

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

Candidate Profile



Position

PhD Student and Lecturer at the Department of Soil Science

Institution

Federal University Dutse, Nigeria

Country

Nigeria

Education

MSc, Soil science, Ahmadu Bello University, Zaria

Mentor

Dr. Aisha Abdulkadir, Associate Professor, Ahmadu Bello University

Research Area

Greenhouse gas emissions particularly methane from smallholder rice farmers' production systems

Abubakar Girei Halilu

2019 One Planet Laureate Candidate

"In another life, I would choose agriculture 95 percent of the time, I am certain of that. I have come to learn what it can do to change people's lives." That is how Abubakar Gireri Halilu, who as a child wanted to be a military man, says about his career. He had wanted to study aeronautic engineering in college, but that was not available in Nigeria, and at university he did not get his choice of medicine, so he ended up with agriculture.

Agriculture turned out to be a perfect fit for him, though, owing to his characteristic curious nature and his constant awareness of the urgent need to help solve the farming problems of his Fulani community through introducing good farming practices. "I have seen firsthand farmers' crops devastated by drought and floods sweep away towns," he remarks solemnly.

Halilu is particularly enthralled by the many opportunities for inventiveness offered by agriculture and the applicability of the knowledge.

He doesn't miss medicine at all. In fact, he sees parallels between treating plants and treating humans, and is conscious of the fact that agricultural scientists safeguard human health through providing nutritious food of plant or animal origin.

In 2018 Halilu got a chance to be involved in cutting-edge research similar to his work at the International Center for Tropical Agriculture (CIAT) in Colombia, where he was on a Climate, Food and Farming Alliance (CLIFF-GRADS) scholarship. He learned from that exposure how he could enhance rice yields without heavy water use or high greenhouse gas emissions.

This experience also opened his eyes to the need for collaboration in research to keep up with developments in methods and technologies in his area of interest.

Community involvement is an exciting aspect and practical facet of Abubakar's research without which he would consider his work incomplete. For example, he is thrilled about being involved in a project supported by the International Fund for Agricultural Development (IFAD) that requires participatory land use planning involving male, female and youth farmers.

The farmers identify their land use problem, define the solution and determine how they want IFAD to intervene.

He also trains and supervises farmers in conservation farming and irrigation.

Halilu was attracted to the One Planet Fellowship because he considered it an excellent avenue for bringing young African scientists together to understand climate change and develop common solutions. "We are on the receiving end of climate change impacts and because these impacts do not respect boundaries, we need to work together to address them," he remarks.

He aspires to rise to the top of the university professorship ranks and then move on to the Economic Community of West African States (ECOWAS), from where he will serve as the representative on climate change at the African Union, a policy-maker and advisor, and a contributor to the Intergovernmental Panel on Climate Change.

He believes that the One Planet Fellowship will contribute to the realization of his goals by improving his capacity and knowledge, expanding his professional network, refining his interpersonal skills, and increasing his visibility.

The benefits from the Fellowship will go beyond Halilu's self-improvement. He hopes to pass on his new skills to colleagues, and his institution's visibility will be improved.

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Through networking he will promote its image, improving its chances of accessing research grants and resources for equipment, facilities, and technical expertise, which are currently inadequate, as well as in finding fellowship opportunities.

Abubakar would want to become the leader in gender and diversity inclusion at his institution and to have a mentoring program introduced.

Abubakar Girei Halilu 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.