# FROM LAB TO FARM



Tracing the Journeys of the 2013 and 2014 AWARD Fellows





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ADAPTATION TO CLIMATE CHANGE AGRICULTURE RESEARCH ASSISTANT LECTURER COLLABORATIVE RESEARCH COMMUNITY MEMBERS CONCEPT NOTE CONFLICT MANAGEMENT DATA ANALYSIS ENVIRONMENTAL LEADERSHIP GENDER RESPONSIVENESS GENERATION AND DISSEMINATION INTERNATIONAL ASSOCIATION INTERNATIONAL CONFERENCES INTERNATIONAL JOURNAL JUNIOR RESEARCHERS KNOWLEDGE GENERATION

LEAD AUTHOR HIGHER LEVEL DEGREE PEER REVIEWED PEER REVIEWED JOURNALS PHD CANDIDATE PHD RESEARCH PHD STUDENT PHD THESIS PLANT BREEDING POLICY BRIEFS PRODUCTION AND MARKETING PROJECT MANAGER RESEARCH ACTIVITIES RESEARCH ASSISTANT RESEARCH INSTITUTE RESEARCH INTERN SMALLHOLDER FARMERS SMALL SCALE SMALL HOLDER

SMALLHOLDER DAIRY SMALLHOLDER DAIRY FARMS YOUNG GIRLS

# Word from the AWARD Director

A robust agricultural innovation system is critical if Africa is to rise to the food security challenges facing the continent. To innovate its way out of its current challenges, Africa cannot afford to leave any resources, especially the talents of its scientists, underutilized.

For the past eight years, AWARD has invested in high-potential African women agricultural scientists to ensure that they have the scientific and leadership skills to contribute to the African agricultural innovation agenda. Specifically, our two-year career development fellowships are aimed at fixing the leaky pipeline of women's leadership in agricultural sciences in Africa.

This publication celebrates the contributions that African women scientists are making towards Africa's renewal. The publication showcases African women scientists driving technological innovations – from biotechnology to information and communications technology. The scientists featured here are focused on finding solutions to the range of challenges facing Africa's farmers: from productivity to profitability.

This publication also showcases the ways that AWARD Fellows are empowering African women farmers. From policy dialogues, to market places, and in villages, these inspiring African women scientists are transforming communities across Africa for the better. They are setting up social enterprises and community organizations; they are leveraging new funding sources; they are finding new sources of power, confidence and influence within themselves.

Through this publication we welcome you to follow the inspiring journeys of these daughters of Africa. We invite you to join us as we celebrate the progress and achievements of Africa's leading women agricultural scientists and to cheer them on as they pioneer new agricultural technologies at Africa's innovation frontiers.

Dr. Wanjiru Kamau-Rutenberg Director, AWARD



Wanjiru Kamau-Rutenberg Director AWARD

# Acronyms

AST	Advanced Science Training					
BMGF	Bill & Mel <mark>inda</mark> Gates Foundation					
CIAT	International Center for Tropical Agriculture					
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement (Agricultural Research for Development)					
CSIR	Council for Scientific Industrial Research					
DANIDA	Danish International Development Agency					
ICRISAT	International Crops Research Institute for Semi- and Arid- Tropics					
IITA	International Institute of Tropical Agriculture					
ILRI	International Livestock Research Institute					
IUFOR	International Union of Forest Research Organizations					
MSc	Master of Science					
рВ	Post-Bachelor's Level					
рD	Post-Doctoral level					
PhD	Doctor of Philosophy					
рМ	Post-Master's Level					
RUFORUM	Regional Universities Forum for Capacity Building in AFRICA					
U.K.	United Kingdom					
U.S.A.	United States of America					
USAID	United States Agency for International Development					

# Preface

In this publication, AWARD Fellows from the 2013 and 2014 cohorts share progress they have made in their research and careers based on goals set at the beginning of their fellowship. The short progress summaries in the fellows' own voice also detail outputs these African women agricultural scientists have achieved over the course of their capacity development journey.

