



Netsanet Bacha Hei

2019 AWARD-EAIR
Fellow

Position	Breeder-pathologist
Institution	Ethiopian Institute of Agricultural Research
Country	Ethiopia
MSc	Plant Pathology
Mentor	Belay Habtegebriel Wendafrash, Researcher, Ethiopian Institute of Agricultural Research
Research Area	Development of wheat cultivars with resistance to biotic stresses.

Hei's research focuses on training farmers in pest and disease management and use of best agricultural practices while also conducting on-farm demonstrations of effective agricultural technologies such as newly released wheat varieties and pest management.

Netsanet Bacha Hei is a breeder-pathologist at the Ethiopian Institute of Agricultural Research, stationed at Ambo Agricultural Research Centre. She is responsible for conducting research on development of new wheat varieties. She works with the wheat pathology team to monitor the spread and change in the virulence pattern of wheat rusts and provide essential information to determine the gene combinations to be considered by the national and international wheat breeding programmes. She is also responsible for sharing the coordinated surveillance information and advising the Ministry of Agriculture in order to prepare for potential wheat rust outbreaks and to enable them to take action to avoid crop losses.

"After high school I was keen to study social sciences so that I could work with the local communities. However, I was admitted to college to study in the Department of Plant Sciences at Alemaya University. With time, I developed an interest in this field and decided to pursue an MSc in Plant Pathology at the same institution. Soon after graduation, I was employed at the Ethiopian Institute of Agricultural Research and was lucky in that my job today gives me the opportunity to work closely with communities," she explained.

Hei is currently involved in training farmers in pest and disease management and use of best agricultural practices and improved technologies. She is also involved in on-farm demonstrations of effective agricultural technologies such as newly released wheat varieties and pest management.

While explaining what motivated her to pursue a career in this area, she notes that agriculture is the largest contributor to overall economic growth and poverty reduction in Ethiopia. The livelihood



Hei is one of a growing number of women agricultural scientists who have won a customized institutional Fellowship for the Ethiopian Institute of Agricultural Research (EIAR). The customized institutional Fellowship is an intervention of AWARD's Gender Responsive Agricultural Research and Development (GRARD) initiative that supports institutional capacity for gender-responsive agricultural research.

African Women in Agricultural Research and Development (AWARD) works toward inclusive, agriculture-driven prosperity for the African continent by strengthening the production and dissemination of more gender responsive agricultural research and innovation. We invest in African scientists, research institutions, and agribusinesses so that they can deliver agricultural innovations that better respond to the needs and priorities of a diversity of women and men across Africa's agricultural value chains.

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of more than 85% of the population is fully or partially dependent on agriculture.

"Ethiopia has significant agricultural potential which remains largely underdeveloped. Hence, when it comes to fighting poverty and improving the livelihoods of the booming population of the country, agriculture is more effective than other sectors. Therefore, being a researcher in agriculture is an opportunity for me to be part of the solution," she revealed.

She is currently working on a project titled 'Postulation and mapping of seedling stem rust resistance genes in Ethiopian wheat cultivars and breeding lines', which aims to explore resistant genes in more than 200 Ethiopian bread and durum wheat cultivars and breeding lines. The research work combines traditional hybridization, postulation and molecular markers to map the stem rust resistance gene in the wheat germplasms. The information will serve as a foundation to develop durable stem rust-resistant wheat varieties through marker-assisted breeding or gene pyramiding.

Through the AWARD Fellowship, Hei hopes to build her research and scientific skills, and effectively contribute to research that engages both women and men, and generates crop technologies that will help to improve the livelihoods of smallholder farmers.

"The Fellowship programme will also enable me to achieve my career goals which include improving my visibility and self-confidence, becoming more proactive, and building my leadership skills."

Discussing some of the challenges that she has encountered in the workplace, Hei mentioned the difficulty of leading in a male-dominated institute and work-life balance, especially considering that she is a mother and wife, and is often expected to travel for field work.