

## **Borlaug LEAP- Past Fellows Directory (Spring 2008)**

### **Haroon Sseguya**

**Country:**  
Uganda

**University:**  
Iowa State University

**Department & Degree:**  
Sustainable Agriculture and Sociology, PhD

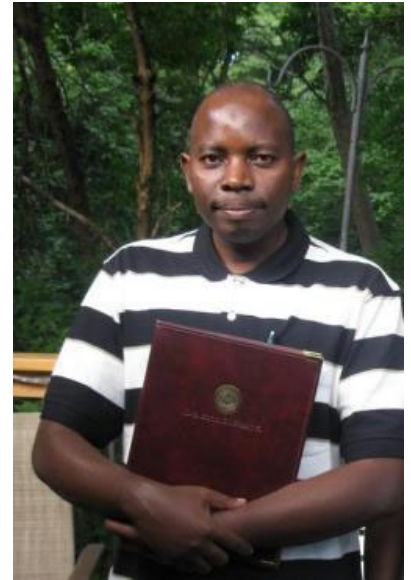
**US Mentor institution:**  
Iowa State University

**CGIAR Mentor Institution:**  
International Center for Tropical Agriculture (CIAT)

**Research:**  
Impact of Social Capital on Food Security in Southeast Uganda

**Websites:**  
[Rising Voices: Haroon Sseguya](#)

**Email:**  
[hsseguya@gmail.com](mailto:hsseguya@gmail.com)



Dr. Haroon Sseguya graduated with a PhD in Sustainable Agriculture and Sociology from Iowa State University (ISU) in August 2009. During his fellowship in 2008-2009, he was mentored by Dr. Robert Mazur, Associate Professor of Sociology at Iowa State University and Dr. Jemimah Njuki, Senior Scientist at CIAT in Uganda. Following his graduation, Sseguya returned to his home country of Uganda and returned to his position as a faculty member in the Department of Agricultural Extension/ Education and Coordinator for Graduate Studies at the College of Agricultural and Environmental Sciences, Makerere University, Uganda. He also continued as a Resource Person, evaluation and communication, for a community-based livelihoods program in Uganda, supported by the Centre for Sustainable Rural Livelihoods at ISU. His LEAP fellowship experiences have enabled him to ably implement tasks associated with his new roles, especially with respect to the livelihoods program. His research interests are in the areas of rural development, agricultural communications, sustainable livelihoods, monitoring and evaluation, organizational and institutional development, human-ecosystem interactions and the influencing processes.

In 2015, Dr. Sseguya joined IITA as a technology scaling specialist. He is working with USAID-funded projects, Africa RISING, NAFKA and Tuboreshe Chakula to create linkages and integrate activities. He coordinates the development and dissemination of strategies and the mobilizing of partnerships to ensure stronger community involvement.

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## **Idris Amusan**

**Country:**  
Nigeria

**University:**  
Purdue University

**Department & Degree:**  
Plant Breeding and Genetics, PhD

**US Mentor institution:**  
Purdue University

**CGIAR Mentor Institution:**  
International Institute of Tropical Agriculture (IITA)

**Research:**  
Improving the efficiency of Striga resistance breeding in maize through marker assisted selection.

**Email:**  
[iamusan@purdue.edu](mailto:iamusan@purdue.edu)

{No Bio}



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## **John Recha**

**Country:**  
Kenya

**University:**  
Cornell University

**Department & Degree:**  
Soil and Crop Sciences, PhD

**US Mentor institution:**  
Cornell University

**CGIAR Mentor Institution:**  
International Center for Research in Agroforestry (ICRAF)

**Research:**  
Streamwater Nutrient and Carbon Losses from Agricultural Headwater Catchments for a Gradient of Organic Soil Matter Degradation

**Email:**  
[j.recha@cgiar.org](mailto:j.recha@cgiar.org)

Dr. John Recha holds a PhD in Soil Science with minor specialization in Hydrology, and International Agriculture and Rural Development (Cornell University). He has an MSc in Soil Science and Land Management (Sokoine University of Agriculture), and BSc in Agriculture



(University of Nairobi). He joined the Borlaug LEAP Fellowship program in 2008 enhance his doctoral studies.

