

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

Candidate Profile



Position

Research fellow

Institution

Senegalese Institute for Agricultural Research (ISRA)

Country

Côte d'Ivoire

Education

Msc, Agroforestry, Cheikh Anta Diop University (UCAD), Dakar, Senegal

Mentor

Amin Ariane Manuela, Associate Professor, Swiss Center for Scientific Research in Côte d'Ivoire (CSRS) / Félix Houphouët Boigny University, (FHBU) Côte d'Ivoire

Research Area

Optimizing economic and financial systems for sustainability

N'goran Ange-Jokébed Adjoua

2021 One Planet Laureate Candidate

N'goran Ange-Jokébed Adjoua was born in Bouaké, a town in central Côte d'Ivoire, located approximately 350 km from Abidjan, where her paternal family resides. She comes from a family of eight children. When her family moved to Abidjan, the economic capital, she was two years old.

Her parents were continuously on the road for professional reasons, so she joined a Catholic boarding school with her older sister from the age of four. Her experience as a boarder, living far from her parents, did not go well. In particular, she admits with embarrassment due to the mistreatment she suffered following a false accusation of theft by some nuns.

After a year, she and her sister returned to their family.

As a good student, she received a scholarship from the Ivorian state after the BEPC (middle school exam).

She cultivated a love for school but, above all, for excellence in achievement, thanks to her neighboring classmate, who always came to the top of the class. This made her want to do better than her.

To this day, N'goran maintains a healthy sense of competition. She finally managed to overtake her classmate at the end of the year and was very proud to win the prize for being the best mathematician of the school in the final year.

Her friend and rival were the first to congratulate her, she recalls emotionally. She obtained her scientific baccalaureate (natural sciences) and opted for a scientific course with good marks. 'The socio-political crisis in Côte d'Ivoire shattered her dream of studying medicine as universities closed, and it was too late for her medical registrations in neighboring countries.

After kind advice and encouragement from her family, she passed the entrance examination to the long academic cycle for the Polytechnic Houphouët-Boign school of excellence in Yamoussoukro in Côte d'Ivoire. The first two years were highly selective preparatory classes.

She admits that she did not enjoy this course of study. The first year, she was hardly motivated and not diligent enough, she admits frankly.

Every weekend, the young student returned with her family to Yamoussokro (located 240 kilometers north of Abidjan) or to Abidjan. She was not concentrating because she was secretly hoping for a positive response for enrolment in a medical school in Mali.

For the first time in her brilliant school career, her results were fairly average but reflected her lack of work. However, these results did allow her to move on to the second year.

Both relieved and happy, she, at last, decided to invest in her studies. Fortunately, this experience made her realize that she wasted a great opportunity. Other students envied her being in this school of excellence.

She chose the agricultural sciences engineering cycle: zootechnical specialization in her final year, no doubt because she grew up with researchers' parents.

Indeed, her father is a parasitologist teaching at the university, and her mother is an agricultural engineer in service in a research center. As a child, she often went into the field in different cities to accompany her parents to work. This is how she developed a love for travel and, above all, discovery, but also the ability to adapt.

However, she had a vague idea of agronomy and the animal industry. Her objective is to reach at least the level of her parents.

She believes that "children should not achieve less than their parents (in education")," she affirms. Very early on, she began to look for ways and means, and above all, the best option, to surpass the level of her parents.

'She won a German AAD scholarship for a two-year research master's in agroforestry, ecology, and plant adaptation in Senegal with this as motivation.

When the time came for an internship to validate her master's degree, she looked for a theme to link her two areas of expertise: zootechnics and agroforestry ecology.

She ,therefore, applied for an internship offer from the Pastoralism and Dry Areas Pole (PPZS).

Unfortunately, the internship had already been awarded. However, her application (cover letter and CV) allowed her to obtain an appointment, which would lead to a proposal for an internship without funding, still relating to a topic that interested her. This was how a collaboration began with Dr. Simon Taugourdeau as a master's supervisor, then a doctoral thesis supervisor.

Her fieldwork (soil study) led her to travel to several cities to propose a method of analyzing carbon stocks in the soil on sites of the Senegal Ecological Monitoring Centre, where vegetable biomass was already assessed. At the end of her master's, it was a matter of great pride for her to see the presentation of her research results at the 2019 International Conference on Agroforestry. The ecological monitoring center also appreciated the work done.

In entering the field, especially zootechnics, through experience and internships, she was won over by the sector because she ended up understanding that good health is also linked to a sufficient quantity of good quality food.

She did internships on the study of the livestock sector and the influence of trees on soil carbon stocks in silvopastoral zones.

