

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

Candidate Profile



Position

Lecturer

Institution

Malawi University of Science and Technology

Country

Malawi

Education

PhD, Earth Sciences, University of Malawi

Mentor

Dr. Levis Keliyasi Eneya, Senior Lecturer, University of Malawi

Area of research

Assessing the contribution of soil properties on vulnerability to dry spells and food security.

Gulule Ellasy Priscila

2020 One Planet Laureate Candidate

Gulule Ellasy Priscila has a BSc degree in earth sciences from the University of Malawi and an MSc in engineering from the University of Witwatersrand in South Africa. She is pursuing a PhD in Earth Sciences at the University of Malawi under the Building Research Capacity in Food and Water Capacity for sub-Saharan Africa (BRECcIA) project.

She is also a lecturer in Earth Sciences at Malawi University of Science and Technology. She regards her dad, who has a PhD and was a lecturer, as her inspiration source. His encouragement to push herself beyond her imagination gave her the confidence to take on whatever she put her mind to. He is still mentoring her.

For her research, Gulule is using remote sensing to understand the dynamics of the climate change impact on food security, working under the BRECcIA project. Using her geology background and geostatistics for modelling, she is assessing the contribution of soil properties to vulnerability to dry spells.

She is looking at characteristics of dry spells, i.e., their length, frequency, and time of occurrence during the growing season, to identify dry spell hot spots. The soil types at the hot spots will then be identified and a map produced showing areas vulnerable to dry spells based on soil properties. Satellite imagery assessment of crop yield will be done to compare the performance of the different regions based on soil types. Still, under the BRECcIA project, Gulule is part of a project working with communities and interacting with farmers while collecting farm management data on their yields to compare with potential output. Asking farmers about their farm management can help identify the causes of the crop yield gap between farmers' actual gain and the potential yield expected from their fields.

Gulule's interest in science came during her secondary school days. The study of the earth, how the earth came to be, and what was happening in the natural world intrigued her. Climate change issues prick her curiosity.

Her current choice of focus is heavily influenced by her har background in geology as she wants to incorporate geology in generating innovations that can help in solving climate change issues.

Gulule would want her research to be the source of practical solutions that impact both the community and the country and have her name associated with research solutions that improve people's ways of doing things, for example, how they respond to dry spells. She believes that the opportunities available through the One Planet Fellowship, particularly networking, will provide her the tools for success. Mentorship will help her advance in her career. Interpersonal skills will enhance her presentation ability and networking. The opportunities for exposure to what is happening elsewhere in her area of research, to different people, and knowledge will help her grow. She sees herself gaining more confidence in climate change and agriculture with more knowledge and experiences through the One Planet Fellowship.

Gulule finds that her role as a female scientist can be challenging, especially her work-life balance. This requires working long hours and proper planning. She is lucky because she has a husband who supports her and even assists in programming when need arises, as well as friends and colleagues who step in as needed, including a supervisor who pushes her. Gulule is using remote sensing to understand the dynamics of the climate change impact on food security. She is developing practical solutions to influence farmers decisions about how they respond to lry spells.

Gulue Ellasy Priscila 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>