

GREAT

GENDER-RESPONSIVE LEGUME BREEDING COURSE

WEEK 1 | 23 July-01 V

WEEK 2 | 14-18 | January, 2019





About Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT):

GREAT equips researchers to create more inclusive and effective agricultural systems by addressing the priorities of both women and men in sub-Saharan Africa.

GREAT delivers courses to agricultural researchers from sub-Saharan Africa in the theory and practice of gender-responsive research, seeking to increase opportunities for equitable participation and the sharing of benefits from agricultural research and improve the outcomes for smallholder women farmers, entrepreneurs, and farmer organizations. By building and engaging communities of researchers equipped with the skills, knowledge, and support systems to develop and implement gender-responsive projects, GREAT will advance gender-responsiveness as the norm and standard for agricultural research.

GREAT is a 5-year collaboration between Cornell University in Ithaca, New York and Makerere University in Kampala, Uganda, that started in 2016. Funding support is from the Bill & Melinda Gates Foundation.

www.greatagriculture.org

Welcome!

As co-leaders of the Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) project, we warmly welcome you to the GREAT Gender-responsive Legume Breeding Course, taking place over two separate sessions, on 23 July-01August 2018, and 14-18 January 2019, in Kampala, Uganda.

We have a GREAT vision:

To equip researchers to create more inclusive and effective agricultural systems by addressing the priorities of both women and men in sub-Saharan Africa.

The GREAT vision is based on a premise: that agricultural research projects are often designed with little consideration of how the research outputs, technologies and interventions will impact both men and women. Researchers are increasingly expected to design projects that deliver equitable outcomes, yet there is only limited or inappropriate gender training out there for agricultural researchers. Considering gender in research requires thinking differently, and not just applying tools. GREAT will not only teach participants how to use tools, but also how to change the way they look at their research, to be able to identify relevant gender research questions, or potential points of negative or positive impact for women and men, and how to address these.

What we strive for is changing researchers and research systems. If GREAT can change the agricultural research paradigm so that



gender is the lens through which all projects are conceptualized and implemented, research outputs will be more appropriate to the needs of both women and men farmers, and more widely adopted. Women will gain greater visibility and voice in agricultural research design and implementation.

All of this would culminate in increased benefits from agricultural research for men, women and children together.

The challenge in developing a truly applied gender training course for agricultural researchers bound GREAT proponents together, building a community of passionate supporters. We are indebted to the many visionary voices that have contributed intellectual input into the development of GREAT, and thank everyone who has generously devoted time, thoughts and resources to the GREAT vision.

Rhetoric around gender-responsive research is not new, but action and evidence is what is lacking. With GREAT intervention, we hope that the usual process of paying lip-service to gender without linking it to concrete commitments of time, budgets and personnel will change. Change is our greatest challenge. We hope you will join us as agents of change to implement this new vision of agricultural research to intelligently design research projects that maximize impact for all.

Thank you for joining the GREAT vision!

Male Ann Tufan

e Ann Tufan Margaret Mangheni

INFORMATION ABOUT UPCOMING COURSES

Stay tuned for information about our upcoming courses!

Applications will be due in early 2019. Information about applications and course details will be available starting in Fall 2019, on the course website, at:

<u>www.greatagriculture.org/</u> <u>contentcourses/upcoming-courses</u>

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What is the GREAT Approach?

GREAT combines theory and practice into a dynamic package, ensuring that learning is practical, grounded and applied. To do this, our courses are split into three parts:





Week 1 Training: Nine days of hands on training in applied gender theory and mixed methods research in Kampala, Uganda





Field Work Phase: Four months of field trainersupported field practice, testing out mixed methods tools with participant team's own projects





Week 2 Training: Five days of follow-up training covering mixed methods data analysis and writing, communications and institutional change

To broaden learning and deepen understanding, participants attend in interdisciplinary teams, combining biophysical scientists, like plant or animal breeders, with social scientists, like sociologists and economists. Sessions on mixed methods approaches are designed to strengthen skills for researchers from all backgrounds, and enable Fellows to fluidly communicate across qualitative and quantitative research disciplines. This enables more effective project management and development of more inclusive and effective technologies, which leads to better adoption and enhanced outcomes for farmers and consumers-both women and men.

For research programs to be gender-responsive, researchers need to be effectively equipped to work in interdisciplinary settings. This doesn't mean that biophysical scientists need to become gender experts, or vice versa, but it does require a basic understanding of the gender research tools used for both qualitative and quantiative research.





The result: both groups are better able to speak each other's language, and develop technologies that are more inclusive and effective of everyone's needs, resulting in better adoption rates and greater impact.



The GREAT Course Roadmap

PART ONE

Week 1 **Training** Kampala, Uganda

1. Self realization, conceptual clarity, and interdisciplinarity

- 2. Methodology: qualitative and quantitative
- 3. Research guestion and case study
 - 4. Impact assessment and participatory methods

Genderresponsive research design



PART THREE

Week 2 **Training** Kampala, Uganda

6. Data analysis and reporting

7. Communication to policy makers and the communities

> 8. Institutional transformation

9. Community of Practice

Gender-responsive research analysis

Gender-responsive research communication

Gender-responsive research community building

Seed Grants







In Week 1 of the GREAT course. participants learn applied gender theory and develop their own mixedmethods research plans at Makerere University, in preparation for heading out to the field.

