



2011 AWARD Fellow
Bezaye Gorfu Tessema

Position	Assistant researcher II
Institution	Ethiopian Institute of Agricultural Research (EIAR)
Country	Ethiopia
MSc	Environmental science, Addis Ababa University, 2008
Mentor	Dr. Kindu Mekonnen, Visiting scientist People, Livestock, and Environment International Livestock Research Institute

Research area: Sustainable land management using an integrated watershed management approach.

For Bezaye Gorfu Tessema, environmental science is as much about people as it is about plants. “My world opened up when I did my master’s in environmental science and I saw agriculture in a whole new way,” says this enthusiastic researcher. “Environmental science is an interdisciplinary field that integrates physical and biological sciences. It’s about the myriad of interactions between people and the world around them, and about finding solutions to environmental problems. I particularly enjoy the social and economic aspect of my work, especially how the environment affects communities and people’s livelihoods.”

Tessema works closely with farmers, introducing new sustainable land-management technologies and approaches. However, her real passion is training community members and different stakeholders about an integrated watershed-management approach, which is critical to sustainable natural-resource management and agriculture—the backbone of the Ethiopian economy.

Ethiopia’s agricultural sector is driven by the subsistence strategies of smallholder farmers and their families, explains Tessema. In the past, insufficient knowledge, coupled with a rapidly growing population, chronic poverty, and rainfall shortages, have caused natural-resource degradation and severe food-security challenges for farming communities. It is estimated that 2 million hectares of Ethiopia’s highlands have been degraded beyond rehabilitation, and an additional 14 million severely degraded (UNEP 2002). Drastic new approaches that will lead to the improvement of food security and resource management are needed, including integrated watershed-management strategies, says Tessema.

Studies have shown that an integrated watershed-management approach can decrease soil erosion, increase soil moisture, reduce sedimentation and run-off, and set the scene for a number of positive effects, such as stabilization of gullies and river banks, rehabilitation of degraded lands, as well as effective farmer collectives and partnerships.

“Our goal is to see communities take ownership and leadership of their own land and resources,” she says. “For instance, we help create community committees and discuss the importance of planting trees to prevent

soil erosion in the highlands, so farmers downhill will not be flooded. It's rewarding to help farmers to see the interconnectedness."

As an assistant researcher at EIAR, Tessema coordinates two major projects: a government program entitled "Integrated Watershed Management Research for Sustainable Resource Use and Livelihood Improvement" and the International Development Research Centre-funded "Going to Scale: Enhancing the Adaptive Management Capacities of Rural Communities for Sustainable Land Management in the Highlands of Eastern Africa". The latter is implemented in partnership with the World Agroforestry Centre's African Highlands Initiative, and the Policy Analysis and Advocacy Programme of the Association for Strengthening Agricultural Research in Eastern and Central Africa (PAAP-ASARECA), the EIAR and Uganda's National Agricultural Research Organisation, as well as local districts.

Tessema takes a participatory approach to her work with disadvantaged rural groups, including women farmers who have little access or control over natural and agricultural resources, although they provide much of the labor involved in managing them. "I want to publicize women's contribution in this area and help to strengthen it."

In her workplace, Tessema is the youngest member of her team, often working alongside very senior scientists. "I see this as a great opportunity because I can learn so much from others who have more experience," she says. "If I make a mistake, they kindly advise me rather than exposing me, and I'm grateful for that."

A determined young woman, Tessema brings energy and optimism to all she does—including overcoming hurdles when applying to AWARD. After completing the 17-page electronic application with painstaking care, her computer was confiscated by airport Customs upon returning from a field trip—the night before the application cutoff. "I only had a few hours to get the ownership documents that Customs demanded, but I made the deadline. I'm so proud to have been chosen from among more than 780 applicants," she says. "I plan to be influential in my career. I have something to contribute to my community and my country."

Being an AWARD Fellow is already having an impact on her life, says Tessema. "The coaching at the Mentoring Orientation Workshop helped me to think more broadly. I learned that I can create my own future if I set clear goals and plan accordingly. I appreciate the networking opportunities that AWARD provides. In that one workshop alone, I met 49 fellow African researchers." Together, she believes, they will be a force for change in African agriculture.

Tessema 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
