



Wane Yaye Deffa

2019 One Planet Laureate Candidate

Position

PhD student

Institution

Gaston Berger University of
Saint Louis

Country

Senegal

Education

Master's II, Plant Production
and Agronomy, Gaston
Berger University of Saint
Louis

Mentor

Dr. Lamine Diop, Teacher-
Researcher, Water
Productivity, and Water
Management Resources,
Gaston Berger University of
Saint Louis

Research Area

Plant Production and
Agricultural Innovations for
Small Producers

Wane Yaye Deffa, passionate about biology since her secondary school years, dreamed of being a doctor. After obtaining her Baccalaureate S2, specialising in natural sciences, she unsuccessfully sat the entrance exam for the Thiès medical faculty.

In 2012, on the well-meaning advice of her father, an Agronomist Engineer at the Society for the Development and Exploitation of Delta Land (SAED - Société d'Aménagement et d'Exploitation des terres du Delta) in the city of Saint Louis, she enrolled on an undergraduate course at Gaston Berger University, in the faculty of Agronomic Sciences, Agriculture and Agri-food Technologies (S2ATA) in Saint Louis.

During her undergraduate degree, she did an internship at the SAED delegation in Podor, to draft her thesis, and then at Grands Domaines du Sénégal (GDS).

Between 2015 and 2016, she successively completed her master's I and II degrees in crop production and agronomy at the Gaston Berger University of Saint Louis.

Her first research project took place as part of her master's II internship at the Africa Rice centre in Senegal. She worked there for 6 months on the characterization of more than 200 new lines of rice with male sterility induced by EGMS (environment-induced genie male-sterile).

At the end of her second master's, several opportunities were available to her, among others: working for Agripo Senegal, an organization that distributes hybrid and market gardening seeds to small producers in rural areas for trials and comparisons with local seeds, or continue in academic research.

Deffa opted to write her thesis in 2019 under the leadership of Professor Mariam Dallanda Diallo, a renowned female scientist, whom she considers to be her mentor.

Deffa's thesis is funded by WAGRINNOVA (Co-Innovations across scales to enhance sustainable intensification resilience, and food and nutritional security in water-managed agricultural systems in West Africa).

She aims to establish sustainable management of water, soils and long-term food security in the context of climate change.

The overall objective is to contribute to increasing the agricultural productivity of irrigated systems by improving soil fertility and irrigation management in the northern Niayes area. In the Niayes area, smallholders mismanage water resources. The waste is permanent, although given the resources available, rational use is essential.

In addition, production does not reflect the real potential of the area. It is therefore advisable to support them in their production system to detect faults and propose innovations. These actions will focus particularly on practices relating to soil fertilization and irrigation.

The very curious, determined and sensitive young researcher who got wind of the "One Planet Fellowship" programme via an information sharing network, wants to make the most of the collaboration, capacity building and visibility opportunities that will be available to her, offered for the next three years.

Deffa dreams of becoming a Teacher-Researcher and also leaves the door open to opportunities within research and development organizations.

Deffa aims to implement long-term sustainable water and soil management solutions in the context of climate change by increasing the agricultural productivity of irrigation systems and improving soil fertility.

She owes this freedom to dream to her father, who made the quality of his children's education a point of honour, regardless of their gender.

Indeed, Deffa, born in Saint Louis, had a happy childhood with her four brothers and sisters, wanting for nothing, she says. This young Fulani girl would without doubt have been married long ago and abandoned her studies, had it not been for the environment her parents created, so favourable to their children's academic success.

Deffa not only wants to be a role model of scientific success but also a source of inspiration and mentor for young people, especially young girls.

Wane Yaye Deffa 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