending locust outbreaks. NASA scientists are already working on an approach that [uses satellite imagery](#) to identify locust breeding sites that can be eliminated before the insects hatch and spread.

Locusts lay their eggs in warm, moist, sandy soil. Until now the best available tools for tracking and forecasting locust movement relied on rainfall as a proxy for soil moisture to predict where they might breed in large numbers. A NASA/[USAID](#) initiative known as SERVIR is helping FAO integrate high-resolution soil moisture data from land surface modeling, which can estimate soil moisture at egg-laying depth, into maps with much more detail on soil type. Combining locust observations with soil type and moisture data can help identify optimal areas for egg-laying and target control measures early.

Implementing this technology and taking decisive action with the intelligence it produces will require commitment from FAO, and the benefits of using such technology enable us to respond more efficiently now and avoid locust and other pest crises in the future.

In short, it is essential to scale up the resources to meet the need, address the barriers, and realize the innovations in surveillance that are needed to address the locust infestation. Protecting crops and livestock will save lives and provide urgently needed income for farming households, putting the region on a much firmer footing for fighting the pandemic in the difficult days ahead.

Visit our dedicated COVID-19 page for news, job opportunities, and funding insights.



devex
Do Good. Do It Well.™

All our **COVID-19** coverage in one place:
news, jobs, funding.

Agriculture & Rural Development

Innovation & ICT

Global Health

Gates Foundation

Eastern Africa

The views in this opinion piece do not necessarily reflect Devex's editorial views.

About the author



Rodger Voorhies

Rodger Voorhies is the president of the Bill & Melinda Gates Foundation's Global Growth & Opportunity Division, where he oversees agricultural development, financial services for the poor, gender, and WASH programs. Before joining the foundation, he was CEO of the Opportunity Bank Serbia and Opportunity Bank Malawi.