



Feed the Future Country Fact Sheet

Online Version: <https://www.feedthefuture.gov/article/emerging-tanzanian-leaders-address-food-security-challenges>

Emerging Tanzanian Leaders Address Food Security Challenges



iAGRI

Kadeghe Fue demonstrates to his academic advisers how he can wirelessly program and collect data from his automated drip irrigation system.

Kadeghe Fue is a young faculty member at Tanzania's Sokoine University of Agriculture. While he himself was a student not so long ago – earning his Master of Science degree in agricultural and biological engineering from the University of Florida – his accomplishments to date are impressive.

Fue developed a solar-powered automated drip irrigation system to increase horticulture production in Tanzania, and his research in this area is pioneering future domestic horticulture production that could address the country's dual challenges of poor access to water and electricity. Drip irrigation is rare in Tanzania, but Fue envisions a future where the technology will help smallholder farmers across the country grow profitable crops even without the benefit of regular rainfall.

Fue is one of more than 100 young Tanzanians who are emerging as some of the country's most prominent scientists, farmers, entrepreneurs and policymakers thanks to assistance from the [Innovative Agricultural Research Initiative](#), a program supported by the U.S. Agency for International Development under Feed the Future. Through this program, university students have the opportunity to pursue graduate studies designed to address the needs of smallholder farming families and other Tanzanian communities while growing the country's agribusiness sector. To date, 135 Tanzanians have pursued M.Sc. and Ph.D. degree studies in agriculture and nutrition with this support.

Tanzania's population is growing at nearly three percent annually while agricultural yields remain low, presenting an enormous challenge to sustainable food security and long-term stability. That's why the Innovative Agricultural Research Initiative is not just a scholarship fund: it also trains students to identify commercial applications of their research findings in food security and poverty reduction and to market them to potential sponsors and investors who can help scale up their contributions.

Half of these young scholars complete their studies at American universities, while the other half study at universities across Africa and Asia. Frida Nyamete, who also now teaches as part of the faculty at Sokoine University of Agriculture, earned her M.Sc. degree in food science and human nutrition at Michigan State University. Her research used bacteria multiplied through fermentation to reduce mycotoxins found in corn. Mycotoxins can cause cancer as well as stunting in children – a condition suffered by 40 percent of children in Tanzania – which is why Nyamete focused her research on weaning food for babies, as parents may not understand the dangers around mycotoxin contamination.

The Innovative Agricultural Research Initiative is a consortium of six U.S. universities: Ohio State University (the managing entity), Michigan State, Virginia Tech, Tuskegee University, the University of Florida and Iowa State University. Key partners in Tanzania include the Sokoine University of Agriculture and the Ministry of Agriculture, Food Security and Cooperatives. [Watch a video](#) featuring students sponsored through this program.