Before joining the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), as a researcher on Participatory Action Research, he was a Postdoctoral Associate with Cornell University's Department of Crop and Soil Sciences for a semester, working on soil fertility management. He was a Research Fellow with the World Agro-forestry Centre (ICRAF) from 2007 to 2011. As a Research Fellow, he undertook research on stream water dynamics and carbon and nutrient losses in Nandi watersheds in western Kenya. Prior to that, he worked as a Research Technician with ICRAF from 2004 to 2006, where he coordinated soil fertility management on-farm research in western Kenya's Nandi chrono-sequence. He has worked with environmental non-governmental organizations, promoting climate smart agriculture for improving rural livelihoods, and has written research articles on soil fertility management and hydrology in the tropics.

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## **Kiddo Mtunda**

**Country:**

Tanzania

**University:**

University of Kwasulu-Natal, South Africa

**Department & Degree:**

Plant Breeding , PhD

**US Mentor institution:**

Cornell University

**CGIAR Mentor Institution:**

International Institute of Tropical Agriculture (IITA)

**Research:**

Assessment of cassava root starch qualities in F1 population derived from by crossing Tanzanian local varieties with elite Cassava introductions

**Email:**

[kjmtunda09@yahoo.co.uk](mailto:kjmtunda09@yahoo.co.uk)



Borlaug LEAP Alumnus Dr. Kiddo Mtunda is a Principal Agricultural Research Officer at the Sugarcane Research Institute in Kibaha, located in her home country of Tanzania. In 2010 she was selected as a Borlaug LEAP Fellow while attending the University of KwaZulu-Natal in South Africa, in partnership with Cornell University. Dr. Mtunda's research investigated starch content and quality of cassava varieties developed and grown in humid and sub-humid lowlands of Tanzania. The Rockefeller Foundation and Alliance for Green Revolution in Africa (AGRA) also helped fund her research in Tanzania and Cornell University provided laboratory facilities for analytical analysis cassava starch samples. Dr. Mtunda's US mentor was Dr. Tim Setter, who has over 10 years of experience collaborating with researchers in Africa and he helped support the modeling elements of her research.

Dr. Mtunda's research focused on the breeding, evaluation, and selection of cassava for high starch content and yield in Tanzania. During her research in Tanzania, she developed new cassava clones using ten parental lines, of which five were from Tanzania and five from CIAT in Columbia.

While at Cornell University, Dr. Mtunda assessed cassava root starch qualities in F1 population derived by crossing Tanzanian local germplasm with elite cassava introductions. She believes that understanding the starch qualities of Tanzanian bred cassava varieties will help starch processors in Tanzania to identify the varieties they need for starch industry. Dr. Mtunda received her PhD in Plant Breeding in 2010.

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## **Rafael Martinez-Garcia**

**Country:**  
Mexico

**University:**  
University of Arizona

**Department & Degree:**  
Environmental Science/Aquaculture, PhD

**US Mentor institution:**  
University of Arizona

**CGIAR Mentor Institution:**  
WorldFish Center

**Research:**  
Development of integrated shrimp - tilapia polyculture for mitigate cultured shrimp disease transmissions in the Southeast of Mexico

**Email:**  
[rmartine@email.arizona.edu](mailto:rmartine@email.arizona.edu)



Borlaug LEAP Fellow Rafael Martinez-Garcia completed his PhD in Environmental Science and Aquaculture at University of Arizona at the end of 2010. Prior to his doctorate studies, Martinez-Garcia obtained his Bachelor's degree in Biology at the University of Tabasco in his home country of Mexico. While working as a Project Technician at the University of Tabasco, he developed an interest in Tilapia farming, which eventually led to the basis for his doctoral research. Martinez-Garcia's research specifically looked at the sustainability of farming Tilapia in brackish waters and using the nutrient-rich waste waters to fertilize seaweeds and halophytes that can be consumed by humans and animals.