PART TWO

Field Work Phase **Participant Field Sites**

5. Research planning and field data collection

Gender-responsive research application

In Week 2, participants learn how to analyze and write up data collected from mixed methods research, and GREAT works with participants in strategies for effective communications, institutional transformation and building a community of practice.





At the close of Week 2, participant teams compete for seed grant funding to further data collection and publish case studies. Two Fellows from each course are also selected to receive further training and take on training roles with future GREAT courses.



Participant Team — Burkina Faso

Improving Groundnut Productivity and Seed Systems in Burkina Faso

Donor Agencies:

Australia Awards / the Australian Agency for International Development (AusAID)

Project Description:

This project focuses on ways and means of establishing efficient, sustainable seed systems for an important but neglected staple crop in Burkina Faso, groundnut. Such seed systems will provide farmers with a reliable supply and a range of choices of quality seed, well adapted to local conditions. The project will adopt participatory and interdisciplinary approaches, in close partnership with farmer organisations, non-governmental organisations and other stakeholders of the groundnut industry to select varieties that suit current and future needs, such as food and cash. Capacity of farmer groups – with higher focus on women farmers – will be strengthened in groundnut production, seed production techniques, monitoring seed quality, prediction of demand, and marketing.



Moumouni Konate, from Burkina Faso, is employed by Burkina Faso's Environment and Agriculture Research Institute (INERA) and based at the Farakoba Research Station. For the past eight years Moumouni has been involved in legume crops genetics, with a current focus on peanut breeding for high oil content. His ultimate goal is to increase domestic production of cooking oil to improve family health and wellbeing. Moumouni, who obtained his PhD in Genetics from the University of Adelaide (Australia) in 2017, believes that the development of the peanut value chain will improve livelihoods for women farmers and processors in Burkina Faso. He has no prior gender training.



Julienne Gue, has worked as a sociologist and research engineer since 1993 at Burkina Faso's Environment and Agriculture Research Institute (INERA) in Burkina Faso, where she manages natural resources and production systems. From 2010 to 2015 she was the national coordinator of the project 'Strengthening research and development of seed systems,' and from 2011 to 2015 she served as technical advisor to the Minister of Scientific Research and Innovation. She has a master's degree in Sociology.

Participant Team — Burkina Faso

Tropical Legumes III Project: INERA, Burkina Faso

Donor Agency: The Bill & Melinda Gates Foundation

Project Description:

The Tropical Legumes III project (TLIII) is a major international initiative partnering the International International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Center for Tropical Agriculture (CIAT), the International Institute of Tropical Agriculture (IITA), eight African or Indian national/state, and other partners, to develop improved cultivars of common bean, cowpea, chickpea and groundnut and deliver their seed at scale to small-holders in Gates Foundation-focus geographies. In Burkina Faso this project aims to create varieties with a more complete character profile for resistance, while ensuring that they are adapted to the socio-economic conditions of the producers.



Silamana Barry, from Burkina Faso, is currently employed by the Institute of Environmental and Agricultural Research (INERA) and based at the Saria Center. Silamana has worked for 14 years in socioeconomic and agroeconomic issues in partnership with national, regional, and international scientists. His work focuses largely on determinants of adoption of technologies and farmer preferences on gender aspects, with a goal to improve livelihoods for farmers – mainly those of the women farmers. Silamana obtained his PhD in Development Economy from the University Ouagadougou 2 in 2015. He has no prior gender training.



Benoit Joseph Batieno, is a cowpea breeder from Burkina Faso. He work for the Institute of Environmental and Agricultural Research (INERA), where he has been the head of the cowpea breeding team in Burkina Faso since June 2014. His work focuses on the development of famers' preferred varieties that are resistant to diverse constraints. Benoit Joseph obtained his PhD in Plant Breeding from the University of Ghana, Legon, in 2014, through the The West Africa Centre for Crop Improvement (WACCI) program. He has no prior gender training.

Participant Team — Burundi

Special PABRA Flagship Initiative in Burundi

Donor Agencies:

The International Center for Tropical Agriculture (CIAT) / the Pan African Bean Research Alliance (PABRA)

Project Description:

This project covers different areas of bean research activities in Burundi, such as breeding, seed system, socio-economy (market aspect), nutrition and gender. Breeding activities are carried out on-station under plant population development and screening, and on-farms under participatory variety selection. Seed system activities are carried out in collaboration with seed producers, farmer's organization and NGOs, and several categories of seed (pre-basic, basic, certified and quality declared seed) are being produced. Socioeconomic activities are carried out through impact assessments, surveys and linkage of farmers with markets, especially by empowering the whole value chain. Several business platforms have been created in different zones of production, commercialization and consumption hubs. Nutrition activities include developing high iron bean varieties and producing bean-based products such as mandazi, biscuits, bean flour and purée. Work is also being done under community crèches where vulnerable people, especially young children, are assisted. Gender activities are carried out by integrating different categories in research development activities.



