



2019 AWARD Fellow
Hadijah Ally Mbwana

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| Position | Lecturer, researcher |
| Institution | Sokoine University of Agriculture (SUA) |
| Country | Tanzania |
| PhD | Agriculture and Nutrition, SUA/University of Hohenheim, 2017 |
| Mentor | Professor Henry Laswai, Food Security Analyst, Ministry of Agriculture, Tanzania |
| Research Area | Food security, agriculture for nutrition, value chains for nutritious crops. |

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Hadijah Ally Mbwana was raised in a rural area near Bukoba, Tanzania, but attended secondary school in Kampala, Uganda. She completed her BSc in Home Economics and Nutrition at SUA, and then took a job as a community development officer at Tanzania’s Ministry of Agriculture, Food Security and Cooperatives for a year before starting as a tutorial assistant at SUA. Mbwana then did her MSc in Human Nutrition at Massey University in New Zealand, where she spent two years.

Always driven to improve nutrition through agriculture, Mbwana returned to her job at SUA and was promoted to assistant lecturer. In 2014 she began a doctoral program in Agriculture and Nutrition, focusing on improving children’s nutritional status by promoting vegetable gardening. She completed her PhD in 2017, spending some time on research stays at the University of Hohenheim in Germany.

“I am very much interested in doing research to change dietary practices, especially of local populations, so they can consume more nutritious foods from locally available food sources,” Mbwana says. “I also want to investigate agricultural value chains of indigenous vegetables from production to storage and consumption.”

Mbwana is frustrated by the fact that Tanzania has plentiful resources but many people are malnourished. “I want to do more—let’s use these resources to alleviate hunger and malnutrition,” she emphasizes. She says the problem is particularly severe among children under five years of age.

Mbwana envisions a rural community free from undernutrition. Thus, she is exploring alternative processing techniques to improve the value chains for indigenous crops.



Mbwana is one of a growing number of women agricultural scientists who have won an AWARD Fellowship. AWARD works toward inclusive, agriculture-driven prosperity for the African continent by strengthening the production and dissemination of more gender-responsive agricultural research and innovation. We invest in scientists, research institutions, and agribusinesses to deliver sustainable, gender-responsive agricultural research and innovation.

The AWARD Fellowship is a career-development program that invests in top women agricultural scientists to ensure that confident, capable, and influential women are available to lead critical advances and innovations in the agricultural sector.

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"I long to see the rural community free from undernutrition," she continues. "Some of the effects of stunting are irreversible after age five, and have an impact on cognitive development. I want to see children thriving."

The main challenge is poor processing methods. "People don't know how to store their vegetables to prevent them from going bad and losing nutrients—many tend to spread them on the ground and then store them in tins when they're dry, but the majority don't know how to do it properly," Mbwana says. She is teaching the importance of retaining nutrients during processing and is demonstrating how to do it.

Mbwana undertook research as part of her doctoral studies during which she promoted the use of "pocket gardens" in Dodoma, a semi-arid area of Tanzania where people had no access to green leafy vegetables during the dry season. "With a pocket garden, you have a hollow space in the middle with pebbles that allow water to pass through," she explains. "It uses very little water, so now households have gardens and they have access to fruits and vegetables throughout the year."

She also introduced these gardens and fruit tree planting at schools, so children are learning how to garden. Some of the schools have also built water underground collection and storage areas. "This successful intervention means that this community also has year-round access to fruits and vegetables." Mbwana hopes to do more knowledge awareness campaigns as her career progresses.

She is currently evaluating the potential of pigeon peas. "These are a good protein source," she states. "But people tend to consume them only when they are green." She is exploring alternative processing techniques and encouraging people to consume them in different ways, such as by making various products and snacks. "I am working with schools and women in the villages," she says. "We have produced pigeon pea flour and mixed it with wheat flour to make a pastry that is rich in protein and other nutrients. It's a good, nutritious snack for schoolchildren—and they like it!" She is in the process of producing a documentary to demonstrate how to make this dough.

Mbwana heard about the AWARD Fellowship from a colleague who is previous AWARD Fellow and who encouraged her to apply. She is eager to grow in her career. "I need to acquire skills such as award-winning proposal writing," she says. "My ultimate goal is to help the community, and for that you need funds." She anticipates that the AWARD Fellowship training will open other opportunities for her. "The training at the mentoring orientation workshop has been eye-opening," she enthuses. "I also appreciate the chance to network with other agricultural scientists." She looks forward to liaising with the AWARD country chapter in Tanzania.

Mbwana sees the AWARD Fellowship opening her up to the world. "I see my way being paved," she says. "I don't do things just for myself. My institute will be more visible, and the ultimate beneficiaries will be the rural communities with whom I work."