



2011 AWARD Fellow
Immaculate Mugisa

Position	Research assistant/Crop agronomist
Institution	National Agricultural Research Organisation (NARO) Zonal Agricultural Research and Development Institute, Mukono
Country	Uganda
BSc	Agriculture, Makerere University, 2004
Mentor	Dr. Pamela Papanu, Plant pathologist National Crops Resources Research Institute

Research area: Epidemiology of groundnut rosette virus disease in Uganda.

Immaculate Mugisa is a gifted young researcher who plans to follow the road less travelled. Committed to helping alleviate poverty in her country, she eventually wants to launch an NGO that serves the rural poor in northern Uganda—a once-dangerous conflict zone. It's perhaps not a traditional career path for a crop scientist who grew up in the capital, Kampala.

"Despite the difficulties we experienced while growing up, my five siblings and I all did well in school, and I got a government scholarship for university, where I studied agriculture, specializing in crops," says Mugisa. "I've always been interested in plants, and particularly plant diseases and pests, but as a Christian, I also love helping people and when I see people in poverty, my heart goes out to them. This is what drives me."

During university, Mugisa served as an intern at the Zonal Agricultural Research and Development Institute in Mukono, and upon graduation, was offered a job there, where she quickly earned a reputation for being reliable and hard-working. "I received the award for best research assistant in 2006 and 2010," she says proudly.

In 2010, Mugisa won another scholarship to do a master's program in molecular plant sciences at Makerere University. "I was the only woman among the seven shortlisted candidates, and I was pregnant when I went for the interview," recalls Mugisa. "I was one of two chosen for the scholarship." Now completing her final year of the program, she plans to commence a PhD program immediately upon graduating in 2013.

As the mother of a toddler, Mugisa says she's learned a lot about work-life balance. "I go to university from Monday to Wednesday, and I work Thursday to Saturday. I leave early and get home late, but this schedule has taught me to be very intentional about what I need to do as a mother." She is equally focused when it comes to her career path. "I want to publish an article before I graduate and to present a paper at an international science conference."

Mugisa speaks enthusiastically about her master's research on rosette, the most destructive viral disease of groundnuts in sub-Saharan Africa. It is caused by a complex of three agents, and sporadic epidemics of the disease cause serious crop losses and sometimes total crop failure.

“The factors that lead to the spread of this disease are not clear,” says Mugisa. “Rosette has been studied extensively, but there are still gaps in the epidemiology. For instance, we know that aphids carry it, but weather, temperature, rainfall, and soil conditions all influence its spread and occurrence. All three viruses have to be present for the disease to occur. We can now diagnose all three at once, and this is what I am currently researching further.”

In the long term, Mugisa envisions herself leading a research institute and launching her NGO in northern Uganda. “Agricultural projects would be part of the organization’s activities,” she says. “I want to see people go beyond subsistence farming to commercial production.”

Unafraid to get her hands dirty, Mugisa wants to learn all she can about farming. “I want to actually practice commercial farming, not just have academic knowledge about it,” she asserts. “Sometimes as researchers, we lack practical know-how. I don’t aspire to be a professor—I want to be in the field.”

Mugisa admires and is encouraged by the farmers—predominantly women—with whom she works. “After a training session on rice cultivation techniques that we held for 200 farmers, one of them said to me, ‘I planted two acres of rice, and I got so much more yield.’ It’s exciting to see such concrete change in people’s lives. You go back and see that they have, for instance, built small, permanent structures and bought bicycles with the income earned from their crops. These are signs of progress.”

Mugisa views working with farmers as a privilege. “I enjoy sharing my knowledge with people who didn’t have the opportunity to go to school like I did,” she says. “Sometimes in Uganda, people envy those who have an education, but I tell the female farmers, ‘All of us have to work hard. There is no shortcut if we want our lives to improve. Don’t waste time admiring me; just do all you can by yourself.’”

Described by friends and colleagues as a natural leader, Mugisa admits that “people have more faith in me than I have in myself sometimes.” She believes that AWARD will help build her self-confidence and equip her with the leadership skills she needs to advance. “Sometimes in this male-dominated profession, I ask myself, ‘Am I in the right place?’ I need to be more assertive and I think the AWARD leadership course, as well as working with my mentor, will really help me.”

Mugisa takes some of her inspiration for leadership from the example of Dr. Christine Androa, a medical doctor from northern Uganda who was recently appointed as the country’s Minister of Health. “I know her personally and she impresses me because she demonstrates that, if you are diligent and hard-working, people see this commitment and doors begin to open for you,” observes Mugisa. “Dr. Androa grew up in a village, and when I see her, I think there is no limit to what I can do. Perhaps I can become that kind of leader, and maybe even the next Minister of Agriculture.”

Mugisa is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. AWARD is a professional development program that strengthens the research and leadership skills of African women in agricultural science, empowering them to contribute more effectively to poverty alleviation and food security in sub-Saharan Africa. AWARD is generously supported by the Bill & Melinda Gates Foundation and the United States Agency for International Development. For more information, visit www.awardfellowships.org
