



Ifeoluwa Olotu
2015 AWARD Fellow

"I want to use my skills, research, collaborations, and positions to contribute to achieving food security in Africa"

Position	PhD Candidate
Institution	University of Johannesburg, South Africa
Country	Nigeria
MSc	Food Quality Control and Assurance, Federal University of Agriculture, Abeokuta (FUNAAB)
Mentor	Prof. Juliet Akinyele Bamidele, Professor of Microbiology, Federal University of Technology, Akure (FUTA)
Research Area	Creating a value chain for solid waste from cassava processing through use of the waste as substrate to cultivate edible mushrooms, and extending their shelf life using different preservation methods.

Ifeoluwa Olotu was taught about farming early although she wasn't allowed to frequently go to the farm, as she was "the baby" of the family. Her parents emphasized processing and preserving of crops, particularly yams, cassava, plantains, vegetables, and fruits. The family used most of what was produced, and her mother sold value-added products, such as plantain crisps, at the primary school where she taught.

Olotu's decision to study food science and technology at university was influenced by her experience as a child. "When I was growing up, I learned about challenges like malnutrition, hunger, and food-borne hazards, and understood that these are components of food insecurity," she says. She felt she should contribute to addressing this issue.

To achieve this, Olotu knew she had to further her studies so she could be involved in research. She worked hard at the university, making the Dean's List for seven consecutive semesters. Her undergraduate project was on the effect of gamma radiation and cooking on the properties of the African oil bean seed—an underutilized crop in Nigeria. Her performance on this project led her supervisor to recognize her research potential and encouraged her to pursue a career in academics.

Taking up her supervisor's challenge, Olotu enrolled in a master's program in Food Quality Control and Assurance. Her project focused on value addition to waste from cassava processing, using the waste to cultivate mushrooms, thereby creating a value chain for the waste and encouraging mushroom cultivation. "Cassava is the most commonly produced tuber crop in Nigeria and much waste is generated and discarded into the environment during processing creating a potential

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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.

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public-health hazard,” she explains. “Mushroom is a good source of protein—19 to 35 percent on a dry weight basis—and therefore has the potential to solve the problem of protein malnutrition in sub-Saharan Africa.” The results showed that mushroom could grow on cassava waste.

“Unfortunately, mushrooms have a short shelf life, which is a barrier to their processing marketing, and distribution,” Olotu says. Her current work focuses on developing affordable preservation methods that will increase the shelf life, such as cold temperature storage, and using food-grade preservatives that are not harmful to people. This will help to increase the availability and consumption of mushrooms in the country, thus improving the health status and livelihoods of Nigerians.

Olotu, was previously a research assistant at FUNAAB and has commenced her PhD studies at the University of Johannesburg, South Africa. She is still focused on her goal of addressing food insecurity and intends to use her research results to improve the livelihoods of small holder famers especially women. “Mushrooms can provide women with income-generating activities, which can solve the problem of malnutrition and lead to gender empowerment,” Olotu says.

Olotu already feels more technically competent in the short time she has been an AWARD Fellow. She is particularly impressed with the cultural diversity the program has exposed her to.

Olotu is confident that the fellowship will help her develop the skills she needs to have a positive impact on smallholder farmers in Nigeria. She looks forward to using this expertise toward achieving her career purpose. “I want to use my skills, research, collaborations, and positions to contribute to achieving food security in Africa,” she says.