



2014 AWARD Fellow
Dancilla Mukakamari

Position	National Coordinator
Institution	<i>Association Rwandaise des Ecologistes</i>
Country	Rwanda
BSc	Nutrition, National University of Rwanda, 2010
Mentor	Christine Mukantwali, Rwanda Agriculture Board
Research Area	Promotion of indigenous vegetables by providing information on nutritional value, cultivation, and cooking techniques, thus improving the nutrition and livelihoods of resource-poor communities.

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Dancilla Mukakamari realized during her research for her bachelor's degree that Rwandans have lost sight of some valuable indigenous vegetables that could help reduce hunger and malnutrition, and boost the food supply, if they were reintroduced. She is now dedicated to promoting the production and consumption of these orphan crops—including amaranth, pumpkin, African nightshade and African eggplant—to help improve the livelihoods of smallholder farmers.

"Orphan crops" are African food crops and tree species that have been neglected by researchers and industry because they are not economically important on the global market. "One of the issues is that national policy does not recognize indigenous vegetables as potential food crops, so we are looking for policy change," says Mukakamari.

She laments that indigenous vegetables have been replaced by "exotic" produce like cabbage and carrot, which are uncommon and unconventional among rural Rwandan farmers. Mukakamari says orphan vegetables have several advantages over their exotic counterparts. "They have the potential to contribute to the nutritional well-being of rural people by providing the nutrients required for growth and development, and for the prevention of diseases associated with nutritional deficiencies, such as blindness due to vitamin A deficiency," she explains. "They are very resilient to climate change. They are inexpensive, don't require much space to grow, and they are far richer in nutritional value than the more 'trendy' vegetables."

For her bachelor's degree in Nutrition, Mukakamari conducted a research study in 2009 on indigenous vegetables in the Volcanoes National Park zone in northern Rwanda, in collaboration with the *Association Rwandaise des Ecologistes*, the NGO with which she works.

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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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The results revealed a lack of information and knowledge on the nutritional value, cultivation, and cooking techniques for indigenous vegetables, and recommended awareness and capacity building at all levels, with a focus on women.

“With our research, we created a link between farmers and research institutes, and this formed an opportunity for future collaboration,” notes Mukakamari. “Particular attention was given to bitter leaf (*Vernonia*) and a cooking test was organized with the women. *Vernonia* is a healing and medicinal plant that is also consumed and marketed in other countries, like Cameroon and Nigeria, where it is produced for export to Europe and America.”

Acting on that research, Mukakamari plans to organize a women’s group to plant indigenous species on pilot sites. She hopes the women will then spread the message to other community groups within the area, and train others about the value of these crops. “My NGO has already shown its support, which is good news.” As the National Coordinator at *Association Rwandaise des Ecologistes*, which is involved in community empowerment for environmental protection and sustainable management of natural resources, Mukakamari is engaged in biodiversity conservation and community-based natural resource management.

Mukakamari hopes to begin a master’s degree shortly and then move on to a PhD. “Why not?” she says. “I am ambitious and eager to be more proactive. I work at regional and international levels on issues related to gender and women’s empowerment, and I am trying to link what I’m doing in Rwanda with what’s being done in other countries.”

Mukakamari enjoys her interactions with smallholder groups, which are composed primarily of women. “Almost 30 percent of households in this region are headed by women,” she says. “Government policy in Rwanda is to empower women at all levels, and to provide support in terms of capacity building, leadership, and civil participation.” She believes that more effort must be devoted to engaging local women, who are often unwilling or unable to leave their farm work to participate in programs.

Mukakamari is grateful to be an AWARD Fellow, saying that the training will prepare her to take a lead in field research and to share her findings and influence policy. “My research skills are sure to grow,” she says. “What I learned at university was not enough, and if I want to advance in this career, I need to build my capacity in research and leadership.”

Working with rural women and seeing them prosper is rewarding for this ambitious woman. “To see these women achieving their goals, especially when they benefit by making money from activities like growing and selling vegetables, is a real joy. You feel that you are making change within the community.”