Eric Nduwarugira, from Burundi, has been employed by the Institut des Sciences Agronomiques du Burundi (ISABU) for the past nine years, where he currently works as bean researcher coordinator. His work is focused primarily on conducting and coordinating bean research activities on station and under farmers' conditions. Eric received an MSc in Plant Breeding fron Sokoine Ubiversity of Agriculture, Tanzania, in 2014. He has no prior gender training.



Blaise Ndabashinze, from Burundi, is currently employed by the Institut des Sciences Agronomiques du Burundi (ISABU) and based at the Bukemba Station Research, where he has worked for the past year in bean breeding and socio-economic activities. His work focuses largely on on-station trials and assessing bean adoption and impact in the community. Blaise obtained his diplôme d'ingenieur agronome from the University of Burundi in 2017. He has no prior gender training.

Participant Team — Ghana

Cowpea Genetic Improvement

Donor Agencies:

The Council for Scientific and Industrial Research — Ghana (CSIR) / the Canadian International Development Agency (CIDA) / Seed Co., Ltd. / RMG Ghana, Ltd.

Project Description:

The primary objective of the project is to improve incomes and livelihoods of rural communities in selected target districts in Ghana through increased production and utilization of legumes. Over 36,000 households are involved in legume production in Ghana, with cowpea being the second most important grain legume. The project seeks to develop improved cowpea varieties through farmerparticipatory variety selection, seed multiplication and training of farmers and agricultural extension agents on best practices in soybean production. The project involves germplasm collection in collaboration with National Agricultural System trials; on-farm trials alongside farmers' own varieties; and training of extension agents including a "training-the-trainer" approach. It also includes seed multiplication and demonstration through field days, demonstration fields, the community seed system and seed companies.



Stephen Amoah, from Ghana, is a legume breeder (cowpea and soybean) with the Council for Scientific and Industrial Research-Crops Research Institute (CSIR-CRI), with interest in developing high-yielding varieties that are resistant/tolerant to diseases and pests, have grain characteristics that meet consumers' expectations, and show improved nutritional attributes. Stephen's group is particularly interested in exploring the role of genotype-byenvironment interactions in breeding for traits of economic importance, and development of improved varieties for climate change adaptation. Stephen is also a part-time lecturer at the College of Agriculture and Natural Resources of the Kwame Nkrumah University Science and Technology, Ghana, and has a PhD in Plant Sciences from Rothamsted Research and University of Reading (UK).



Alexander Adu-Appiah, from Ghana, is a research scientist with the Council for Scientific and Industrial Research-Crops Research Institute (CSIR-CRI), where he has worked for the past 20 years. His interest is in the area of agricultural marketing policies. His goal is to improve rural livelihood of men, women, youth and the marginalized through policy advocacy research. Recently, he was the principal investigator of a USAID Feed the Future Agricultural Policy Support Project on Marketing Standardization, Grading, and Pricing of Maize in Ghana. He received an MPhil in Agribusiness from the University of Ghana, Legon in December, 2011. He also holds a bachelor's degree in Marketing.

Participant Team — Ghana

Tropical Legumes III Project: CSIR-SARI, Ghana

Donor Agency: The Bill & Melinda Gates Foundation

Project Description:

The Tropical Legumes III project (TLIII) is a major international initiative partnering the International International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Center for Tropical Agriculture (CIAT), the International Institute of Tropical Agriculture (IITA), eight African or Indian national/state, and other partners, to develop improved cultivars of common bean, cowpea, chickpea and groundnut and deliver their seed at scale to small-holders in Gates Foundation-focus geographies. The objective of the TLIII project in Ghana is to enhance the competitiveness of cowpea for increased income and nutritional security for smallholder farmers in the dry lands of Ghana, and improve the livelihoods of smallholder farmers in drought-prone areas through enhanced cowpea production and productivity using integrated breeding methods (conventional, molecular and gender responsive).



Alhassan Nuhu Jinbaani, works as a monitoring and evaluation and gender specialist with the CSIR-Savanna Agricultural Research Institute (SARI) in Tamale, Ghana. He holds an MPhil degree in Agricultural Economics from the University for Development Studies, Ghana, was a United Nations University Fellow in Iceland, and has been working in the field of research for 14 years now. His present responsibilities include monitoring and evaluation of agricultural projects, impact studies, integration of gender frameworks in technology dissemination, and facilitation of Innovations Platforms (IPs). He has previously had a number of gender trainings.



Haruna Mohammed, from Ghana, is currently employed by the Savanna Agricultural Research Institute of the Council for Scientific and Industrial Research, Ghana (CSIR-SARI) and based at the Nyankpala Research Station in Northern Ghana. For the past 18 years he has been engaged in breeding improved high-yielding cowpea varieties in partnership with national and international scientists. His breeding focus is on farmer-preferred traits including tolerance to drought, insect pests and striga gesnerioides to improve the livelihoods of vulnerable smallholder farmers, including female farmers. He has an MSc in Plant Breeding from Kwame Nkrumah University of Science and Technology (KNUST), Ghana.

