



Adelusi Oludotun Olusegun

2020 One Planet Laureate Candidate

Position

Lecturer II

Institution

Federal University of Agriculture
Abeokuta, Nigeria

Country

Nigeria

Education

PhD, Ruminant Animal Nutrition,
Federal University of Agriculture,
Abeokuta, (FUNAAB), Nigeria

Mentor

Dr. Ronke Yemisi Aderinboye,
Associate Professor, Federal
University of Agriculture
Abeokuta, Nigeria

Research Area

Innovative approaches to
sustainable pest management in
the face of climate change.

Adelusi Oludotun Olusegun was born to career teachers in a family of four children. He did his primary and secondary schooling in Ogun State's Owode-Egbado town in Nigeria before joining the Federal University of Agriculture, Abeokuta, to study agriculture. His early exposure to agriculture by helping in his fathers' farm left him an impression of farming's value.

He had the first-hand experience on how poultry and crops production, even on a small scale, could ensure a family's food security and serve as a source of income. Adelusi and his siblings helped on the farm mainly during the school vacation, but that was enough time for their dad to ensure adequate home education in agriculture.

Growing up during the Nigerian oil boom era created awareness for Adelusi about the neglect of agriculture, especially animal production, as the engine for economic development and its consequences, particularly on the country's inability to feed itself. In choosing ruminant nutrition as his area of research focus, Adelusi believed that this was where he could best serve Nigeria in contributing to reviving agriculture while at the same time having his curiosity satisfied because there were many research gaps in that area.

A significant goal of Adelusi's research, which he is conducting as a lecturer at his old university,

is improving the economic value of ruminant production. In Nigeria, ruminant production is done majorly by smallholders and nomadic herders, and its commercialization is difficult. Changing its commercialization and economic impact on the nation requires congregating ruminant production and finding viable and sustainable feed sources. The production of such feed must also consider the need to reduce ruminant methane production, which is a contributing factor in the generation of greenhouse gases.

Adelusi's work addresses these challenges by finding a way for local and readily available resources such as agricultural waste and agro-industrial by-products can be used as feed sources. Doing so will also manipulate the rumen environment to reduce the adverse climate effects of methane from livestock. He is evaluating herbs and shrubs that contain phytochemicals for their ability to modify rumen chemistry, lower methane production, and nutrient retention. He uses these plant species, along with crop residues and agro-industrial by-products, to formulate diets to combat the feed shortage that smallholder farmers face.

Adelusi's research focus is driven by the fact that the work he chose to do 15 years ago is still relevant today. He notes,

"We have challenges in the feeding of

ruminants. These require solutions to reduce conflicts over land and water resources and engender cooperation and synergy among resource users in agriculture. For example, stalk from crop production can be used as livestock feed, while manure can serve as fertilizer. People are waiting for the outcome of the work I am doing.”

The fact that Africa does not have the agricultural production level of advanced nations indicates that innovation is imperative for better agricultural outcomes on the continent that do not compromise the environment. Adelusi is working towards creating answers and solutions to some of these challenges.

Community engagement is crucial for research to have relevance. Adelusi seeks to work closely with the extension department at his university to share technologies from his research with the intended people. Interaction with the extension workers provides an opportunity to see what is going on in the community where the research’s raw materials are fetched.

For Adelusi, interaction with students, the generation that will come after him, is enlivening. He enjoys being in the lab or field with them and mentoring them to appreciate work’s value. He aspires to participate in policy-making nationally and internationally as an expert in agriculture. He sees the One Planet Fellowship as a perfect fit in his realization of his career objective. The mentorship training will sharpen his coaching skills, while the leadership and interpersonal skills will boost his confidence and provide him with the tools he needs to function as a scientific leader and a policy expert in his area of research. The Fellowships’ networking opportunities will promote collaboration with researchers worldwide and expose him to the latest developments in his field,

Adelusi’s research is exploring ways in which local and readily available resources such as agricultural waste and agro-industrial by-products can be used as feed sources to improve the economic value of ruminant production in Nigeria.

particularly instrumentation and methodology, thereby improving his research. The grant writing skills, an essential tool for every scientist, will serve him well in his search for funding and coaching students in that area.

The influence of the One Planet Fellowship is already being felt in Adelusi’s university. Many of his colleagues who are now aware of it will be seeking enrollment in the Fellowship. He plans to initiate a mentoring structure to enrich the student experience and support beginning scientists.

Some of the challenges confronting Adelusi’s research are institution-wide. They are beyond the capacity of the Fellowship, such as inadequate instrumentation, which forces him to be ship samples across states or overseas, which is expensive. Lack of access to current knowledge is another huge obstacle. Inter-department support efforts are an innovative way of dealing with these challenges.

Adelusi Oludotun Olusegun 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

www.awardfellowships.org | www.oneplanetsummit.fr