



Vestine Musanayire
2015 AWARD Fellow

Position	Bacteriology Specialist
Institution	Rwanda Agricultural Board (RAB)
Country	Rwanda
BSc	Science, Bangalore University, 2002
Mentor	Dr. Cyprian Ebong, Senior Scientist Animal Nutrition, RAB
Research Area	Control of mastitis disease in dairy cows to increase milk yield.



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Vestine Musanayire grew up in a family with nine siblings whose parents were farmers. Apart from her, only two brothers attended university, and the privilege is not lost on her. “After 1994, the entire French educational system in Rwanda changed to an English one,” she says. “I had a secondary school diploma in biochemistry, but I wasn’t selected to attend the University of Rwanda due to the political leadership in place at the time.” In 1998, she was grateful to win a scholarship to study for her bachelor’s degree in Bangalore, India, where she spent four years, and now enjoys her work as a specialist in bacteriology at the RAB in Kigali.

“One of the RAB’s goals is to reduce poverty by increasing milk production, and expanding the marketing of good quality milk to improve the nutrition of rural households while generating income and employment,” Musanayire explains. Her work at the laboratory involves research into preventing, controlling, and treating mastitis disease in livestock. “Mastitis is the most common and costly disease afflicting dairy cattle,” she states. “It causes a loss of milk production, and is very painful to the livestock.” She and her team bring milk samples to the lab and perform bacteria isolation, identification and antibiotic sensitivity tests. “We also test for brucellosis, foot and mouth Disease, and contagious bovine pleuropneumonia, rift valley fever, east coast fever and rabies, all of which are problems found in Rwandan livestock,” she says. “The testing methods we use aim to improve animal health while protecting public health.”

Musanayire has been working at the RAB since 2007 and was recently voted in as the lab’s quality manager. When she arrived, the bacteriology lab had no programs, leaflets, or data about mastitis. “But now, I’m proud that we have data which should be published and I need to increase the number of samples collected and analyzed in the lab per year.”

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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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She very much enjoys working with smallholder farmers, both men and women. One way to serve farmers coming into the lab is to listen to their problems, then find the right person who is sent to visit their farms.

Every year, the laboratory runs an epidemiosurveillance program to control the prevalence of animal diseases in the country. "We collect samples in order to determine the rate of disease in the different districts," she says.

Musanayire is delighted to be an AWARD Fellow and says she has already learned to be more focused. She hopes to gain leadership and communications skills that will enable her to develop a project and present it to stakeholders, particularly pertaining to Rwanda's "One Cow Per Poor Family" Program. This government project assists vulnerable families, including genocide survivors, widows, orphans, people with disabilities, and people living with HIV/AIDS, by providing assets in the form of livestock to families. "In this regard, I know the leadership skills course will be very helpful," she says.

She recognizes the lack of quality control personnel in Rwanda, and hopes to develop a private laboratory that will raise research standards in her country. "We must improve and implement standards," she asserts.

She believes the AWARD Fellowship will help her improve her research skills. "I need more training to improve my capacity on how to deliver effective solutions for poor families. I also hope to gain project management skills so that I can develop sustainable control and marketing systems for the beneficiaries of the 'One Cow per Poor Family program'."