Participant Team — Kenya

Genetic Diversity of Soybean Germplasm in Kenya (KALRO)

Donor Agency:

Korea-Africa Food & Agriculture Cooperation Initiative (KAFACI)

Project Description:

The project intends to generate data that would essentially be useful for breeding purposes. The main scope of the study revolves around studying the genetic diversity of soybean germplasm in Kenya. Germplasm was sourced from the Genetic Resource Research Institute (GeRRI), the Kenya Agricultural and Livestock Research Organization (KALRO), farmers and other institutions that readily provided the germplasm. We will study the diversity of the germplasm through phenotypic and genotypic characterization. This will provide the breeding program with parental material for further breeding activities as well as identify the cultivars already released for licensing. Further from the diversity study, we maintain germplasm as an annual activity and early generation seed for further bulking into certified seed.



James Ng'ang'a Njoroge, from Kenya, is currently employed by the Kenya Agricultural and Livestock Research Organization (KALRO) and is based at the Food Crops Research Centre Njoro. James has been involved in soybean breeding for the last eight years and is currently collaborating with the Syngenta Foundation for Sustainable Agriculture (SFSA) and the Soybean Innovation Lab (SIL) in evaluating soybean cultivars from different breeders in the Pan-African Soybean trials, as well as genotypic and phenotypic diversity of soybean genotypes in Kenya. James obtained an MSc degree in Plant Breeding in 2015 from Egerton University in Kenya. He has no prior training in gender.



Charity Njeru, from Kenya, works with the Kenya Agriculture and Livestock Research Organization (KALRO), under the Food Crop Research Institute, Njoro Centre. She received her MSc in Agricultural Extension in 2013. Charity has worked with soybeans for more than twenty years in the areas of breeding, agronomy and dissemination. Currently, in partnership with other stakeholders, she works with farmer groups to promote KALRO technologies along the value chain, one of which involves soybean. Charity has some exposure to gender, though has not received prior intensive training.

Participant Team — Malawi

Feed the Future Malawi Improved Seed Systems and Technologies Project

Donor Agency:

The United States Agency for International Development (USAID)

Project Description:

The project is promoting soybean seed production while working with small or medium scale farmers. These are farmers that usually work in farmer groups such as cooperatives or associations. However, good quality certified soybean seed is inaccessible to many smallholder farmers in Malawi, largely due to limited availability in shops and, when available, often unaffordable by many women farmers. Therefore, most farmers – especially women – recycle seed saved from previous harvests, resulting in decreased productivity levels that exacerbate household food and nutrition insecurity. Farmers often perceive recycled seed quality to be equivalent to certified seed for self-pollinated crops. In this study we will therefore conduct a perception study of the improved certified and recycled seed to understand farmer perceptions.



Gbenga Akinwale, from Nigeria, currently works with the International Institute of Tropical Agriculture (IITA) in Malawi. Gbenga has over 20 years of experience in variety development and technology transfer in international agricultural research organizations, including the International Institute of Tropical Agriculture (IITA), The International Rice Research Institute (IRRI) and AfricaRice, with a focus on variety development and technology transfer. His breeding activities focus on developing high-yielding varieties that combine various positive agronomic traits, resistance to biotic and abiotic stresses, and desirable quality characteristics using both conventional and marker-assisted breeding. He has no prior gender training. Gbenga obtained his PhD in Plant Breeding from The Federal University of Technology, Akure, Nigeria in 2013.



Therese Gondwe, from Malawi, currently works in Zambia with the International Institute of Tropical Agriculture (IITA) as a Technology Dissemination specialist. This entails working with breeders end users of a technology to ensure uptake of the promoted agriculture- and nutrition-related technologies. Therese has for the past 10 years been involved in managing and implementing food- and nutrition-related projects after obtaining her PhD in Human and Environmental Sciences from Reading University (UK) in 2008. She has some gender experience due to her background in agricultural extension.

Participant Team — Mali

Tropical Legumes III Project: ICRISAT-WCA

Donor Agency:Bill & Melinda Gates Foundation (BMGF)

Project Description:

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Almamy Sylla, from Mali, is currently employed by the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) and based in Samanko, Mali. For the past three years Almamy has been involved in gender integration in research and bilateral projects on new groundnut, cowpea, millet and sorghum varieties. His work focuses largely on agency, innovations, gender norms, trait preferences, and his goal is to improve livelihoods for women, youth and cowpea, groundnut, sorghum and millet value chain actors in West and Central Africa as a way to improve food security and wellbeing. Almamy obtained his master's degree in Anthropology in 2014 from l'institut supérieur de formation et de recherche appliquée (ISFRA) / Université des Sciences Juridiques et Politiques de Bamako (USJPB) in Mali.



Sory Diallo, from Mali, is currently employed by the Institute of Rural Economics (IER) and based at the Cinzana Research Station. For the past 20 years he has been involved in cowpea breeding in partnership with national, regional and international scientist. His work focuses mainly on cowpea breeding for striga resistance and consumer traits preferences. His goal is to improve livelihoods for women farmers and value chain actors in Mali as a way to improve family health and wellbeing. Sory obtained his PhD in Plant Breeding and Genetics from Ouagadougou University in 2017, and has no prior gender training.

