AWARD
African Women in Agricultural Research and Development

Profile

2014 AWARD Fellow
Beatrice Sadina

Position	Research Assistant
Institution	National Agricultural Research Laboratories (NARL) Uganda
Country	Uganda
BSc	Agricultural Land Use and Management Makerere University, 2010
Mentor	Dr. Richard Edema, Senior Lecturer, Coordinator Regional Plant Breeding and Seed Systems Program College of Agricultural and Environmental Sciences Makerere University
Research Area	Popularizing use of locally available organic materials among smallholder farmers in eastern Uganda to replenish soil fertility and thus improve maize yields.

"There is no life without soil and no soil without soil scientists."

Beatrice Sadina grew up watching her farmer mother struggle to provide for her four children. "I helped my mother sell vegetables around Kampala," she recalls. "This strengthened my resolve to get an agricultural education so I could help farmers like her."

With few funds available for school fees, Sadina had little hope of completing high school, but she graduated, thanks to the generosity of a Ugandan Member of Parliament and a local priest, who supported her education. The same MP informed her of a scholarship opportunity from Makerere University's Gender Mainstreaming Division. "They were looking for women from disadvantaged backgrounds," she recalls. "I was delighted to get a scholarship, which covered my tuition and accommodation." Sadina enrolled in a BSc program, studying agricultural land use and management, graduating with second-class honors, upper division.

Upon entering the workforce, Sadina worked with the Italian Development Cooperation in Uganda as a farm manager, dealing with the multiplication of cassava stalks for rural households in the West Nile region. Now a research assistant in the Soils and Agrometeorology Unit at NARL in Kampala, Sadina is also studying for a master's in soil science at Makerere University with a scholarship from the Alliance for a Green Revolution in Africa in its Soil Health Program. Her area of research is the agronomic and financial potential of soybean residues to improve maize production in eastern Uganda.

"If we recycle soybean residues back into the field instead of burning them and then losing the nutrients to the atmosphere, I believe we could improve yields," she asserts. Part of her research explores integrated soil-fertility management, using organic materials in combination with inorganic fertilizers. She wants to develop optimal combinations of organic materials, such as farmyard manure with inorganic fertilizers, to improve the yields of major food security crops promoted by the government, including rice, millet, maize, and sorghum.

Sadina's research team is collaborating with an American university to design a fertilizer optimizer tool that helps farmers determine where to invest in growing particular crops. "The farmers enter information on how much money they have to invest in purchasing fertilizers for growing a particular crop, the available acreage, and the yield goal of that crop," she explains. "The spreadsheet generates information on the investment profitability, which crops to prioritize in terms of expanding the land acreage, as well as the major fertilizers required and their application rates. The tool helps extension agents guide smallholder farmers in what to grow, and when and where to grow it."

Sadina is confident that the AWARD Fellowship will equip her to maximize new opportunities. "This fellowship will prepare me to write research proposals that will attract donor funding and advance the search for food security solutions," she says. Sadina particularly appreciates the mentoring she will receive, and the access to contacts that will help her expand her professional networks. She looks forward to attending scientific workshops and conferences, and intends to join a professional association, sponsored by AWARD.

Sadina plans to study for a PhD once she has completed her master's. "I want to broaden my skills and knowledge in the field of soil science," she says. "After all, there is no life without soil and no soil without soil scientists."

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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