AWARD
African Women in Agricultural Research and Development

Profile

2013 AWARD Fellow

Olubukola Ajike Isah

Position	Senior Lecturer
Institution	Federal University of Agriculture, Abeokuta
Country	Nigeria
PhD	Agriculture, University of Ibadan, 2002
Mentor	Professor Grace Oluwatoyin Tayo, Director Research and International Cooperation Babcock University, Nigeria

Research area: Identification and nutritive evaluation of non-conventional forages and feed supplements for dry-season feeding, and their effect on climate change.

Olubukola Ajike Isah wants to make a positive contribution to improving livestock production and productivity in Nigeria. The accomplished Senior Lecturer at the Federal University of Agriculture Abeokuta, who has authored or co-authored more than 25 papers, focuses her research on the identification and nutritive evaluation of various non-conventional forages and feed supplements, such as urea molasses feed blocks for dry-season feeding.

Growing up in Lagos with parents who were both teachers, Isah says she and her eight siblings are all well educated. Although her high school did not offer agriculture as a subject, she decided to write the qualifying exam to enter university, and was accepted, ultimately earning a PhD in Agriculture.

Isah is working on modifying ruminant microbes to bring about improved productivity of livestock with a focus on sustainability. "I want to minimize the negative effects of livestock gastric emissions on climate change," she says. "Rumen microbes produce gas, the livestock then belch it out, which destroys the ozone layer and causes climate change." One tactic she's using is to introduce urea molasses feed blocks to local farmers through her university's agricultural extension and media resource center. "Appropriate feed supplements and some non-conventional forages can enhance the use of crop residues and agro-industrial by-products by all ruminant breeds," she explains.

In the humid and sub-humid areas of Nigeria, sheep and goats are the prevalent livestock and the animals roam about freely to scavenge for food. "A baseline survey was conducted to identify the various plants that livestock around the homestead feed on. They consume a wide variety of unconventional plants in small quantities," says Isah. "Some of the identified plants (e.g. *Albizia saman, Sida acuta, Gmelina arborea, Merremia aegyptia, Spondia mombin, and Ficus exasperata*) contain nutrients that contribute favorably to the productivity and survival of ruminants." She carried out experiments with cattle, sheep, and goats that were fed these plants, and observed an increase in total nutrient intake, digestibility, overall weight, and other performance measurements.

Isah is also working with a rural community in Ogun state that deals with red Sokoto goats. "I go there to train the women's group on how to improve their goats' productivity by making use of plants and crop waste in their vicinity without extra financial cost," she explains.

She hopes to continue research that will impact positively on the small ruminant farmers, most of whom are women. "If I have good results from my research, with farmers adopting what I recommend, it makes me very happy." She is currently involved in a project with a commercial research station owned by her institution, where people bring in young animals (calves)." We help them grow them," she says. "I formulated affordable multi-nutrient feed blocks that reduced the negative impact of the dry-season feed shortage on the animals, keeping them alive and healthy, and fattening the cows. We have close to 200 cattle staying there until owners are ready to fetch them."

Although she has faced challenges in her career, at times feeling that as a woman her voice is not heard, she maintains her resolve to make a difference. "Family commitments also come into play—you can't stay in the lab as long as you'd like, you have to run home to prepare meals, to oversee homework, and so forth. Even when writing proposals, it's hard to find the time to sit down and concentrate due to time pressure," says Isah, a mother of three girls—two of whom were born before she started her PhD—who appreciates the support of her husband, also an academic.

Isah sees the AWARD Fellowship as offering tremendous benefits. Networking is of particular interest, as is the opportunity to join an international professional association. "My goal is also to secure an international fellowship where I can be hosted to receive advanced science training and carry out research on the molecular identification of ruminant microbes," she notes.

"I have been applying to AWARD since 2009 and am delighted to be in the program now. When one finds oneself in a difficult situation, take courage and don't give up—something better awaits you."

Isah is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. 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, the Alliance for a Green Revolution in Africa, and Agropolis Fondation. For more information, visit www.awardfellowships.org