Participant Team — Senegal

Establishment of Complex
Farming Pilot Village to Improve
Small Farmers' Income in the
Peanut Basin of Senegal



Project Description:

The project will allow increased productivity and marketing of peanuts and chicken on small-scale farms through multiplication and dissemination of significant quantities of high-quality peanut seed (newly released varieties); training for farmers to improve their skills and knowledge around seed production, good management practices for peanut production and post-harvest management; indigenous chicken management technologies; and integrated agricultural practices.



Issa Faye, from Senegal, a geneticist and legume breeder, is currently employed by the Senegalese Agricultural Research Institute (ISRA), where he has led the peanut breeding program since 2010. Issa has been involved in peanut breeding in partnership with national, regional and international scientists. His work focuses largely on development and release of peanut varieties with high yield, earliness, drought tolerance, high oleic content, etc. He has basic knowledge of gender in research and development. Sory obtained his PhD in Plant Breeding and Genetics in 2010 from University Cheikh Anta DIOP in Senegal.



Yacine Ngom, from Senegal, is currently employed by the Senegalese Agricultural Research Institute (ISRA) in office of macro-economic analysis (BAME), based in Dakar. For the past eight years Yacine has coordinated and participated in the implementation of research projects on rice, horticulture, peanuts, gender, agricultural and commercial policies, climate change, etc. Her work mainly focuses on rice consumer preference in urban areas. Her goal is to promote Senegalese rice consumption through women and youth. Yacine obtained her PhD in Sociology in 2013 from Gaston Berger University, Senegal. She has previously completed several trainings on gender and agriculture.

Participant Team — Tanzania

Tropical Legumes III Project: Agricultural Research Institute — Selian

Donor Agency:

The Bill & Melinda Gates Foundation

Project Description:

The Tropical Legumes III project (TLIII) is a major international initiative partnering the International International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Center for Tropical Agriculture (CIAT), the International Institute of Tropical Agriculture (IITA), eight African or Indian national/state, and other partners, to develop improved cultivars of common bean, cowpea, chickpea and groundnut and deliver their seed at scale to small-holders in Gates Foundation-focus geographies. This TLIII project is focused gender mainstreaming, sensitizing farmers to address gender inequality in farming to minimize gender gaps (who has access to and control over available resources); assessment on factors contributing to women's participation in common bean value chain activities; analyzing gender operational structures planting, weeding, fertilizer application, harvesting, and post-harvest-market technologies – so as to be able to sensitize the available labor saving technologies.



Upendo Frederick Titi, from Tanzania, has been employed by the Ministry of Agriculture as an Agricultural Research Officer stationed at the Selian Agricultural Research Institute (SARI) in the Arusha region since 2007. For the past six years she has been working with the SIMLESA project in Northern Tanzania, scaling out improved technologies in maizelegume intercropping, with the aim of improving livelihoods for smallholder farmers through increased crop productivity of both maize and legumes, and improved soil fertility. She holds an MSc in Agricultural Economics from Sokoine University of Tanzania, in 2013. She has no prior gender training.



Edith Laurence Kadege, from Tanzanaian, is currently employed by the Ministry of Agriculture as a researcher based at the Selian Agricultural Research Institute (SARI), located in northern part of Tanzania. For five years she has been involved in common bean breeding in partnership with national, regional and international scientists working under the International Center for Tropical Agriculture (CIAT). Her work focuses mainly on famers' preferences in varietal selection, with a goal to improve food security, nutrition and income. Edith has an MSc in crop protection, and works closely with plant breeders and plant pathologists.

Participant Team — Uganda

Assessment of Access and Adoption of Biofortified Beans by Male and Female Farmers in Central Uganda

Donor Agency: National Crops Resources Research Institute (NaCRRI)

Project Description:

The National Agricultural Research Organizational (NARO) has been able to release five biofortified bean varieties in collaboration with international research organizations. However, with all the efforts invested in developing and releasing these varieties, little is known about their access and adoption by male and female farmers. Therefore, researchers sought to assess the access and adoption of the biofortified beans by men and women farmers in Mubende District, central Uganda. The study will involve 100 randomly selected respondents.



Grace Nanyonjo, a Ugandan, currently works with the National Crops Resources Research Institute (NaCRRI), located in Namulonge. Grace holds a BSc in Horticulture and is awaiting for an MA in Gender Studies, both from Makerere University in Uganda. Over a period of three years, Grace has been working closely with breeders, analyzing gender issues along the bean value chain, and designing and implementing priority interventions. She focuses on use of various methods beyond sex disaggregation during participatory varietal selection and household dynamics for increased adoption of improved varieties and improved livelihoods of men and women farmers. She is motivated by changing household dynamics and gender roles.