AWARD Fellows cover the laboratory-to-farm range: with laboratory-based scientists on one end to those who are field-based and work more directly with farmers on the other. Most fellows are, however, working in both the laboratory and the farm, as well as in process or people management roles at different institutions. As the fellows' narratives take shape, a pattern emerges—their outputs loosely fall into one of four categories—transformation in the laboratory, in their career, on the farm, and ultimately, influence on the greater agriculture landscape. These categories are not mutually exclusive; fellows have a foot in more than one field, for instance, a fellow with growing influence is likely to have strong laboratory and significant farm activity.

This publication profiles 100 AWARD Fellows from 15 countries in the following sub-regions:

East Africa: Ethiopia, Kenya, Rwanda, Tanzania, and Uganda;

Southern Africa: Malawi, Mozambique, and Zambia;

West Africa: Nigeria, Ghana, Liberia, Cote D'Ivoire (Ivory Coast), Burkina Faso, Mali and Cameroon.

AWARD offerings—the career development workshops, science writing and leadership courses, international conference attendance and professional association membership, role-modeling, advanced science training, and mentoring—are often cited as directly or partially contributing to fellows' realized outputs.

With each fellow's growing impact, AWARD hopes to position competent women agricultural scientists to lead more effective, gender-responsive innovations in the African agriculture landscape.



# East Africa at a Glance

Number of AWARD Fellows by country

Country	рВ		рМ		рD		Total
Ethiopia	1	3	2	1	1		8
Kenya	5	3	4	2	7	4	25
Rwanda		1			1		2
Tanzania	2	2		1	2	2	9
Uganda	4	1	1	3	1	1	11
Total	12	10	7	7	12	7	
Grand Total	22		14		19		55



# East Africa Fellows' Journeys

#### Jane Ambuko, 2013 Post-Doctoral Fellow, Kenya

"What I love about the AWARD Fellowship is that it shows you that anything is possible in your career; you just have to imagine it! I can say that my career got a real boost when I joined the AWARD Fellowship program in 2013, after four attempts. The effort to get in has been worth it! Participating in the fellowship has helped me to sharpen my career focus, improve my networking and visibility, and hone my leadership skills," Jane Ambuko, 2013 post-Doctoral AWARD Fellow, Kenya.

Jane Ambuko is a Senior Lecturer currently working at the University of Nairobi. She is the Head of the Horticulture Unit of the Plant Science and Crop Protection Department.

Ambuko's research is focused on working with local manufacturers in Kenya to build brick coolers from locally available materials that local farmers can use to store their harvest. The farmers she has trained on how to use the technology confirm that it works and that they are happy with the results.

"The technologies I am researching on include the CoolBot system which uses a standard domestic air conditioner to create a 'cold room' effect—and the Zero Energy Brick Cooler, which is based on the principle of evaporative cooling. I was inspired to pursue this line of research since thousands of smallholder farmers lose at least 40 percent of their harvest, and in the case of horticulture this is even higher. "This is like a farmer losing 50 percent and more of what they invested in producing the crop simply because they do not have access to information or technologies on how to better store their harvest," explains Ambuko.

Thanks to the AWARD Fellowship, Jane Ambuko has received national, Africa-wide and global visibility. This newfound visibility has allowed her to network and collaborate with leading professionals whom she has admired over the years.

"In 2014, at the International Horticultural Congress in Australia, I was connected with Dr. Jim Simons, a professor in the Department of Plant Biology and Pathology at the Rutgers School of Environment and Biological Sciences in New Brunswick, New Jersey, United States of America (U.S.A.). I am now collaborating with him on a project to promote better nutritional health in vulnerable groups," she shares. "Through the fellowship, I have been given the tools with which to inspire others, particularly my students, to have a better appreciation for their chosen field—agriculture—and to learn of the endless career possibilities available in the field. I have seen that this helps them to approach their studies with interest and enthusiasm, and get good grades."

