



Amy Bodian

2019 One Planet Laureate Candidate

Position

Researcher

Institution

Senegalese Institute of Agricultural Research, Institut Sénégalais de Recherches Agricoles (ISRA)/Regional Study Centre for the Improvement of Adaptation to Drought Centre d'Etude Régional pour l'Amélioration de l'adaptation à la Sécheresse (CERAAS)

Country

Senegal

Education

PhD, Plant and Microbial Biotechnologies and Improvement of Plants (UCAD)

Mentor

Dr. Tatiana Wade Krasova, Lomé Scientific Programme Officer, Research Institute for Development (IRD)

Research Area

Management of Agricultural Biodiversity

Amy Bodian was born in Casamance, which has the reputation of being the most beautiful region in Senegal and West Africa. Casamance, whose name comes from the River Casamance, is located in the South West of Senegal, between Gambia and Guinea-Bissau.

Bodian is the daughter of a military medic, and has no memory of her mother, who died young. She wanted to become a pilot, but this dream was soon shattered by relatives who saw this profession as being reserved for men. She still nourished her love for science and in 1999 achieved her Baccalaureate S2 (natural sciences, mathematics, physical sciences). She applied to the Department of Pharmacy at Cheikh Anta Diop University (UCAD - Université Cheikh Anta Diop) in Dakar but, to her disappointment, was accepted to study natural sciences at the Faculty of Science and Technology for her undergraduate cycle.

Her hopes of becoming a pharmacist were not entirely lost as the Senegalese university system still offered her the opportunity to apply for the Department of Pharmacy after two years of studying natural sciences.

She got a taste for plant biology and, upon obtaining her degree in 2003, applied to do a master's.

Her only revenge against a difficult childhood was to succeed in obtaining the highest university degree possible, she says.

Between 2004 and 2005, Bodian enrolled to take her Certificate of Advanced Studies (AEA - Attestation d'Etudes Approfondies) in plant biology and then her Diploma of Advanced Studies (DEA - Diplôme d'Etudes Approfondies) and worked on the genetic diversity of date palm as part of a project funded by the Institute of Research for Development (IRD - Institut de Recherche pour le Développement). She conducted her research in the molecular biology laboratory of CERAAS based in Thiès.

After her DEA, Bodian, without funding, saw her hopes of studying for a doctorate vanish. However, a colleague put her in contact with Professor Mouhamed Aziz El Houmaizi from the Mohamed Premier University (Université Mohamed 1er) in Oujda, Morocco, who was working on date palms.

Bodian is working on agricultural biodiversity management. Her objective is to contribute to a better management of plant genetic resources in Senegal.

This contact gave rise to close scientific collaboration, a thesis proposal co-supervised by Professor Mouhamed El Houmaizi and Professor Djibril Sané of UCAD and external supervisor Dr. Khadidiatou Ndoye Ndir of the National School of Agriculture (ENSA - Ecole Nationale Supérieure d'Agriculture) in Thiès, Senegal. She benefits from a multitude of grants and financial supports (state grants, Azyila gum company, DAAD). The Azyila gum company grant allowed her to finance her stays in Morocco for her field work. The DAAD scholarship financed her stay in Germany at Julius Kuhn Institute (JKI) in Quedlinburg for her laboratory work.

Bodian defended her thesis at the Cheik Anta Diop University of Dakar in 2012 and was recruited in 2014 as a researcher at the Regional Study Centre for the Improvement of Adaptation to Drought (CERAAS) in Thiès, Senegal.

At CERAAS, she works on the management of agricultural biodiversity. The objective is to contribute to better management of phytogenetic resources in Senegal. In this context a collection of traditional accessions of wild relatives of cowpea has been established through surveys and collections from rural producers. This collection is kept ex situ in a cold room. After phenotyping and genotyping the traditional accessions, a core collection has been defined, on which detailed studies are carried out, such as adaptation to drought, inoculation with rhizobia to increase productivity. This knowledge will allow better development of these resources by producers and selection programmes to deal with climate change.

Bodian, who aspires to become a Research Director, have more responsibility and hold decision-making positions within her institution, underlines the importance of the "One Planet Fellowship" programme for her career goals. She intends to take advantage of the capacity building, the collaboration possibilities and the visibility offered by the programme. She would like to lead a research team to use her leadership skills and better integrate gender issues in her research projects. She also plans to transfer the benefits offered by the "One Planet Fellowship" to the students she supervises as well as to the staff of her institution and even at national and international level. She says she is very enthusiastic about the idea of becoming a mentor and putting particular emphasis on the support of women and girls whom she supervises in the context of their master's and doctorate work. She speaks with great sadness about the difficulties of African women who sometimes have to make the difficult choice between their professional career and their family life. She remains very grateful to her husband who provides all the support she needs to cope with daily difficulties.

Amy BODIAN 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