

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

# Candidate Profile



### **Position**

Research Assistant

#### Institution

Protecting Ecosystems and Restoring Forests in Malawi project

#### Country

Malawi

#### **Education**

BSc, Forestry, Lilongwe University of Agriculture and Natural Resources

#### Mentor

Kefasi Kamoyo, Senior Land Resources Conservation, Ministry of Agriculture, Irrigation and Water Development (Malawi)

#### Research Area

Climate smart soil management technologies

## **Mary Charles Jambawe**

2019 One Planet Laureate Candidate

The One Planet Fellowship could not have come at a better time for Mary Charles Jambawe. This is because its commencement coincided with the conclusion of a project with which she was working, giving her the time and opportunity to define the direction of her future research. The Fellowship will make that easy by allowing her to get into the research that she is passionate about, i.e. reduction of greenhouse gas emissions in agriculture focusing on soil management practices among smallholder farmers in Malawi.

Jambawe always wanted to be a crop scientist like her father, but she was diverted to forestry in college, which is the course she was offered. Her first job with Dzalanyama Forest Conservation Project involved collecting baseline forestry data and socioeconomic data for the charcoal value chain from the Dzalanyama forest reserve, which is the main watershed for Lilongwe city. The data showed that if action was not taken to protect the forest, water would dry up in 10 years.

An emergency action plan was developed that included measures to address the drivers of deforestation and degradation of the forest. Her second job was with Protecting Ecosystems and Restoring Forests in Malawi, which focused on increasing land use opportunities with low emissions of greenhouse gases in the forestry, agriculture and energy sectors; improving the capacity for creation of development strategies targeting low emission of greenhouse gases; and advancing REDD+ readiness for Malawi.

One of the research studies from the project estimated the levels of greenhouse gas emissions from waste, livestock, energy, crops, forests and other land uses and found the most emissions to come from agriculture. It was the experience from these projects that ledJambawe to decide to become a research scientist.

Jambawe recognized, however, that working in forestry was drawing her away from her childhood dream of becoming a crop scientist and working to bring solutions to farmers' problems. So when the opportunity to combine climate change science with agriculture presented itself she grabbed it.

Research on the role of crops and livestock in greenhouse emissions was her way of getting into agriculture, and specifically crop science. She chose to focus on soil management practices and their role in greenhouse gas emissions.

Involvement with communities is an essential component of any research in Jambawe's view, and she finds it exciting when her innovation finds a place in the lives of the people she works to serve. She had that opportunity with an energy-efficient cooking stove model she supported promoting that was made with materials easily found in the community and that received community acceptance and a high adoption rate. There was a lesson for her in this case as well, that technologies that are easy to use, are cost-effective and address users' problems will be adopted.

Jambawe sees herself growing professionally to become an international consultant creating climate change adaptation and mitigation solutions for smallholder farmers. She wants to be part of the part of the policy making bodies for governments in Africa. She believes that the One Planet Fellowship will be important in the realization of her goals. It will provide her with the capacity to define her professional progression and to deliver her message to farmers; develop her interpersonal skills; facilitate her networking; and point her to resource sources.

Jambawe is keen on working on reseach that reaches and impact the community.

She is therefore, exploring livestock and soil management practices and their role in green pouse emissions.

Her new abilities will be valuable to her institution as well through improving her work, sharing with her colleagues, and by her influencing the programs to include factors such as gender, diversity, and cultural considerations. Jambawe is optimistic that the Fellowship will equip her with the confidence to handle some of the challenges she has encountered as a woman and a young scientist.

She remembers once when she had been selected from among her college class as the winner of an internship opportunity that led to her first job, and the project facilitator found it necessary to have two men from the class included to assist her on the assumption that she could not do the work by herself.

Mary Charles Jambawe 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.