



Melvis Celeste
Vilanculos Cossa
2015 AWARD Fellow

“I want to make things better for Mozambique and Africa by helping smallholders get profit by cultivating food crops.”

Position	Researcher
Institution	Mozambique Agricultural Research Institute (IIAM)
Country	Mozambique
MSc	Genetics and Biotechnology, Federal University of Juiz de Fora, Brazil, 2013
Mentor	Italia Cossa, Researcher, Technology Transfer, IIAM
Research Area	Micro-propagation of crops through tissue culture to facilitate rapid multiplication of virus-free vegetative material.

Melvis Celeste Vilanculos Cossa grew up in Maputo with her parents and three brothers. She appreciates the support of her parents, and especially admires her mother, who went back to school as an adult to get a degree in marketing, and who now works in the Mozambique Agricultural and Food Security Ministry. Cossa, herself a mother of two young girls, always enjoyed science, and decided to study chemistry and biology at university. Her first degree was in Biology at the Pedagogical University of Mozambique, and she has since completed a master’s in Genetics and Biotechnology.

Cossa’s first job after completing her bachelor’s was at a recently opened biotechnology lab, doing crop micropropagation. She was the third woman working at the Biotechnology Lab at IIAM when she started there seven years ago, and is engaged in micro-propagation of tissue cultures of food crops. “I’m focusing on cassava, banana, Irish potato, and sweet potato,” she explains. “Micro-propagation deals with in vitro multiplication of improved food crops via tissue culture. These crops come from breeding programs. We have been in touch with some of the farmers benefitting from these programs and they are happy with the improved yields.”

Once the multiplication is complete, the products—specifically, cassava and banana are distributed to smallholder farmers. “For sweet potatoes, we work in partnership with the International Potato Centre (CIP),” she notes. “The principal aim of CIP is to provide sweet potato with high vitamin A values to reduce malnutrition in children.”

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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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Cossa is eager to help smallholders resolve some of the problems they have in the fields by introducing technologies to help them increase their yields and thereby increase food security in the country. “Farmers are facing challenges, due to climate change, which has made it more difficult to have improved yields. Another factor is farmers cannot afford new technologies.”

She would like to eventually do a PhD but found it difficult to be so far away while pursuing her master’s in Brazil, and she is not ready to leave her children again. For now, she will continue to focus on her research, while hoping to publish in recognized scientific journals to make her research work more visible.

Cossa says time is a challenge for women in Africa. “When you’re a woman, you’re a wife, a mother, plus you work—this limits you a lot,” she explains. “Another struggle has been the lack of access to higher education, but thankfully, my parents gave me the incentive to study. Although there are fewer opportunities for women in terms of employment and promotions, things are changing in Mozambique.”

She expects the AWARD Fellowship to provide the opportunity to improve her scientific writing skills, and to expose her to experts in her field. “The various short courses are sure to enhance my research, and increase my visibility within the research community,” she states. As well, she is excited about sharing what she learns with her colleagues. “In my institute there are few technicians who work in biotech. I will acquire a lot of experience and learn about new techniques, and I will share with my coworkers in order to provide solutions for smallholder farmers.”

Cossa is enthusiastic about the future. “AWARD will help me to focus on what I want to do, to believe in my dream, to encourage me to get where I want to go, and to show me how to use life opportunities to help me get there,” she says. “I want to make things better for Mozambique and Africa by helping smallholders get profit by cultivating food crops. I am very thankful for this opportunity to be a better researcher, and I will do my best.”