



## Esther Mwende Muindi

2021 One Planet Laureate Candidate

### Position

Lecturer

### Institution

Pwani University, Kenya

### Country

Kenya

### Education

PhD, Soil and Water  
Management, Sokoine University  
of Agriculture, Tanzania

### Mentor

Dr. Anthony Esilaba, Assistant  
Director Natural Resource  
Systems, Kenya Agricultural and  
Livestock Research Organisation  
(KALRO)

### Research Area

Soil and water resource  
management.

Esther Mwende earned her BSc in agriculture and her MSc in agronomy from the University of Nairobi. She then got her PhD in soil and water management from the Sokoine University of Agriculture in Tanzania. She recalls initially wanting to be an engineer but says she is happy that her path changed to soil and water management.

“Right now, I am working on checking the agricultural potential of post-mined land as a reclamation measure,” she says.

Esther and her team are investigating the performance of various food crops on titanium mined-out soils that have been treated with manure and inorganic fertilizers.

The efforts are geared toward the profitable use of post-mined land to contribute to food security and improved livelihoods within the region through crop production as a land-use option.

She is also conducting a research entitled “integrated agro-waste and bio-slurry improvement for climate change mitigation and improved crop and livestock production systems in Kenya.”

This research is being carried out in three counties—Nyandarua, Nyeri, and Taita Taveta—and features on-farm trials and farmer training.

As a lecturer within the university, Esther has been involved in mentoring a number of undergraduate and graduate students in their studies and research work.

She is also a passionate Farmer Field School (FFS) master trainer.

Esther has been training farmers and community groups across the country in areas related to climate-smart agriculture, environmental management, and water resource management using an experimental learning approach.

Esther says she heard about the One Planet Fellowship from a friend who was an AWARD laureate.

“I was encouraged to apply, but I was hesitant even though I really wanted the mentorship,” she says.

One thing she is looking for in particular is gaining research and leadership skills.

Married with one son, Esther is aware of the struggle to maintain a healthy work-family balance.

As for her career goals, she wants to become a university vice-chancellor, and then after retirement, serve as a consultant at the Food and Agriculture Organization (FAO) or another UN organization.

As she moves through the fellowship and improves her research, communication, and leadership skills, Esther is confident that she will be able to carry out problem solving, climate-smart research in the area of soil and water management for improved environmental health, food security, and livelihoods.

She is also looking forward to gaining leadership skills that will propel her to lead with a difference and become a change agent.

Esther's work focuses on soil and water resource management, water harvesting, dryland agriculture, and climate-smart agriculture using an experimental learning approach.

**Esther Mwende Muindi** 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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