



**2013 AWARD Fellow
Hewan Demissie Degu**

Position	Assistant Professor
Institution	Dilla University, Ethiopia
Country	Ethiopia
PhD	Bio-resource Engineering, University of Tsukuba, Japan, 2008
Mentor	Dr. Fikre Dessalegn Associate Professor, Hawassa University, Ethiopia

Research area: Plant stress response and its role in plant adaptation, tolerance, persistence, and resistance.

Hewan Demissie Degu is an ardent advocate for women and girls, encouraging female students in her university to pursue studies in science. Although she was raised in a family that promoted gender equality, she realized that was not the case everywhere in Ethiopia. "Girls were not recognized in Gondar, where I used to work; they were forced into early marriage and do not see any value in education," she says. "I could not understand that. I seemed to be the only one fighting this unwritten law, and I was considered strange."

Her passion for gender issues motivated her to study diligently, and she won a Japanese Government (*Monbukagakusho*) Scholarship for best international student in 2002, travelling to Japan for both her master's and doctoral degrees in plant breeding and biotechnology. Degu says her research was inspired by the Japanese culture of focusing on a solution, rather than dwelling on the problem.

"Food is a human right," she says. We cannot expect people to change their gender practices if they don't have enough to eat.

Degu is the only female PhD holder at Dilla University, where she has recently started a postgraduate program in plant biotechnology. Her goal is to help rural communities deal with the predicted impacts of climate change by breeding and promoting drought-tolerant crops to break the vicious cycle of drought, food insecurity, and poverty. She plans to collect and characterize landraces of the major legumes in collaboration with farmers' research groups. "We need to disseminate the best performing legumes, those with high yields and low environmental impact," she says.

"In Ethiopia, we currently have very little capacity to train plant breeders, specifically in the field of drought stress tolerance mechanisms," notes Degu. "Yet the opportunities to generate public goods with innovative plant breeding are immense. Of course, there are potentially lucrative careers in the commercial sector as well."

Degu has no illusions that the sophisticated Japanese biotechnology laboratories where she once worked may not be feasible under current conditions in her home country, but she is working to attract grants

to build a functional laboratory for research into promising nitrogen-fixing legumes that require little fertilizer, which few farmers can afford. With her fellow professor and AWARD Mentor, she has initiated collaboration between Dilla University and Hawassa University on grass peas (*Lathyrussativus L*), an orphan legume crop with high potential for serving resource-poor Ethiopian farmers, and particularly women, to meet their families' food needs in times of failing rains.

Degu is particularly proud that her university recently endorsed a new policy to provide scholarships for outstanding female students to pursue master's degrees. She expects a number of those women scientists to explore plant biotechnology and contribute solutions that will improve Ethiopia's food security. As a role model, she has already inspired and motivated several female students and faculty members at Dilla University. Seeing changes in gender roles, seeing girls who were victims become beneficiaries gives her the greatest joy; standing up for girls' and women's rights and actually seeing their success is very rewarding.

Degu expects that her AWARD Fellowship will help her to set specific career goals, while receiving the skills training to achieve them. She looks forward to networking with fellow scientists from across Africa, learning from them how they have overcome obstacles and found solutions.

Degu 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.

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