



## Mamo Fitih Ademe

2020 One Planet Laureate Candidate

### Position

Associate Researcher

### Institution

Ethiopian Institute of  
Agricultural Research

### Country

Ethiopia

### Education

MSc, Soil Science, Hawassa  
University, Ethiopia

### Mentor

Dr. Degefie Tibebe, Postdoctoral  
Research Fellow, Water and  
Land Resource Center of Addis  
Ababa University, Ethiopia

### Area of research

Generation and adaptation of  
climate-smart soil and water  
management options to improve  
crop yields under the changing  
climate conditions.

Mamo Fitih Ademe was born and raised in Dilla town in southern Ethiopia to teacher parents. As a child, his main concern was making sure that he did well in school, but as he grew older, he noticed his farming neighbors' hardships as their crops failed year in, year out owing to unpredictable weather.

Taking agriculture courses in primary and junior schools helped Mamo understand the risks and benefits of agriculture. He saw that the use of traditional farming methods was a significant problem. He joined Mekelle University for his undergraduate degree and enrolled in crop science to equip him with the skills and knowledge to solve the issues faced by farming neighbors. He later obtained a master's in soil science and a Ph.D. in soil science and climate change.

As a researcher with the Ethiopian Institute of Agricultural Research, Mamo works on soil and water management to provide climate change adaptation options to farmers. These farmers are dealing with declining crop yields due to low inherent soil fertility and moisture stress, especially in Ethiopia's semi-arid areas.

His research aims to generate climate-smart soil and water management options to improve crop yields under the variable and changing climatic conditions.

He uses different research protocols, including field experiments and model-based estimation, to forestall climate-related effects on crop production.

Mamo's motivation for pursuing a scientific career was driven by the desire to address challenges faced by his community and farmers in Ethiopia. "I am motivated to reduce their vulnerability to agricultural problems. I saw the issues in detail during my time in college. I want to reduce farmers' risks by providing them alternatives to rain-fed agriculture, which is not sustainable in this era of climate change," he says

Mamo is incredibly proud of successfully defining maize's critical soil phosphorus requirement levels in the central Rift Valley. This means that fertilizer recommendations will match the soil's requirements, and fertilizer use will reduce. Rainfall is the most crucial variable for agriculture.

Mamo's analysis of the trends, dry-spell occurrences, and seasonal water satisfaction levels in central Rift Valley can help development agents and researchers to create agronomic recommendations for farmers. He believes farmer involvement is vital in identifying the problems and in experimental activities. Their indigenous knowledge and their traditional practices are essential keys to solving farming

challenges.

Mamo aspires to be a technical expert and a research leader, and he believes the One Planet Fellowship will play a significant role in realizing his career dream. The skills in gender mainstreaming in research will improve his work and empower him to contribute to gender-responsive policy decisions.

Through mentoring, he will get the support he needs to be the scientist he wants to be. The leadership skills will be invaluable in guiding the multidisciplinary teams he will need to work with to generate farmers' solutions.

Mamo's involvement in the One Planet Fellowship will be a boon for his institution. He will apply his new skills and knowledge to work with colleagues to generate the technologies that will help farmers adapt to climate change and share his new skills with others. The biggest challenges in his line of work include the lack of funding and advanced technologies.

Mamo's research centers on soil and water management to provide climate change adaptation options to farmers using different research protocols, including field experiments and model-based estimation, to forestall climate-related effects on crop production.

**Mamo Fitih Ademe** 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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