During his Borlaug LEAP Fellowship, Mr. Martinez-Garcia was mentored by Dr. Kevin Fitzsimmons at the University of Arizona and Dr. Raul Ponzoni, who was working at the WorldFish Center. His research enhanced a partnership with the AquaFish/CRSP. As part of a team of researchers, Mr. Martinez-Garcia was awarded an EPA grant, "People, Prosperity and the Planet", which was designed to develop a project in an indigenous community in southern Mexico. That project was aimed at helping rural farmers harvest greater quantities of improved-quality products, reduce the detrimental environmental and ecological impacts on

water and land, and open new and better marketing channels for their products. Ultimately, the goal was to improve the quality of life for their families and communities and increase their overall food security. Upon completion of his PhD, Rafael Martinez-Garcia returned to Mexico to work as an Associate Professor at the University of Tabasco.

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## **Ravelina Velasco**

**Country:**

Philippines

**University:**

IGS/Central Luzon State University

**Department & Degree:**

Fish Genetics, PhD

**US Mentor institution:**

North Carolina State University

**CGIAR Mentor Institution:**

WorldFish Center

**Research:**

Genetic Evaluation of Superior Individuals of Genetically Improved Farmed Tilapias (Gift) Strain of Nile Tilapia (*Oreochromis niloticus*)

**Email:**

[gift@mozcom.com](mailto:gift@mozcom.com)

{No Bio}

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## **Borlaug LEAP- Past Fellows Directory (Fall 2008)**

### **Athur Mabiso**

**Country:**

Zimbabwe

**University:**

Michigan State University

**Department & Degree:**

Agricultural, Food and Resource Economics, PhD

**US Mentor institution:**

Michigan State University

**CGIAR Mentor Institution:**

International Food Policy Research Institute (IFPRI)

**Research:**

Food/Fuel Tradeoffs and the Potential for Biofuels Production in Southern Africa

**Email:**

[a.mabiso@cgiar.org](mailto:a.mabiso@cgiar.org)



Dr. Athur Mabiso received his PhD in Agricultural Economics from Michigan State University in 2010. His PhD dissertation was entitled, "The Economics of Petroleum Fuels, Biofuels and Food in South Africa," and his research focused on biofuels developments and smallholder farmers in South Africa. The research shed light on the potential effect of biofuels crop production on land displacement from food production in his home country of Zimbabwe. Mabiso completed his Borlaug LEAP Fellowship in 2009 – 2010 and was mentored by Dr. Augustine Langyintuo, formerly with CIMMYT and now with AGRA, Dr. Siwa Msangi at IFPRI and Dr. Dave Weatherspoon. Following graduation, Mabiso accepted a postdoctoral fellowship at International Food Policy Research Institute (IFPRI) in Washington DC, where he works on policy research to support the USAID's Feed the Future Initiative.

Dr. Mabiso is currently working on a research paper on long-term investment strategies to address food insecurity in the Horn of Africa and his research interests are investments in sustainable agriculture, food security and development strategy. He has worked in his native Zimbabwe as well as South Africa, Swaziland, Uganda, Mozambique, Kenya and Nigeria. His long-term ambition is to start-up a green company in Zimbabwe that would integrate production systems of renewable fuels with waste management and environmental stewardship concepts.

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## **Christopher Chibwana**

**Country:**

Malawi

**University:**

Purdue University

**Department & Degree:**

Agricultural Economics, MS

**US Mentor institution:**

Purdue University

**CGIAR Mentor Institution:**

Center for International Forestry Research (CIFOR)

**Research:**

Agricultural Policy Incentives and Forest Resource Use - The Case of Price Controls and Input Subsidies for Maize and Tobacco in Malawi

**Email:**

[cchibwan@purdue.edu](mailto:cchibwan@purdue.edu)



Christopher Chibwana graduated from Purdue University with a Master's in Agricultural Economics in 2010. For his 2008 Borlaug LEAP Fellowship, he conducted research and published on the impacts of Malawi's Farm Input Subsidy Program (FISP) - a major Government of Malawi policy that provides subsidized seeds and fertilizers to 1.5 million smallholder households to improve their food security and increase incomes. Upon graduation, he joined the International Food Policy Research Institute (IFPRI), which was also his CGIAR host institution. Since November 2010, Chibwana has been working as a Program Development Specialist at USAID/Malawi.

