

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

Candidate Profile



Position

Student - Researcher, Program Manager

Institution

Université Gaston Berger, Initiative Prospective Agricole et Rurale (IPAR)

Country

Senegal

Education

Msc, Applied Sciences, Gaston Berger University, Senegal

Mentor

Dr. Boubacar Fall, Research Professor in Geology, Cheikh Anta Diop University of Dakar (UCAD), Senegal

Research Area

Climate change and food security (Socio agEcon and gender).

Ly Amadou

2021 One Planet Laureate Candidate

Ly Amadou was born in 1990 in Podor, a town in northern Senegal, 215 km east of Saint-Louis (on the island of Morfil, between two branches of the Senegal River). He lived there until the age of five. His mother was his teacher for his first three years of primary school.

Then his family (two boys and two girls) moved several times to the north, following their accountant father's work assignments. When the family moved to Dakar, the Senegalese capital, he was eight years old.

A good student, Ly won several spelling bees in primary and secondary school. He obtained his literary baccalaureate in 2008 in Dakar. Thanks to his brilliant results, he was awarded an excellence scholarship to France's university studies. However, for two successive years, administrative reasons prevented him from leaving. In the meantime, he opted for economics and enrolled at the Gaston Berger University of Saint Louis. Saint Louis is one of the largest cities in Senegal and is on the UNESCO World Heritage List.

From his first day at the university, he had a fixed idea without knowing the exact path. He wanted to be a doctor, he recalls.

He received a scholarship from the first year of university. After a foundation degree in economics and management sciences, he continued to a bachelor's degree in 2011 and a master's degree in applied economics in 2012. In 2014, he opted for a postgraduate degree in quantitative economics.

In his advanced studies qualification, Ly wanted to focus on current issues such as sustainable development.

As part of his advanced studies, he did a four-month internship in the regional statistics and demography department of Saint Louis. Following his initial plan, he enrolled for a PhD at this same university in 2015.

After his advanced studies, he decided to specialize further and thus moved on to another topical issue, namely climate change.

His interest in this issue grew and he of course deepened his knowledge during his thesis, and since then has been working in this field.

"I have always had a keen interest in going beyond factual issues," says the agroeconomist.

Ly is a PhD student in economics at Gaston Berger University in Saint Louis, Senegal.

His research area is the analysis of climate impacts on food security and poverty of rural households.

Specifically, it examines the implications of climate shocks on food and nutrition security in rural Senegalese agriculture.

He is currently leading an Agricultural Model Intercomparison and Improvement Project (AgMIP) to assess the impacts of climate change on agricultural production systems and the effects of adaptation options on the welfare of farming households.

This project aims to develop a better understanding of how plausible future agricultural systems will respond to climate conditions to inform decision making and national adaptation policies.

On this basis, together with the research team, the PhD student is working to understand better how plausible future agricultural systems will react under climate change.

For him, the rural environment is being hit hard by climate change, and its urgent issues are either ignored or barely taken into account in current policies. He asks himself, "How can we help to change this?

In addition, at the beginning of his thesis, he did an internship with his supervisor at the Research Centre for Economic and Social Development to become more familiar with the application of econometric and statistical tools on real data.

Since 2015, his research has focused on rainfall shocks' impacts on malnutrition in Senegal, as the impact chain is not always clear, and the link is not always obvious. In West Africa, the causal pathway is not always studied.

However, the results at this stage demonstrate the link between the impacts and the status of the mothers of children. Indeed, women are still involved in the agricultural sector, but their income does not match their work.

They work a lot but do not always find enough time to concentrate on their children's nutrition to ensure sufficient development conditions. Ly takes great pleasure in tackling the most exciting research topic he has explored until this stage.

However, Ly works mainly with secondary data in the framework of his thesis. In the near future, he would like to meet with rural communities directly to consider their vision of the solutions to be developed.

His research director sent him an email to inform him about the One Planet Fellowship.

In the short term, Ly intends to defend his thesis. In his family, he is the only one with this level of education. Ly is studying the implications of climate shocks on food and nutrition security in rural Senegalese agriculture in order to better understand how plausible future agricultural systems respond to climate to inform decision-making and national adaptation policies.

Then, in the medium term, he would like to become a researcher specializing in adaptation strategies for vulnerable communities to better link research to policy, as research alone is not enough.

It is imperative to transform research findings into policy on the ground. To this end, he also wishes to continue working in institutions (combining research and policy influence) to continue to reflect on how research results can be taken into account more by policymakers.

His career goal is to do a postdoctorate to strengthen his skills as a researcher on econometric tools and publish high value-added articles.

This fellowship will help Ly achieve his career goals and improve his research work on two levels. Firstly, scientific capacity building through tools, writing scientific articles, and developing research projects on relevant projects.

Secondly, personal development (soft skills): mentoring, leadership, managing research teams, self-confidence, presenting results.

In short, he wants to develop his leadership skills further to be more proactive in all areas of his professional life. For him, this aspect is cruelly lacking in scientific research.

The lessons learned from the One Planet Fellowship will be put to good use by his institution, in this case, through responses to calls for projects. From now on, published studies will be of better quality. Ly aims to improve his research skills and publish articles in renowned journals.

After identifying the problems faced by vulnerable populations in the agricultural sector, he will develop coping strategies with them. Moreover, he will be equipped to convince decision-makers to transform knowledge into concrete action.

Ly's first challenge is finding a mentor or someone who can accompany him to develop skills to avoid making certain mistakes. He acknowledges that he has missed this psychological and technical support.

He explains that junior researchers have great potential but are not guided.

Ly admits that he did not overcome the lack of a mentor 100 percent, but he could develop coping strategies.

His motto was, "take action and continue to do so while learning from your mistakes." In addition, it is important to share ideas with junior researchers and new PhD students, guide them toward feasible topics, advise them on how to manage time better, and develop important skills for researchers. Of course, the financial challenge is obvious.

Ly Amadou 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