Eunice Kesiime, a Ugandan, works for the National Agricultural Research Organization (NARO), based at National Crops Resources Research Institute (NaCRRI), as a common bean breeder. Eunice's research focus is on multiple pathogen and pest resistance, drought, declining soil fertility, and enhanced iron and zinc content. Her research is aimed at improving the livelihoods of small-scale farmers, and eliminating malnutrition for resource poor farmers, children below five years of age, and expecting mothers. Eunice has an MSc in Plant Breeding and Seed Systems from Makerere University, Uganda. She has no prior gender training.

Participant Team — Zambia

Improving Drought Tolerance and Nutritional Quality of Bambara Groundnut Grain Through Mutagenesis

Donor Agency: Mulungushi University

Project Description:

Bambara groundnuts, considered the third most important food legume after groundnuts and cowpea, have a good balance of important nutrients for humans with protein and carbohydrates making up more than 50% of the grain. Project activities include: (i) surveys to determine the extent of cultivation and constraints associated with Bambara groundnut production in Kabwe district of Zambia; (ii) collection and evaluation of germplasm obtained from the International Institute of Tropical Agriculture (IITA) and the national gene bank, which identified a number of vigorous and high-yielding accessions which can be introduced for Zambian farmers; (iii) testing accessions for homozygosity to identify a suitable accession which can be exposed to mutagenesis so as to generate variants which will be screened for drought tolerance, levels of antinutritional factors and nodulation potential. In order to improve the possible adoption of varieties that the programme will produce, we intend to involve as many Bambara groundnut stakeholders as possible in selection advancement decisions.



Nchimunya Bbebe, from Zambia, is currently employed by Mulungushi University based at Kapiri Mposhi main campus. For the past thirteen years Nchimunya has been involved in crop improvement work for various crops. His main interest is breeding crop varieties that are tolerant to drought and heat. Since joining Mulungushi University his focus has largely been on Bambara groundnuts and popcorn improvement. Nchimunya obtained his MSc in Plant Breeding and Seed Systems from the University of Zambia. He is currently studying towards a PhD in Plant Breeding at the same university. He has no prior training in gender issues.



James Mutambo, from Zambia, is currently working as a lecturer of Agricultural Economics at Mulungushi University. James previously worked for the Zambia Agricultural Research Institute under the Farming Systems and Social Sciences Division, where he obtained a lot of experience in managing survey research and field experiments. For the past eight years he has been involved in adaptation of research findings to small-holder farmers in Zambia. He has some survey experiences with gender-segregated work. James obtained his MSc in Agricultural Economics and Management from Wageningen University in 2017. He joined academic work in 2016.





Adeline Muheebwa is a gender and development consultant, a chairperson of AUPWAE, and a bronze medal winner for the first ever "Create and Cook with Tooke Flour" competition. Adeline's passion is to inspire individuals, especially women and youths, to discover their purpose, restore their dignity and creatively use their potential for a fulfilling livelihood. She previously worked with ASARECA, a regional organization represented by 11 member countries. Prior to this, Adeline worked as a development practitioner with USAID, IFAD, Chemonics Inc, ILO and Winrock projects.



Brenda Boonabaana is a Lecturer at Makerere University, Gender and Development Researcher and trainer, and has a PhD in Tourism, Development and Gender from the University of Otago. She is a Fellow of the African Women in Agricultural Research and Development (AWARD) and the International Food Policy Research Institute (IFPRI) under the GAAP2 project.



Christine Leuenberger, Department of Science & Technology Studies, Cornell University, is interested in development studies, sociology, science and technology studies, gender studies, interdisciplinarity and social research methods. As a recipient of a National Science Foundation Scholar's Award she pursued issues of mapping, land- and property rights and state-building. Christine was a Fulbright Scholar and a Fulbright Specialist in Israel and the West Bank, and she served as an American Association for the Advancement of Science Science & Technology Policy Fellow pursing questions of how to better integrate science into policy-making. She is also engaged in peace and educational initiatives in the Middle East and Sub-Saharan Africa.



Devon Jenkins is an agricultural development specialist at Cornell University. His background covers international and community development, with a focus on sustainable agriculture and holistic community development, including extensive work in West Africa. As part of the GREAT project support team, Devon works on communications and project management. He has a master's degree in International Agriculture and Rural Development from Cornell.



Elizabeth Asiimwe is an agricultural extension professional with an MSc in Agricultural Extension Education, and works at Makerere University as a project administrative and financial support officer and part–time tutor. Elizabeth's work experience ranges from promotion of agricultural inputs in the private sector to research and research / communication work in academic and CGIAR institutions, respectively. Her research interests include gender, agriculture, human nutrition and adult learning.



Eva Weltzien is a freelance consultant whose research focused on the effective use of sorghum, pearl millet and barley genetic resources for variety development and seed systems suited to women and men farmers' needs in dryland areas. She coordinated research on sorghum improvement in West Africa for ICRISAT for 17 years. In 2015 she was awarded the 'Justus von Liebig Prize for World Nutrition', jointly with her husband. Eva has a PhD from the Technical University of Munich, Germany.



Godfrey Kayobyo is a socio-economist based in Uganda, who works as a consultant with Nkoola Institutional Development Associates (NIDA). His work has included research briefs and impact assessments for the International Food Policy Research Institute (IFPRI), Opportunity International, Uganda's national agricultural advisory services (NAADS), CTA and others.



