



	Position	Master's student	
	Institution	University of Zambia	
	Country	Zambia	
	BSc	Agricultural sciences, University of Zambia, 2010	
2011 AWARD Fellow Mirriam Phiri	Mentor	Shirley Ng'andu, Senior lecturer University of Zambia	

Research area: Integrated soil fertility management.

Orphaned as a child and raised by her grandparents who were subsistence farmers, Mirriam Phiri has a heart to see rural smallholders succeed. "I grew up working in the fields and I saw how my grandparents struggled," recalls Phiri. "It was so difficult for them even to afford my school fees. I want to do something to improve agricultural production for farmers like them."

Phiri saw education as the way to a better life, and her hard work was recognized by the Zambian government and the Omnia Fertilizer Company, which provided university scholarships. Soon after graduating with a BSc in agricultural sciences, Phiri joined the Cotton Development Trust as an agronomist. Her research there aimed at reducing crop production costs, increasing yields, and improving the quality of produce in order to increase farmers' incomes.

"I really enjoy working with farmers," says Phiri. "When you interact with them face-to-face, you learn about their actual problems and it enables you to think about how you can best help them." At farmers' training sessions and on-farm trials, Phiri quickly saw that most Zambian farmers lack basic resources. "They have a major problem acquiring inputs, such as seeds and fertilizer, and soil fertility is a real issue for them. Some crops may not improve no matter how much fertilizer you put on them because the soil is too acidic, but most farmers don't know about this."

Phiri is also eager to teach farmers about neutralizing soil acidity by adding lime made from pulverized limestone or chalk. Although this is not a new process, farmers tend to be a little hesitant to try it at first. "We have to convince them that this is the way to go by showing them the difference in yield between a limed and a non-limed plot," says Phiri.

Soil fertility has become Phiri's passion and she recently won a two-year scholarship from the Alliance for a Green Revolution for master's studies in integrated soil fertility management at the University of Zambia. She is researching the nutrient priming of seeds—a low-cost technique to improve crop yields. "Seeds are soaked in water containing nutrients, and when planted, they only require half the recommended fertilizer. Even if a farmer can only afford a small amount of fertilizer, this technique can make a big difference in the yield."

An ambitious young agronomist, Phiri admits that occasionally, her drive isn't appreciated. "Sometimes people don't want to believe in me as a scientist, as someone who can contribute to the institution, because I am young," says Phiri. "I've had to prove that I can do the work and do it well."

In the future, Phiri wants to instill that same standard of excellence in students. "I want to get a PhD and become a senior lecturer, so I can train students who can produce technologies to solve farmers' problems."

Phiri appreciates the "push in the right direction" that AWARD has given her. "I've learned so much already," she reflects. "For instance, I didn't realize how important networking is to my career. AWARD will also help me build my leadership capacity and self-confidence. I can't lead research teams and teach if I don't have these skills."

Phiri is challenging other young women to consider careers that will contribute to Zambia's development. "I especially want to encourage other orphans to look beyond their current problems and see the opportunities," she urges. "Through hard work and determination, I got an AGRA scholarship and an AWARD Fellowship. I have the support and encouragement to go even further, and they can, too."

Phiri is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. AWARD is a professional development program that strengthens the research and leadership skills of African women in agricultural science, empowering them to contribute more effectively to poverty alleviation and food security in sub-Saharan Africa. AWARD is generously supported by the Bill & Melinda Gates Foundation and the United States Agency for International Development. For more information, visit www.awardfellowships.org