

UW Receives \$1.385 Million Grant to Assist Ag Efforts in Kenya, Uganda

Feb. 18, 2010 -- Researchers at the University of Wyoming will use a five-year \$1.385 million grant to become part of what they hope is a new green revolution in Africa.

Business management, economic, soil and plant experts in the College of Agriculture and Natural Resources and College of Business will try to improve food production and supplies in Kenya and Uganda, countries deemed food insecure by the United States Agency for International Development (USAID).

Jay Norton, an assistant professor in the Department of Renewable Resources and one of five principal researchers in the project from UW, calls the new farm sustainability effort green revolution 2.0, the new version of Norman Borlaug's green revolution.

"Africa was bypassed in the green revolution of the 1960s and '70s," he said. "Supply chains for high-input agriculture had broken down with volatile political situations. We want to build soil quality so farm production is less dependent on off-farm inputs and to enable more production by small-holder farmers."

The UW project in eastern Africa is part of the Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program, a world-wide effort by USAID with other grants awarded for projects in food-insecure regions in Southern and Western Africa, Latin America and the Caribbean and Southern and Southeastern Asia (www.oired.vt.edu/sanremcrsp/).

"The goal is to develop, evaluate and extend farming systems that build soils and are socially, culturally and economically acceptable," said Norton. "There has been a ton of work on this in Africa. Our first challenge is to talk to farmers, extension people and scientists working there to determine how we can make a positive contribution."

Other lead scientists from UW are Distinguished Professor Eric Arnould and Assistant Professor Melea Press, both of the Department of Management and Marketing in the College of Business; and Assistant Professors Dannele Peck of the Department of Agricultural and Applied Economics and Urszula Norton of the Department of Plant Sciences in the College of Agriculture and Natural Resources.

Two Ph.D. students from Kenya in the College of Agriculture and Natural Resources were critical for the proposal receiving funding, said Norton. The grant requires the college to work with non-governmental organizations (NGOs) and universities in the two countries.

Emmanuel Omondi, in plant sciences, is from Kitale, and Eusebius Mukhwana, in renewable resources, is from Bungoma, both small towns in western Kenya. Omondi is director of the Manor House Agricultural Center NGO, and Mukhwana is director of the Sustainable Agriculture Center for Research and Development NGO, both in Kenya. The other NGO is Appropriate Technology Uganda. UW is working with researchers from Makerere University in Kampala, Uganda, and Moi University in Eldoret, Kenya.

Mukhwana in 2009 received the Borlaug Leadership Enhancement in Agriculture Program award. Both students will conduct post-doctoral work there as part of the project.

There are many challenges, said Norton. "It's a warm, humid climate. Organic matter decomposes rapidly and is lost, and crop residue is also used for other purposes, such as livestock feed and building materials, and is eaten up by termites."

Little goes back into the soil. "Our task is to work closely with local farmers to find feasible ways to build soil organic matter by doing things like rotating crops, adding organic materials or incorporating crop residues, and then transfer that knowledge through extension and education," he said.

The grant funds are being administered through Virginia Tech University.

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