Grace Bantebya is a Professor of Women and Gender Studies in the School of Women and Gender Studies at Makerere University. She is a distinguished social anthropologist and an experienced trainer / lecturer, researcher and advocate for gender equality and social transformation. Grace has done extensive research in poverty and social exclusion, gender poverty and social transformation, transforming the lives of young women and girls. She has published widely, most recent being a book entitled "Women, Work and Domestic Virtue in Uganda" which got an award from African Studies Association. Grace is a Fellow of the International Women's Leadership Forum.



Hale Ann Tufan is Principle Investigator of the GREAT project. A molecular biologist by training, she has worked for the John Innes Centre, CIMMYT, and the University of East Anglia's School of International Development. Hale joined International Programs at Cornell University in 2012 to manage the NEXTGEN Cassava project, for which she developed a "Gender-Responsive Cassava Breeding" initiative. She has a PhD in molecular plant pathogen interactions from the John Innes Centre, UK.



Jaron Porciello is the Associate Director of Research Data Engagement and Training in International Programs, College of Agriculture and Life Sciences, Cornell University. As an information science researcher she is interested in how we collect, curate, and use data to solve problems and as well as how to build a culture of data sharing across international science collaborations. She is responsible for curating GREAT's resource hub. Jaron brings more than seven years of academic experience, and holds masters degrees in Library and Information Sciences, and English, from Indiana University.



Jenipher Bisikwa is an Agronomist and a Senior Lecturer at the School of Agricultural Sciences, Makerere University, Uganda. She has engaged in research and consultancy projects on the development of appropriate agronomic packages using participatory approaches that involve farming communities in both technology development and dissemination. She is a fellow of the African Women in Agricultural Research and Development (AWARD) and has also been recognized for dedication and commitment to excellence in mentoring by AWARD, CGIAR Gender & Diversity Program. Jenipher has a PhD in Applied Plant Sciences and an MSc in Agronomy from the University of Minnesota, USA.



Josephine Ahikire is Dean of the School of Women and Gender Studies and an Associate Professor of Gender Studies at Makerere University, and is Executive Chair of the Centre for Basic Research (CBR), a leading research centre in Kampala. Josephine has worked extensively in feminist political theory and has published works on women and politics, labour and urban culture. She is an active member of the Uganda Women's Movement and is also member of regional bodies such as the Council for Development of Social Science Research in Africa (CODESRIA) and the African Gender Institute (AGI) University of Cape Town.



Lawrence Lubyayi is a statistician with over 8 years' experience in data management, analysis, synthesis and dissemination; health systems research; social and public health evaluation research. Lawrence has a Master's degree in Statistics (Specialization-Biostatistics) from the University of Hasselt, Belgium, and international experience in Belgium and in the African context, particularly in Uganda. His has worked with global donors including PEPFAR, NIH, ICER, IFPRI, DFID, Global Fund for Children and USAID. Lawrence is pursuing a PhD in Biostatistics in the School of Public Health at the University of the Witwatersrand, Johannesburg, South Africa.



Lilian Nkengla is a Research Associate at IITA in Cameroon who leads the gender aspects for a breeding project in West and Central Africa. She participates in the development of gender protocols and gender-responsive management for data collection and qualitative research. Lilian studied Women and Gender Studies as an undergraduate and holds a PhD in Gender and Natural Resource Management from Brandenburg University of Technology, Cottbus-Senftenberg, Germany. She is a GREAT Fellow from Theme 1, a GREAT Gender Fellow, and a member of the GREAT Community of Practice Advisory Board.



Losira Nasirumbi-Sanya is a social and development research professional with over 10 years of adaptive and applied research experience. She holds an MS in Agricultural Economics and a BA in Social Sciences, and a PhD in Agricultural and Rural Innovation, both from Makerere University, Uganda. Losira is a GREAT Fellow from Theme 1, a GREAT Gender Fellow, and a member of the GREAT Community of Practice Advisory Board.



Margaret Mangheni is the Co-Project Leader for GREAT, and an Associate Professor at Makerere University. She has over 10 years of practical experience supporting integration of gender into higher education, and successfully spearheaded the integration of gender into the agriculture curriculum at Makerere. Margaret has conducted research and short-term consultancy projects with: the Rwanda Agricultural Board, Uganda's National Agricultural Research Organization, ASARECA and RUFORUM, focusing on gender responsiveness of project proposals, gender training, evaluations, project design, and institutional analysis. She is also a member of the international advisory committee of a USAID-funded project on integrating gender and nutrition into agricultural extension and advisory services.



Margaret Smith is a Professor of Plant Breeding and Genetics at Cornell University, focused on corn breeding. Her research is focused on enhancing our understanding of corn adaptation to marginal environments (in the US and internationally), and developing genetic materials that will improve corn productivity and sustainability in such environments. Her research includes understanding the genetics of and genetic variability for improved performance under marginal conditions, developing better selection methods, exploring sources of novel genes to improve key productivity and sustainability traits, and developing and releasing germplasm sources.