After her master's, she returned to Côte d'Ivoire at the end of 2018, where she had an important meeting with Dr. Wane Abddrahmane (a specialist in livestock economics at CIRAD).

For N'goran, pastures are an essential source of livestock feed in Sahelian countries, where this activity represents a vital economic resource. She is therefore studying the impact of management practices and water regimes on the dynamics of herbaceous vegetation in a Sahelian ecosystem.

Thanks to his recommendations, she was able to gain professional experience. She had the opportunity to carry out various consultancy contracts to study the impact of climate change on the marketing and consumption of livestock.

These were on behalf of, respectively, the Swiss Center for Scientific Research (CSRS), the International Livestock Research (ILRI), and the Center for International Cooperation in Agronomic Research for Development (CIRAD).

N'goran believes that grazing land is the main food source for livestock in Sahelian countries. These pastures represent a vital economic resource.

It remains a struggle to assess this resource in terms of quantity and quality due to climatic fluctuations and the various existing management practices. To this end, she aims to provide clear answers through her PhD research by addressing: "the impact of management practices and the hydraulic regime on the dynamics of herbaceous vegetation in a Sahelian ecosystem: a case study of Dahra Djoloff in Senegal."

N'goran loves nature and therefore hates pollution. And she has realized that in terms of climate change, human action (anthropic) is having a real impact, more precisely, polluting the rural environment.

"We must act without delay, collaborate with the states and major research institutes to help producers, and protect them from pollutive actions from elsewhere," she insists. In times before, when her grandparents were farming, organic farming or extensive cultivation was prevalent. This did not cause any major nuisance, she reasons.

She wants to have a real impact, to take action with stockbreeders because they are the most affected by the status quo. "I cannot say whether it is a trigger, but I want to reconcile economy and quality of production through agroforestry," she confides. Currently, she does not work with rural communities but plans to disseminate her research results in rural areas. She received information on the One Planet Fellowship from fellow master's students.

She wishes to significantly impact the livestock sector in Africa because this sector is neglected by the policies and states of the coastal countries, particularly Ghana and Côte d'Ivoire. Her goal is to help young people integrate into this environment, which is both difficult and closed off, dominated by imports while there is enough food to satisfy everyone in this sector. It is about developing collaboration between people who have the same objective, more oriented explicitly toward breeding and climate change, to create a balance.

For her, AWARD's method of training tomorrow's researchers is exciting (leadership, skills, writing). The method aims to create a network of researchers to join forces and meet Africa's challenges. The idea of combining skills, taking into account multidisciplinarity to produce an impact, means getting sociologists, economists, agronomists, etc. to work together.

She particularly appreciates her growing relationship with her mentor. She has discovered that they have the same professional goals. Another plus is that N'goran feels she is well understood.

Thanks to her mentor's guidance, she has a better vision, particularly in terms of intervention. Her mentor is also teaching her to capitalize on meetings and skills to be better equipped to help and share her knowledge. Upon completing her PhD studies, she plans to work for international organizations such as ILRI or the Food and Agriculture Organization (FAO) to further contribute to the development of research solutions to mitigate the effects of climate change in Africa. She hopes to become an associate professor to share her knowledge and skills with students, the future builders of Africa's economic development.

N'goran cites two major challenges for a scientist-researcher: the slowness of the administrative process and the "superiority complex" of some men. This administrative slowness caused her to be one year behind in her thesis work. Her thesis began in July of this year. However, it should have started in June 2020. To overcome this major challenge, she had to concentrate most of her field activities into this year.

Moreover, she regrets the negative repercussions of the mentoring training sessions within the framework of the AWARD program. Much of her field activities occur during the rainy season in Senegal (June to October each year). Firstly, she was a month late in starting her work because of financial complications and the lack of professionalism within the company to help her build her experimental device. This device comprises four shelters or roofs to allow the rainwater to be diverted and thus control all the water inflows on the plots to be studied.

Everything was ready when, on the night of July 18, 2021, a violent wind destroyed all four roofs. She and her thesis supervisors had anticipated this delay and had considered three alternative scenarios of field activity plans (A, B, C). They were therefore forced to switch to plan B. This is just one example of the problems, says N'goran.

As a woman, working with certain people, such as butchers and livestock traders, is not always easy. Indeed, these people are generally very attached to traditional socio-cultural values concerning the role of women. To cope with this, she has become accustomed to involving both men and women on her teams for carrying out focus groups or interviews. And she puts men in the foreground to chair or moderate the discussions.

N'goran Ange-Jokébed Adjoua 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.