

Building a robust pipeline of scientists leading climate change research in Africa

Candidate Profile



Position

Lecturer/ Researcher (Crop Protection)

Institution

Egerton University

Country

Kenya

Education

PhD, Plant Pathology

Mentor

Professor JobKibiwot Lagat, Associate Professor, Egerton University

Research Area

Crop Protection and pest Control and disease management to reduce post-harvest losses and increase yield

Miriam Karwitha

2019 One Planet Laureate Candidate

Karwitha is a crop protection scientist. . She is currently working at the Egerton University in Kenya in the department of crops, horticulture and soils where she teaches both undergraduate and postgraduate students.

She is also involved in research in the field of crop protection.

Karwitha first started working with farmers when she served as a project assistant in the Indigenous Mushroom Production Project.

The role involved working with famers in various parts of Kenya by training them on how to identify the edible mushrooms, how to produce the best seed as well as production of the fruiting bodies.

It was a tedious process, and some farmers gave up along the way. She was however encouraged by a few farmers who were eager to learn and progress with the project, especially one farmer from Nyahururu (Ndaragwa town) who made good income from the project. Seeing the farmers adopting the project and earning money from it served as a great motivation for Miriam. "I could see I had touched someone's life," she said.

Karwitha's research focus has been on crop protection, including the study and management of pests, diseases, weeds and crop nutrition at both pre and postharvest stages.

Her most exciting research was collaborating with the local community to promote reforestation at the Mau forest catchment area using indigenous trees.

The study aimed to improve the forest cover in the Mau, a key water catchment in Kenya, using fungi known as mycorrhizae that promote the growth of indigenous trees.

The indigenous tree seedlings were inoculated with the fungi and distributed to the community forest associations (CFAs) for planting.

The CFAs were also responsible for ensuring the protection, weeding and general management of the seedings until the plants were two years. The project was exciting because she witnessed firsthand the extent of destruction of Mau and now was part of a crucial project to replenish the forest.

The biggest challenge she has faced as a researcher is when project funds come to an end. The researcher is unable to track the progress of interventions and support the communities.

The transfer of government focal points in the project areas also brings a challenge especially if the replacement is not supportive of the ongoing initiatives.

The call for proposals for the One Planet Fellowship was shared through the faculty network. Although she had previously applied for AWARD Fellowships but did not succeed, she didn't give up and this time she was successful. She was encouraged by a friend of her who had participated in another of AWARD's Fellowships.

The international experience and exposure to leading scientists in his area; the enhancement of knowledge and skills from the training; the improvement of networking and interpersonal skills from the mentoring experience; and the recognition as a One Planet Fellowship Laureate all will serve to raise his profile as a climate change expert.

Karwitha plans to win youth in Kenya into agriculture. Her concern is that the rate of youth unemployment is high yet there is not enough food to feed the country and the continent. Karwitha works with rural farming communities in Kenya to promote reforestation and train them on better crop protection approaches.

She believes youth can transform their lives using agriculture. The One Planet Fellowship will help her nurture the vision of the youth, and through the soft skills she will gain from the fellowship, she will learn how to understand issues from their perspective.

Miriam Karwitha is one of the growing number of candidates selected to participate in the One Planet Fellowship. The One Planet Fellowship is a career development initiative that is building a robust pipeline of highly connected, inter-generational scientists equipped to use a gender lens to help Africa's smallholder farmers cope with climate change. The One Planet Fellowship is funded by the Bill &Melinda Gates Foundation, the BNP Paribas Foundation, the European Union and Canada's International Development Research Centre (IDRC). African Women in Agricultural Research and Development (AWARD) and Agropolis Fondation are jointly implementing the Fellowship.

Do you have any further questions? Send an email to : <u>oneplanet.award@cgiar.org</u>