



**Position**

Lecturer

**Institution**

Jomo Kenyatta University of  
Agriculture and Technology  
(JKUAT), Kenya

**Country**

Kenya

**Education**

PhD, Horticultural Sciences,  
Gottfried Wilhelm Leibniz  
Universität Hannover, Germany

**Mentor**

Prof. Kanali Christopher,  
Professor of Agricultural  
Engineering, Jomo Kenyatta  
University of Agriculture and  
Technology (JKUAT), Kenya

**Research Area**

Crop processing and modeling  
and simulation in agriculture.

## Erick Kiplangat Ronoh

2021 One Planet Laureate Candidate

Erick Kiplangat Ronoh is a lecturer in the Agricultural and Biosystems Engineering Department at Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Nairobi, Kenya. "I cover climate-smart agricultural processing technologies to benefit farmers in Kenya," he says.

After completing his BSc degree in Agricultural Engineering and MSc degree in Agricultural Processing Engineering at the same university, he took a PhD in Horticultural Sciences from Gottfried Wilhelm Leibniz University Hannover, Germany, in the field of Biosystems Engineering.

"Agricultural engineering is broad, and my interest is on the agro-processing part," he says. "What can be done to help with postharvest handling, which results in about 30 percent losses?" He is very interested in sustainable climate-smart technologies using renewable energy such as solar and biomass. "To help minimize losses, I firmly believe that we need climate-smart technology."

Erick comes from a family of farmers who are focused on subsistence farming. "In seasons where losses occurred due to drought, nothing could be done. So postharvest losses sparked my interest in agriculture because I wanted to do something to help," he says.


Even though he was interested in climbing the academic ladder, he is committed to doing his best to "benefit humankind."

Right now, Erick is engaged in an ongoing project that involves solar-biomass hybrid drying and evaporative charcoal cooling powered by a solar photovoltaic (PV) system.

"These technologies are multipurpose and include drying and cooling systems for various agricultural products such as bananas, avocados, and indigenous vegetables, among other crops," he says. "For the case of cooling, solar PV improves the effectiveness of the cooling facility, and farmers are very happy."

Part of his work involves the use of briquettes for drying. "Biomass is plant or animal material used as fuel to produce heat," he explains. "Due to the engineering design of heat generation in the dryer, smoke doesn't get into contact with the product being dried."

This project was made possible thanks to funds from UKAID and the existence of an MOU between farmer groups and the university, and Ronoh says they are working closely together to date. "We may be able to provide other products to enable farmers to do different things," he remarks.



Erick's research centers on agricultural processing and structures, modeling and simulation in agriculture, renewable energy, and controlled environment agriculture.

Erick has been working with 20 farmers—sanitizing and wearing facemasks—but he says, “It’s not easy because of COVID. We are also engaging with the leaders and county officials. Online may not be an applicable option in our work, and hence we would need permission from the county to county to engage farmers while observing various protocols.”

While at JKUAT, Erick heard about the One Planet Fellowship from a colleague who was already involved in AWARD and says it came at the right time. “The program is valuable, especially because of the networking and mentoring,” he says. “Also, being linked with laureates provides the opportunity to expand my knowledge and share experiences with others.” He hopes that the One Planet Fellowship will help him to enhance his skills. “I believe this will also benefit others in the community as I network and relate with other researchers and colleagues,” he says.

His hope is to be a professor as well as a distinguished researcher who is involved in the dissemination of knowledge. “Before the program, I was concerned about a lack of opportunities for networking and a lack of funding and information. But now I have my eyes wide open, and I realize what opportunities the program offers,” he concludes.



**Erick Kiplangat Ronoh** 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 : [oneplanet.award@cgiar.org](mailto:oneplanet.award@cgiar.org)

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