Chibwana currently manages three programs, two of which directly support Malawi's Ministry of Agriculture. He manages the Borlaug Higher Education for Agricultural Research and Development (BHEARD) program, a USAID initiative that honors Dr. Norman Borlaug's legacy, whose purpose is to increase the number of agricultural scientists and strengthen scientific institutions in developing countries. In Malawi, the program is supporting long-term training of agricultural researchers from the Ministry of Agriculture and the country's premier agricultural university, the Lilongwe University of Agriculture and Natural Resources, at the master's and doctoral levels. He also manages another program, implemented by IFPRI, that is building the capacity of the Ministry of Agriculture to use scientific evidence in decision making for agricultural policy.

Chibwana says his Borlaug LEAP fellowship opened up a new world of opportunity for him. "I was hired by USAID/Malawi primarily because of my thesis research, which was funded through the fellowship." While it is always impossible to attribute policy reform to recommendations provided in specific research articles, he is happy to have contributed to the body of scientific evidence around the FISP, which has informed the evolution of the program over the past 4 years. "Thanks to the Borlaug LEAP Fellowship, I am considered one of a few indigenous thought leaders on the Farm Input Subsidy Program," notes Chibwana.

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## **Eric Magembe**

**Country:**  
Kenya

**University:**  
University of Nairobi, Kenya

**Department & Degree:**  
Biochemistry and Molecular Biology, PhD

**US Mentor institution:**  
Texas A&M University, AgriLife Research and Extension Center

**CGIAR Mentor Institution:**  
International Institute of Tropical Agriculture (IITA)

**Research:**  
Molecular Diagnostics Kit Development for Banana Bacterial Wilt and Maize Grey Leaf Spot

**Email:**  
[e.magembe@cgiar.org](mailto:e.magembe@cgiar.org)



Selected as a Fellow in the Fall 2008, Dr. Eric Magembe began his Borlaug LEAP Fellowship in 2009. He graduated with his PhD in Biochemistry and Molecular Biology at the University of Nairobi. His research developed molecular diagnostic tools for three important plant diseases in Africa. The user-friendly kits can be taken into the field to assess pathogen diseases for banana bacterial wilt, maize gray leaf spot, and cassava brown streak virus. During his fellowship, he was mentored by Dr. Dong-Jin Kim at IITA and traveled to Texas A&M University to work with Dr. Won-Bo Shim, Department of Plant Pathology and Microbiology.

After completing his PhD in 2011, Dr. Magembe accepted a position at the University of Nairobi in the department of Biochemistry. As a faculty member, he received an African Biosciences Challenge Fund award. This competitive grant enabled him to conduct research at the world-class research facilities at the Biosciences Easter and Central Africa (BecA) Hub in Kenya. Dr. Magembe worked on the BecA-CSIRO (Commonwealth Scientific and Industrial Research Organization) project, "Capacity and action for aflatoxin reduction in East Africa".

In December 2012, Dr. Magembe became a senior research associate at the International Potato Center (CIP). He works primarily on a USAID-funded project developing potato varieties resistant to late blight. The project hopes to control this disease through genetic engineering broad-spectrum resistance genes from wild potato relatives into susceptible farmer-preferred varieties. Dr. Magembe believes that biotechnology presents exciting opportunities to alleviate poverty and improve livelihoods for smallholder farmers.

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## **Miriam Otoo**

**Country:**

Ghana

**University:**

Purdue University

**Department & Degree:**

Agricultural Economics, PhD

**US Mentor institution:**

Purdue University

**CGIAR Mentor Institution:**

International Institute of Tropical Agriculture (IITA)

**Research:**

Key Constraints to the Development of a Value-added Cowpea

**Email:**

[m.otoo@cgiar.org](mailto:m.otoo@cgiar.org)

Hailing from the West African country of Ghana, Dr. Miriam Otoo specializes in the economics of agricultural markets, business development, value chain analysis and agricultural productivity in the context of developing countries. She has a Masters and PhD in Agricultural Economics with a focus on international development and agribusiness. She received support for her PhD through a Borlaug LEAP Fellowship in 2008. During her fellowship, she was mentored by Dr. Ousmane Coulibaly at the International Institute of Tropical Agriculture (IITA) and Dr. Joan Fulton at Purdue University. Her thesis identified key constraints to the development of a value added cowpea. Results from her study have spawned new cowpea flour businesses emerging in Nigeria.

In 2011, Dr. Otoo joined the International Water Management Institute (IWMI). Her research at IWMI currently focuses on understanding the linkages between agriculture and sanitation to enhance food security via the analysis of business opportunities in the waste reuse sector in Africa, Asia and Latin America.



