Yenesew Mengiste Yihun is the first girl from her family and neighborhood to get a university education. Though her parents did not go to school, they were committed to giving their children a good education. “When I was a child, I was walking with my elder brother when he pointed to the university and told me ‘You will go there’,” says Yihun.

Yihun’s mother grew up in rural Ethiopia where women were confined to the domestic realm. She ensured that her daughters worked in the home, unlike their brothers. “In high school, I convinced my mother that I needed more time for study and she offered to cover my duties,” says Yihun. The scientist draws inspiration from her mother. “I really admire her intelligence. I think if she were educated, she would go very far.”

In 2005, Yihun obtained a BSc in Agricultural Engineering at Debub University. After working for a year at Kombolcha Agricultural Technical Vocational College in Harar, Yihun enrolled in an MSc in Irrigation Engineering on a Swedish government scholarship. Armed with her MSc, Yihun worked as a lecturer at Mekelle University, where she won a grant to conduct research on improving water-management practices in Ethiopia’s Gergera watershed area. Farmers in the area depended on rain-fed agriculture despite the rich ground potential in their locale. She encouraged them to adopt irrigation techniques to boost their production. “I showed them how to use water efficiently by explaining the importance of irrigating when the crop is most sensitive,” says Yihun. She also served the College of Dryland Agriculture and Natural Resources as the Quality Assurance Dean. With a grant from the International Foundation for Science, Yihun organized seminars at Haramaya University on mainstreaming spate irrigation, a type of water management approach.

Position: Assistant Professor
Institution: Institute of Technology, Addis Ababa University
Country: Ethiopia
PhD: UNESCO-IHE, Institute for Water Education
Mentor: Dr. Teklu Erkossa Jijo, International Researcher, East Africa and Nile Basin, International Water Management Institute (IWMI)
Research Area: Exploration of alternative and adaptive water-management approaches to optimize agricultural water and crop productivity under drought and deficit water supply conditions.
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.

In 2009, Yihun got a PhD scholarship to study Land and Water Development at the Institute of Water Education at UNESCO-IHE in the Netherlands. She left her then three-month-old son in her family’s care. “My family is helping me climb the ladder—my PhD is for them,” she says. Her doctoral research is focused on identifying innovative, adaptive, and technologically feasible water-management approaches for optimal agricultural production in water-stressed areas. She has calibrated the Aqua crop model for teff, a staple cereal in Ethiopia, and has published her findings in a peer-reviewed journal.

“Research is important to alleviate problems for rural farmers,” notes Yihun. “If we produce more, the country will be self-sustained and food secure.” Her research involves providing practical solutions to farmers in line with her government’s focus on increased production through the efficient use of resources. In Mekelle, Yihun worked alongside smallholder farmers demonstrating the technologies in the field. “I urged them to work with me so they could internalize how to do it,” she explains. “I respect their indigenous knowledge and show them how they can use irrigation to make their efforts more successful.”

Yihun describes the AWARD Fellowship as coming at the right time, since she has recently completed her PhD work. “It will help me to be confident and more visible, and will enhance my work with rural farmers, especially women who have trouble getting access to information,” she says. “AWARD will influence my career growth by exposing me to conferences, research opportunities, and training to boost my competence.”

In the future, Yihun wants to make significant scientific contributions and be a role model for the next generation. “Women can do the best research with their top-quality commitment,” she asserts. As an assistant professor, Yihun sees herself as a role model for her students and fellow female staff members, with whom she plans to share the knowledge she gains from the fellowship.

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