AWARD
African Women in Agricultural Research and Development

Profile

2013 AWARD Fellow
Sophie Tawonga Makoloma

Position	Program Manager
Institution	Christian Aid
Country	Malawi
BSc	Agriculture, University of Malawi, 2002
Mentor	Theresa Mkandawire, Associate Professor University of Malawi

Research area: Food security in a changing environment.

Sophie Tawonga Makoloma tended her family's vegetable garden as a young girl, weeding and doing other chores before or after school, along with her siblings. During secondary school, she pitched in on the farm while living with relatives, including her uncle, an agronomist, who worked with the local agricultural research station. Today, she teaches her young son to help in the garden behind their home. "I grew up valuing agriculture and understanding that food comes from the farm, not from the supermarket," says Makoloma.

Makoloma is motivated by a strong desire to help farmers become better stewards of natural resources and reap more benefits from their land. Following a post-secondary diploma in crop sciences, she spent two years working with farmers. This on-the-ground experience prompted her to obtain a BSc in Agriculture, with a major in Forestry. "I was interested in environmental studies, and forestry turned out to provide a very grounded approach for learning about improved land, water, and resource management," she says.

Today, however, many of Malawi's forests are gone. "People cut down the trees in the name of wanting better land," says Makoloma. She notes that farmers encroach into protected forestland, thinking it will be more productive than the small parcels they are using for crops and livestock. Others have abandoned farming because they cannot benefit from it anymore. Through her position with the NGO Christian Aid, Makoloma works with communities in seven districts, hoping to influence their farming practices and implement conservation agriculture. Her goal is to help farmers value, manage, and benefit from their land more fully and more sustainably.

"My work is different from sitting in a lab, doing experiments, and getting results," says Makoloma. "It is based on the lived experiences of people in communities, and how changes in land-management practices can improve their lives." She recognizes the need to build the evidence base, document it, and share it at the national level to convince policy makers and others outside of the project areas of the value of conservation management.

Makoloma works with her team to train community members in conservation agriculture. Conservation agriculture principles, such as mulching, reduced tilling, and practicing crop rotation or crop association (e.g. mixing legumes and grass), require less labor in the long term, although it can be quite tedious in the initial stages. However, it is known to increase yields and soil fertility. Conservation agriculture does not require extra inputs in terms of inorganic fertilizers and frees women up to engage in more productive activities, such as attending meetings on finance and savings.

The team monitors how these techniques are implemented and whether they follow standard procedures. Then they measure changes in practices and outcomes, such as yields, labor costs, time use, amounts of inputs, and more. At the end of the year, the researchers bring together all of the changes and lessons learned to document impacts and improve their activities.

Women comprise much of the target audience of Makoloma's work, because they are disproportionately affected by climate change. Women are responsible for feeding their families and do much of the field work—and if yields are low, they have to make the extra effort to find or produce more food.

The biggest measure of success for Makoloma is to see a vulnerable, female-headed household excelling. "When a household that was formerly dependent on food aid is able to produce enough food for the family, or have surplus to share and sell, it not only improves their livelihood, it also restores their honor," she explains.

Though dedicated to her work, Makoloma feels the time has come for her to move forward in her career and academic qualifications. She sees the AWARD Fellowship as helping her to gain greater professional visibility, as well as learning new skills so she can influence policy and obtain funding to pursue her ambitions. Motivated through AWARD training to set higher goals and attach timelines to them, she has began her MSC in Food Security in a Changing Environment, setting the stage for a PhD in Soil Sciences.

"If you just go by the wind, there is no one to blame but yourself if things don't come through," says Makoloma. "With AWARD, you monitor your progress and feel responsible for and accountable to yourself."

Makoloma is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. 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.

AWARD is generously supported by the Bill & Melinda Gates Foundation, the United States Agency for International Development, the Alliance for a Green Revolution in Africa, and Agropolis Fondation. For more information, visit www.awardfellowships.org