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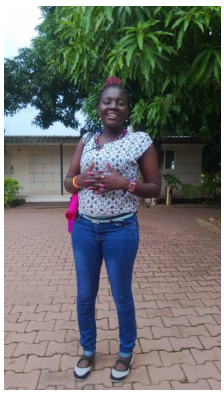
Borlaug Higher Education for Agricultural Research and Development



2017 BHEARD Scholar
Aryemo Ocaya

Profile

Country of Study:	Kenya
University:	University of Nairobi
Department:	Agriculture
Student Position:	Graduate Research Assistant—MSc.
Home Country:	South Sudan
Home Institution:	World Vision International
Home Position:	Consortium Food Security and Livelihood Officer
Mentored By:	Hailu Tolasa Badhane Dr. Obudho Elias

Research Area: *Improving Sorghum Yields in South Sudan*

BHEARD PROGRAM START DATE: September 2017

UNDERGRADUATE EDUCATION: BSc. Environmental & Bio Systems, Gulu University, Uganda

RESEARCH INTERESTS: Aryemo's research interest is Sorghum (the effect of molecular breeding in improving Sorghum yields in South Sudan, effects of molecular breeder sorghum on major sorghum pest and diseases, the effect of molecular breeding on production per acreage). Research shows that sorghum is one of the most important cereal grain crops in South Sudan and in Africa as a whole. It is widely grown in all states of South Sudan as a staple crop. Its production in the semi-arid country of South Sudan is favored by its proven versatility, hardiness, dependability and stability of yield under very adverse conditions of the country. Because it has demonstrated adaptability over a wide range of cultures and climates.

The largest population of South Sudan eat sorghum as a staple food (Chapati, Kisira & Asida). Sorghum is also widely used as feed for animals and as an industrial raw material. Other uses include processing for beer and preparation of other local drinks; its stalk provides fodder, fuel, shelter, sugar, and syrup.

However, research indicates that, Sorghum yield in the entire country is always low leading to high demand and limited supply in the market and at household levels and these has greatly affected food security in the country. Low yield is mainly due to conventional farming practices, little or no services and subsistence mode of production, pests and diseases, insecurity and continuous cropping of land has continue to exacerbate these declines in yields. Also improving yield of Sorghum has been a very difficult task that scientist are battling with.

Therefore, Aryemo's research on Sorghum will mainly focus on effect of molecular breeding in improving Sorghum yields in South Sudan, effects of molecular breeder sorghum on major sorghum pest and diseases, the effect of molecular breeding on production per acreage. She believes her research shall have a greater impact in addressing food insecurity in South Sudan since it will help in improving yields.

In addition, in her home country of South Sudan, her research interest has always been improving yields of major staple crops and horticultural crops to help in the reduction of food insecurity that has greatly invaded the country and left the population entirely dependent on food aid (relief), food imports and cultivation on subsistence plots. She believes her research will have a great impact on food security in South Sudan.

PERSONAL STATEMENT: Aryemo's academic goals are to use the knowledge and skills she learns/gains in research, in collaboration with other colleagues to help elevate research capacity of the government research sector to another level. Secondly, she also intend to work closely with the agricultural institutes including universities back home to see how they can fight food insecurity together. Finally, her professional/career goal is to become a researcher in the field of molecular breeding for major food security crops in South Sudan and above all in the entire Africa.

WHEN I AM NOT WORKING I ENJOY: When Aryemo is not working, she normally listens to music, reads journals and adventure & love novels, watches TV, goes out, swims and most times cooks delicious meals.