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## **Nohemi Voglozin**

**Country:**

Benin

**University:**

University of Maryland, Baltimore County

**Department & Degree:**

Geography and Environmental Systems, PhD

**US Mentor institution:**

University of Maryland



**CGIAR Mentor Institution:**

AfricaRice Center

**Research:**

Eco-geographic Patterns of Phenotypic Diversity and Molecular Genetic Variation in African Rice, *Oryza Glaberrima* in Benin (West Africa)

**Email:**

[nohevog1@umbc.edu](mailto:nohevog1@umbc.edu)

Former 2008 Borlaug LEAP fellow Dr. Nohemi Voglozin believes in agriculture "for farmers, by the farmers" for her native Benin. During her fellowship she pursued a PhD that focused on the value and importance of indigenous knowledge and seed conservation practices in Benin. Dr. Voglozin was first introduced to agricultural studies at the University of Abomey-Calavi in Benin and went on to complete her Bachelor's of Science in Engineering, and Master of Philosophy degrees in Agronomy, Management of Natural Resources there. She completed her PhD at the University of Maryland, Baltimore County in the Department of Geography and Environmental Systems.

Dr. Voglozin's PhD work focused on understanding the genetic diversity of African rice land-races and cultivation practices of African rice growers in Benin. Her research is expected to contribute to the conservation of African rice, an important genetic resource. During her Borlaug LEAP Fellowship, Dr. Voglozin was mentored by Dr. Laura Lewis of the University of Maryland-Baltimore County and Dr. Mande Semon at the AfricaRice Center in Cotonou, Benin. Dr. Voglozin is currently consulting for the Food and Agricultural Organization of the UN (FAO) and Agricultural Research for Development (CIRAD) on a project related to Global Networking for Plant and Genetic Resources for Food and Alimentation.

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**Sudha Narayanan****Country:**

India

**University:**

Cornell University

**Department & Degree:**

Applied Economics and Management, PhD

**US Mentor institution:**

Cornell University

**CGIAR Mentor Institution:**

International Food Policy Research Institute (IFPRI)

**Research:**

Contract Farming Practice and Smallholders in India: An Empirical Investigation of Select Schemes in Tamil Nadu

**Email:**

[sudha@igidr.ac.in](mailto:sudha@igidr.ac.in)



Borlaug LEAP Alumna Dr. Sudha Narayanan is an Associate Professor at the Indira Gandhi Institute of Development Research (IGIDR) in Mumbai. She earlier obtained a PhD in Agricultural Economics from Cornell University in 2011, specializing in agricultural and development economics. The LEAP Fellowship enabled Sudha to undertake a project titled Choosing Farmers: Selection and Screening Mechanisms in Contract Farming Schemes in Southern India. This project was part of the author's doctoral dissertation, which examines aspects of contract farming practice in southern India. It is built around a survey of farmers, which was undertaken between January 2009 and January 2010. The work was done with the support and mentorship of Bart Minten at the International Food Policy Research Institute (New Delhi Office) and M.Chandrasekaran, Tamil Nadu Agricultural University (TNAU), Coimbatore.

Sudha's research interests straddle agriculture, food and nutrition policy, and human development in India. She is particularly interested in survey-based research using microeconomic approaches to understand broader questions of agrarian change and state delivery systems for nutrition security. Her current research focuses on contract farming, technology adoption in agriculture, public policies for food security and employment and agriculture-nutrition linkages. At IGIDR she supervises research students working on these themes and teaches impact evaluation.

Sudha has worked with the Tata Cornell Agriculture and Nutrition Initiative of Cornell University at IFPRI in Washington D.C., among other organizations. She has also worked with the Right to Food Campaign in India, where she provided research support to the Commissioners appointed by the Supreme Court of India to monitor the implementation of orders issued in connection with the Right to Food case. Her past works include a book coauthored with Ashok Gulati titled "The Subsidy Syndrome in Indian Agriculture" published by the Oxford University Press, New Delhi. She has published in high impact journals within India, a strategy that reflects her strong preference for action-oriented research, and has also written in business dailies such as Mint, Business Line and the Economic Times. Her academic work has also been published in international peer-reviewed journals.

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