

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

# Candidate Profile



### Position

PhD student at Haramaya University and Researcher

### Institution

Ethiopian Institute of Agricultural Research, Assosa Center

### Country

Ethiopia

### **Education**

Msc, Animal Sciences, Wageningen University and Research Center, Netherlands

#### Mentor

Dr Aemiro Kehaliew Ashagrie, Senior researcher, Ethiopian Institute of Agricultural Research (EIAR)

### **Research Area**

Climate-smart agriculture with special emphasis on greenhouse gas emissions from livestock

## Alemayehu Abebe Lamore

2019 One Planet Laureate Candidate

Alex, as Alemayehu Abebe Lamore is fondly known, has a personal reason for his interest to develop livestock feed technologies that minimize greenhouse gas emissions and at the same time improve animal production and productivity. He is part of a society that is victim to the effects of climate change, manifested in the high levels of livestock diseases, loss of grazing land productivity owing to the prevalence of invasive weeds, persistent droughts, and natural resource degradation and desertification, the result of which is food insecurity. He is also aware that livestock, the mainstay of his community's livelihood, contribute as much as 80 percent of the greenhouse gases from agriculture.

Lamore believes that addressing these challenges is urgent and that he needs to be part of it: "I have seen the impact of climate change on my family and society and I feel that I have to contribute something to solve this problem," he says. "I have a daughter too, and I have to think of her future."

The magnitude of the task is disheartening, considering Ethiopia's livestock numbers.

For cattle numbers alone, Ethiopia is fifth worldwide with an estimated population of 54 million, most of which are reared under a smallholder crop-livestock mixed farming system and are dependent on poor roughage feeds with high fiber content. These feeds are said to generate the highest levels of methane, a major greenhouse gas. Lamore's research seeks to develop improved animal feeding practices and technologies.

The technologies that he and his colleagues at the Ethiopian Institute of Agricultural Research's Assosa Center are working on focus on strategic supplementary feeding, improved diet quality, adequate animal health control, and improvement of livestock genetics. The goal is to introduce highly productive livestock and more nutritious animal feed, reducing animal numbers but improving animal outputs and reducing animal greenhouse gas emissions.

Lamore grew up aiming to be a doctor, which was his family's expectation, but ended up pursuing animal science because that was the course he was assigned to at university. He says that he immediately took to animal science because he could see its value in the lives of his family and community. He has also found out that animal science offers many opportunities for creativity and defining how one can best serve the people he care about.

His current work of screening animal feed for quality and biomass yield for eventual transfer to farmers is exciting for several reasons: (1) it will result in improving farmers' livelihood by providing them good quality feeds and in minimizing greenhouse gas emissions, (2) after the animal feeds from the genebank are screened, promising varieties will be demonstrated to farmers, and this involvement of the community is something he likes, and (3) detailed research in the areas of his interest has not been carried out in Ethiopia, so in a sense he is breaking new ground in his exploration of animal feeds for his PhD.

Lamore aspires to be a principal investigator in climate change at an international research institution, specifically working within the CGIAR. He aims to undertake groundbreaking research that will win him worldwide recognition and earn him a seat at the Intergovernmental Panel on Climate Change as a contributor. He considers the One Planet Fellowship as a godsend opportunity in his career journey.

The international experience and exposure to leading scientists in his area; the enhancement of knowledge and skills from the training; the improvement of networking and interpersonal skills from the mentoring experience; "I have seen the impact of climate change on my family and society and I feel that I have to contribute something to solve this problem. Thus, I am developing improved animal feeding practices and technologies that will enhance animal productivity and nutrition while reducing animal greenhouse gas emissions."

and the recognition as a One Planet Fellowship Laureate all will serve to raise his profile as a climate change expert.

But even before the time comes to get into the international research arena, Lamore can help change the way his current institution conducts its work with the skills acquired from the One Planet Fellowship: his own performance at the institution will improve, he will start mentoring colleagues and work to have a mentoring program started, and he will ensure that gender aspects are included in the institution's work.

Like many research institutions, Lamore's institution deals with limitations in resources to conduct experiments, inadequate facilities for undertaking good research in greenhouse gas mitigation, and lack of training and internet access, but he believes that the One Planet Fellowship will broaden his creativity and allow him to discover non-traditional methods through which he can have access to some of the resources his institution lacks.

Alemayehu Abebe Lamore 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>