K-State joins with Georgia to help improve farming conditions in Madagascar

USAID funds $2.5M project to address food security

MANHATTAN, Kan. – The U.S. Agency for International Development has awarded $2.5 million to support work by Kansas State University and the University of Georgia aimed at helping farmers in Madagascar improve their growing conditions in the face of recent climate changes.

The funds will pair Georgia’s Feed the Future Innovation Lab for Peanut with K-State’s Global Collaboration on Sorghum and Millet, officials said.

“Feed the Future Innovation Labs are driving novel solutions to the increasingly complex challenges we face today,” said Dina Esposito, Feed the Future deputy coordinator and USAID’s assistant to the Administrator for Resilience, Environment, and Food Security. “USAID is pleased to advance the Peanut Innovation Lab’s critical contribution to support small-scale farmers and their communities.”

“We will be working with already established relationships in Madagascar, including farmer cooperatives and networks where these three crops will play a key role in a crop rotation and intercropping techniques to support more sustainable agro-ecological production,” said Nat Bascom, director of engagement and leadership for K-State’s Global Collaboration on Sorghum and Millet.

Bascom notes that the project’s goal is to establish a “resilient rotation of peanut, sorghum and millet that will improve soil conditions, make farms more productive, feed people and protect the natural environment.”

“Madagascar is a unique place but faces many of the same challenges that we see in the other African countries where the peanut innovation lab works,” said Dave Hoisington, director of the University of Georgia’s Innovation Lab for Peanut. “USAID has seen an opportunity to use the expertise and systems that we have built to improve the food system in Madagascar.”

He adds: “A stronger food system not only benefits farmers and consumers, it also can help to preserve the forests that are home to plants and animals that are unique to the island.”
Madagascar, located off the southeast coast of Africa, is particularly vulnerable to climate change as the region has experienced more frequent cyclones, rising seas and additional rain that has eroded coastal areas. Meanwhile, prolonged drought and desertification plagues the southern part of the island nation.

In addition to those climate challenges, Madagascar is a developing country that at times has struggled to feed its own people, while protecting the most biodiverse ecology in the world. There are more unique species of plants and animals living in Madagascar than on the rest of the African continent, and more than 80% of its species cannot be found anywhere else on Earth.

But small-holder farmers in Madagascar, similar to small-holder farmers across much of sub-Saharan Africa, can’t afford machinery, fertilizer, irrigation or pesticides that are available to growers in the U.S. Instead, farmers with poor soils resort to slash-and-burn agriculture, which destroys habitat and compounds the negative effects of climate change.

Peanut, sorghum and pearl millet are part of the local cuisine in much of Africa and work together to create a resilient rotation for farmers, and nutritious diet for consumers.

To get those crops in the field and then to market, Georgia and K-State will work with colleagues in Madagascar to develop varieties that can resist problems in the field. Without irrigation and facing shorter rainy seasons, for example, shorter-duration and drought-tolerant varieties are valuable to farmers. And, without fungicides and other chemicals to fight diseases in the field, farmers benefit from varieties that have genes to fight off diseases on their own.

The Peanut Innovation Lab and Global Collaboration on Sorghum and Millet facilitate similar work on the mainland of Africa, including variety development, value chain improvements, nutrition knowledge and gender equity projects.

Headquartered at the University of Georgia, the peanut lab brings together experts from a dozen U.S. universities to work with African colleagues and dozens of graduate students to complete research projects in Senegal, Ghana, Uganda and Malawi.

K-State’s Global Collaboration on Sorghum and Millet is focused on a Pan-African approach and sharing institutional knowledge, seed, technologies and expertise across the continent, “in close partnership with our Malagasy counterparts strengthening their research and development of sorghum and millet value chains,” Bascom said.

“Both K-State and the University of Georgia will leverage our long-standing Pan-African networks of expertise, improved seed and technologies, as well our commitment to capacity strengthening in Madagascar along sorghum, pearl millet and peanut value chains, to address food security, nutritional outcomes in families and development of markets,” Bascom said.

FOR PRINT PUBLICATIONS: Links used in this article
Feed the Future Innovation Lab for Peanut, https://ftfpeanutlab.caes.uga.edu
Global Collaboration for Sorghum and Millet, https://globalsorghumandmillet.com
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