OnePlanet FELLOWSHIP

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

Candidate Profile

Dekoula Sekpa Charles

2020 One Planet Laureate Candidate

Position

Researcher

Institution

Université Felix Houphouët-Boigny

Country

Côte d'Ivoire

Education

PhD, Earth Sciences, specializing in Hydrogeology, with Water Resources and Climatology

Mentor

Dr. M'bo Kacou Antoine Alban, Researcher, Université Félix Houphouët-Boigny, and Associate Researcher, ICRAF Côte d'Ivoire

Research Area

Climatic variations and their effects on agricultural production.

Dekoula Sekpa Charles, a 36-year-old hydrogeological researcher at Université Félix Houphouët-Boigny in Côte d'Ivoire, specialises in the field of agroclimatology. His research is focused on documenting the relationship between climate change and agriculture, specifically, climatic variations and their effects on agricultural production. In recent decades, rain-fed agricultural farmers have become vulnerable to the risk of lower yields, and some have stopped producing certain crops. According to Dekoula, it is essential to identify issues related to climatic variations to provide adapted solutions. He is working to strengthen the resilience of small-scale cotton farmers by developing an updated crop-sowing calendar.

Dekoula was born in 1984, in Divo, a city in southern Côte d'Ivoire. From a family of eleven children, he still has vivid memories of working in the rice fields with his mother, brothers, and sisters from a family of eleven children. From secondary school onwards, he developed a passion for science.

After obtaining his high school diploma in Maths and Natural Sciences in 2004, he left his hometown to pursue higher education in Abidjan, the country's economic capital. Although his father, a primary school teacher, was keen for Dekoula to become a doctor, he intended to take geography instead.

Exploring humans' relationship with the Earth was an aspect of this discipline that particularly appealed to the young man. Ultimately, Dekoula opted for the Chemistry, Biology and Geology (CBG) programme at Université Félix Houphouët-Boigny.

After completing the core curriculum, he obtained a General Studies Diploma (DEUG 2) in 2008 and then continued to a Bachelor's degree in Earth Sciences with geology. The following year, he specialized in geology for the Master's degree, but due to the post-electoral crisis in 2010, Ivorian universities were closed and would remain so for two years.

In 2012, Dekoula enrolled on a Master's degree in Earth Sciences specializing in Hydrogeology, delighted to resume his university studies, and graduated in 2014.

He was offered a post-doctoral internship in the same laboratory to continue working on this issue. However, there is a lack of expertise in this field.

Dekoula's thesis was based on optimizing the cotton-growing season by adapting to climate variability in Côte d'Ivoire. His thesis promoted cotton research within a multidisciplinary team, funded by the European Union through the Interprofessional Fund for Agricultural Research and Advisory Services (FIRCA).

Dekoula's research is based on optimizing the cotton-growing season by adapting to climate variability in Côte d'Ivoire to minimize the risk of cotton crop failure by adhering to the recommended sowing periods.

The scientific methodology adopted consisted in determining the optimal dates for sowing cotton plants. It involved a technique for sustainable cotton production through the updating of crop calendars. In other words, the aim was to minimize the risk of cotton crop failure by adhering to the recommended sowing periods.

"I enjoy working in this field of research: optimizing the use of crop calendars to obtain a better yield and thus improve people's living conditions." He is frustrated that producers face the same problems today as 30 years ago when his mother was farming.

Dekoula learned about the One Planet Fellowship through social media. He applied to the first call but was not selected. He prepared for the second calling and was successfully selected.

Dekoula aspires to become a Full Professor or Research Director in the future. He aims to produce research that benefits scientific and rural communities, particularly agriculture and related fields. Additionally, he would like to help train young graduates. He is currently going through the university recruitment process to become an Associate Professor in the immediate future.

He would also like to work in a research center and collaborate with a Non-Governmental Organisation involved in initiatives to mitigate climate change and its devastating effects in Africa.

According to Dekoula, the One Planet Fellowship represents a fantastic opportunity for capacity-building, especially in leadership skills and specific training courses on topics such as modeling. Dekoula regrets not including agro-climatic modeling in his thesis, which he believes is an essential tool when providing consulting services on particular varieties in crop-producing areas.

Dekoula feels highly privileged to be taking part in this program. He plans to share the knowledge gained from the One Planet Fellowship with his colleagues and the students under his supervision. He also hopes to use this new expertise to develop appropriate solutions to the problems encountered by farmers during their daily operations.

According to Dekoula, researchers must overcome several technical and financial challenges, and there are often close links between the two. Despite his efforts to address these challenges and enthusiasm, research outcomes can often be sub-standard because the work must be carried out under difficult circumstances.

Dekoula believes that many protocols or analyses are abandoned due to a lack of funding or equipment. Nevertheless, when research does produce positive results, it is incredibly satisfying. For example, "producers have begun to adopt the updated crop calendar, which is now widely used in certain production areas," says Dekoula enthusiastically.

Dekoula Sekpa Charles 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.