AWARD
African Women in Agricultural Research and Development

Profile

2014 AWARD Fellow

Jemima Omonigho Adepehin

Position	Program Officer
Institution	Upline Resources Foundation
Country	Nigeria
MSc	Food Science and Technology, Federal University of Technology, Akure (FUTA)
Mentor	Dr. Adebanjo Ayobamidele Badejo, Lecturer I, Food Science and Technology, FUTA
Research Area	Promotion of the use of indigenous crops (finger and pearl millet, sorghum, and legumes) in bread production using sourdough fermentation to shift the focus from high dependence on imported wheat flour.

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Jemima Omonigho Adepehin was interested in producing wine as a young woman, but because there was no related course in southwestern Nigeria, she opted to study food science and technology, focusing during her master's degree on food microbiology.

Adepehin's current research work is targeted at reducing Nigeria's dependence on imported wheat for bread production and encouraging the use of indigenous crops, such as finger and pearl millet, sorghum, and legumes. "Dependence on foreign markets for bread is foolish," she asserts. "I have been analyzing the physico-chemical properties, sensory qualities, and shelf life of bread made from cereal flours supplemented with soybean flour to add protein."

The major problem with these cereals is their lack of gluten, which makes the dough rise to about two-thirds of the pan. To address this limitation, Adepehin is exploring the use of sourdough fermentation for bread production. She is also investigating making breads from composite flours—a combination of millet flour and sorghum flour, for example.

Adepehin hopes that her work will help to create greater markets for cereals, which will in turn support smallholder women farmers in rural Nigeria. "It is my goal to strengthen the farmers economically, as well as to boost the nation's economy," she resolves. She plans to encourage bakers' associations in various regions to use and promote these cereals and legumes. "This will have a direct positive impact on the demand for locally sourced cereal flours, and consequently on the livelihoods of the smallholder cereal farmers."

Adepehin currentlyworksa as a program officer at the NGO Upline Resources Foundation. Previously, she worked as a program officer with the Centre for Women and Children's Development, , through which she helped to establish two cassava-processing factories for women farmers—one in Ondo State and the other in Ekiti State. Adepehin says even the king of the Imafo community in Ondo state has been very supportive, providing free land to build the factory upon and supplying power. The facility also provides a place to roast and fry the cassava, and features a borehole for clean water.

"Women in these communities tend to be the family breadwinners, and they have to work hard to raise money for school fees and other needs," Adepehin says. "They grow cassava and process it into *garri*, a popular fermented West African food. They can feed their families, and earn money by selling the products."

Adepehin has also helped to organize a regional cassava-processing association. "This organization is headed by a woman and it is composed entirely of women," she says. She is interested in encouraging female graduates to pursue careers in agricultural research and development, and plans to link these young women with trainers and possible sponsors.

Since winning the AWARD Fellowship, Adepehin has joined the Society for Applied Microbiology and anticipates attending related conferences. "I know AWARD will help me to improve my leadership and scientific skills," she notes. Adepehin also expects to learn to write winning grant proposals to obtain support for her work. "I have seen the transformation in women who have come through the program, and I know I will gain the skills I need to lead others and make a positive change in the Nigerian agricultural sector."

Adepehin plans to pursue a PhD with the ultimate goal of becoming a university lecturer. "I have to build my career in order to have a voice."

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AWARD is a career-development program that equips top women agricultural scientists across sub-Saharan Africa to accelerate agricultural gains by strengthening their research and leadership skills through tailored fellowships. AWARD is a catalyst for innovations with high potential to contribute to the prosperity and well-being of African smallholder farmers, most of whom are women.

AWARD is generously supported by the Bill & Melinda Gates Foundation, the United States Agency for International Development, and the Alliance for a Green Revolution in Africa. For more information, visit www.awardfellowships.org