

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





Position

Assistant Research Fellow

Institution

The Economic and Social Research Foundation (ESRF), Tanzania

Country

Tanzania

Education

MSc, Agricultural and Environmental Sciences, Newcastle University, England

Mentor

Dr. Luhunga Philbert Modest, Chief Research Officer, Tanzania Commission for Science and Technology (COSTECH)

Research Area

Agricultural and environmental sciences.

Benedicto Nsiima Mutalemwa

2021 One Planet Laureate Candidate

Benedicto Nsiima Mutalemwa is an assistant research fellow with the Economic and Social Research Foundation (ESRF), an NGO based in Tanzania. He got his BSc in environmental sciences from the Open University in Dar es Salaam. He then got a scholarship to Newcastle University in England, where he completed his MSc in agriculture and environmental sciences.

His interest in environmental sciences began in high school, where he became involved in environmental-related activities. "In high school, I was in the environmental management club, so I started attending workshops where we met with different organizations to discuss climate change and other issues," he recalls.

Upon completing high school, he joined a meteorological college and earned a certificate in atmospheric physics and meteorology.

Benedicto affirms that his interest was encouraged by his father, an accountant, and his mother, who brought him up in a smallscale farming experience.

After completing his education and engaging in different types of research, he found that the lack of reliable rains limits most smallscale agricultural systems. "Especially in sub-Saharan Africa (SSA), which uses rain-fed agricultural systems, drought has a significant impact on productivity," he says. He began asking himself questions like, "What can we do to help farmers who are experiencing climate change, especially droughts?" Such questions led him to a career at ESRF.

He wants to influence public policies, particularly on improving adaptation strategies to mitigate the effects of climate change on small-scale farmers.

"We aim to design sustainable rainwaterharvesting systems that can be used for irrigation during prolonged droughts and dry spells that are affecting farming seasons," he says.

Married and a father of three, Benedicto provides technical support for several projects at ESRF focused on agriculture and climate change. "Our institute is engaged in several projects, and I am the key person because of my background," he says.

"My institute is linked with the Center for Effective Global Action (CEGA) at Berkeley University in California, which promotes several engagements in East Africa through the East African Social Science Translation (EASST) program," Benedicto says. "We got funding from them last year and held a summit in Nairobi, Kenya. I attended, which provided me with a strong network with Berkeley, where I received updates and information about emerging opportunities in this sector. This is how I heard about the One Planet Fellowship. I recognized the amazing opportunity—and I thank God for it."

Benedicto appreciates that he was accepted into the program. "I have gained a lot in a very short time, especially thanks to the Mentoring Orientation Workshop, where I learned the importance of planning and setting goals," he says.

"I already feel that my performance has improved, as I am better organized, focused, and well-motivated."

He is committed to making a tangible contribution as his career progresses.

He is committed to doing all he can to help solve the problem of climate change that is facing smallholder farmers.

Although he was planning to pursue a PhD in 2022, this has been delayed by COVID-19. "I am thinking can I do up my concept notes and proposal while waiting for the situation to improve," he says.

He is thinking of studying in the U.K., the U.S., or Canada. As a climate change scientist, he realizes that he needs to enhance his skills in data analysis.

Thus, he has begun to look for information on online programs offered at various local institutions and overseas, including at Berkeley and MIT. "This is worthwhile, given the changing climate we are facing." Benedicto's research focuses on the best ways smallholder farmers can adapt to climate change through sustainable and more resilient agricultural practices and how to improve rain-water harvesting systems.

"A lot of things have changed in rain-fed agricultural systems, such as unpredictable seasonal variations like prolonged droughts and dry spells.

Although we have different agricultural zones that also influence productivity, based on crop types and rain patterns in Tanzania and SSA at large, the most important factor to heed is climate," he concludes.

Benedicto Nsiima Mutalemwa 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>