Maria Nassuna-Musoke has worked extensively across Africa facilitating change processes since 2003, and is currently involved in facilitation for team building, strategic planning, process documentation, and project monitoring and evaluation. She has a PhD from the Institute of Crop and Animal Production in the Tropics and Subtropics, University of Göttingen, Germany. Maria also has an MSc in Animal Reproductive Physiology from James Cook University, and a Bachelor of Veterinary Medicine degree from Makerere University.



Miriam Kyotalimye is a Program Assistant at the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), and is based in Uganda. Her work as ASARECA includes agricultural policy support for the Policy Analysis and Advocacy Programme (PAAP). Prior to working at ASARECA, Miriam worked with the International Food Policy Research Institute (IFPRI), and she continues to publish with them on agricultural policy. She has an MSc in Agricultural Economics from Makerere University.



Ogara Collin is currently Head of Research and Learning at ACODEV. He worked at Africhild as a Research Associate, Share Uganda as a Project Manager, Global Hands of Hope as a Programs Manager, Research Coordinator at Sanyu Africa Research Institute (University of Liverpool), Lecturer at Nkumba University, Advocacy Coordinator at Children of the World Foundation and Program Manager at Uganda Orphans Rural Development Program. Mr. Ogara is a master trainer and vendor for ATLAS.ti.



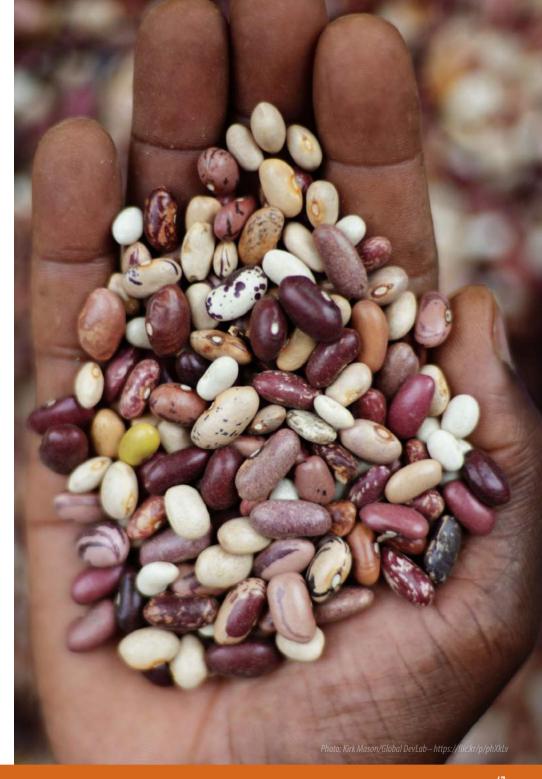
Peace Musilmenta is a Lecturer at the School of Women and Gender Studies, Makerere University, Uganda, and holds a PhD in Gender Studies. She is an experienced gender analyst, mentor, trainer and researcher in women, gender and socioeconomic development issues (gender equality, equity and development; Gender Equity Budgeting; gender analysis and alternative transformative leadership) at both national and international levels.



Richard Miiro, a Senior Lecturer, trainer, facilitator and researcher at Makerere University, is passionate about gender integration. His work involves promoting gender equity and learning in a sweet potato-through-schools project, and he is engaged in an IDRC-funded project assessing the capacity of agricultural researchers to conduct gender-responsive research in Rwanda and Uganda. Previously he worked promoting gender with the Grameen Foundation's Community Knowledge Workers initiative.



Sarah Mayanja is a Research Associate at the International Potato Center in Uganda, and Deputy Project Leader / Gender in Value Chains and Marketing Specialist for the RTB-ENDURE Project. She was previously a Regional Manager at AGRINET, and an African Women in Agricultural Research and Development (AWARD) Fellow (2010-2012). She has an MSc in Agroecology and Sustainable Agriculture from Uganda Martyrs University.



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ONLINE Resources

Providing access to curated resources for gender-responsive agricultural research



Staying Connected:

The GREAT Quarterly Newsletter

Four times per year GREAT sends out an email newsletter to hundreds of recipients around Sub-Saharan Africa and globally, with updates from the project, spotlights on upcoming events and important resources, and the latest blog entries. If you'd like to stay in the know, and be aware of what's new in the gender and agricultural research world, sign up to get the newsletter delivered to your inbox, too!

See our previous newsletters: www.greatagriculture.org/content/news
To sign up, visit: tinyurl.com/great-updates

Finding Resources:

The GREAT Resource Hub

Complementing the training and mentoring components of the project, GREAT also curates a collection of gender resources for agricultural researchers. This resource is freely available to anyone via the GREAT website, at www.greatagriculture.org/resources/resource-hub-home.

Resources cover gender-responsiveness for agricultural research for a broad range of crops and come from a diverse array of sources. As each themed GREAT cohort training takes place new resources will be added that are tailored to the respective crops and value chains of the cohorts.

If you have a specific resource you can't find, or would like to contribute something to the GREAT Resource Hub, please use the integrated form on the website to contact the GREAT web team.



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