"Jane has benefited immensely from AWARD. She has been able to participate in many international scientific conferences with support from AWARD. She has also taken up fellowships that have enhanced her capacity to conduct molecular studies on postharvest physiology and technology.

She is an excellent networker who is empowering postgraduate students by sponsoring their participation in workshops and conferences. If you are her student, you may not graduate if you have not made a presentation at a scientific forum. She is now more confident in celebrating her achievements and in accepting recognition for her efforts from colleagues."

Prof. Chemining'wa, Head of Department, Department of Plant Science and Crop Protection, University of Nairobi



#### Mercy Nasimiyu Wamalwa, 2014 Post-Master's Fellow, Kenya

I am currently working as an Assistant Lecturer in the Department of Biological Sciences at Egerton University, Kenya. I am also conducting doctorate research on rust diseases in wheat. My enduring interest is to find sustainable solutions to these problems by developing rust-resistant wheat varieties.

After joining the AWARD Fellowship program, and specifically attending the AWARD Science Skills Course, l experienced a number of career milestones such as employment as an Assistant Lecturer, successful defense of my Doctorate of Philosophy (PhD) proposal, and made my maiden submissions of scientific articles from my Master of Science (MSc) thesis to a peer-reviewed journal; one of which was accepted for publication. I am grateful for the guidance, professional connections and support I have gained from my mentor, Professor Lenah Nakhone Wati.

Thanks to the networking opportunities of the AWARD Fellowship, I have established professional links with researchers from both Denmark and the United Kingdom (U.K.), which has led to international collaboration in a project titled 'Maximizing the Potential for Sustainable and Durable Resistance to the Wheat Yellow Rust Pathogen' as a PhD student. The research is led by a group at the John Innes Centre, U.K. and also involves a former AWARD Fellow, Ruth Wanyera. In addition, I received a six-month training opportunity in an international laboratory in Denmark under the guidance of Professor Mogens Stovring Hovmoller to improve my skills in identifying rust resistance in wheat. Additionally, I won the coveted Advanced Science Training (AST) placement at DuPont Pioneer in Iowa, U.S.A. I am happy for the opportunity to enhance my research skills and get closer to my career goal of developing rustresistant wheat varieties that will benefit smallholder farmers in Kenya and the greater Eastern Africa region.

My professional profile has also gained visibility having featured in a number of websites such as AWARD's as a fellow, Yellow Rust's as a PhD student, and the Egerton University websites as an Assistant Lecturer in the Department of Biological Sciences.

I am sharing what I have gained from the AWARD Fellowship with other female scientists to enable them identify their career goals and pursue them. I mentor a Master's degree student carrying out research in plant protection, and other bachelor's and master's students. Additionally, I influenced a female scientist who had given up on pursuing an MSc degree to prepare and submit an application to the Egerton University.

These life-changing achievements are all thanks to the AWARD Fellowship program, which awakened the potential within me as well as empowered me.

# Eden Getachew Tolossa, 2014 Post-Bachelor's Fellow, Ethiopia

At the start of my AWARD Fellowship, I set a number of targets for myself so as to advance my career. The main goal was to support the transformation agenda of my country through innovative developmental initiatives. Over the past year, I have made tangible progress on this target and others by moving to a more influential job and setting up a social enterprise to work with smallholder farmers on fruits and vegetables through an out-growers scheme.

I have participated in a number of courses to develop my science and interpersonal skills, with the most impactful being the AWARD Science Skills Course as well as the Agriculture in Transition Course at Wageningen University in The Netherlands.

I successfully began a social enterprise called 'Green Path Food' with various partners including the Massachusetts Institute of Technology. Green Path Food aims to work with smallholder farmers across East Africa to produce organic fruits and vegetables through permaculture farming techniques. I am currently a pro-bono advisor to the company, which has begun a pilot model in Ethiopia with 20 avocado farmers around Butajira area, 130 km from the capital, Addis Ababa.

With the skills and knowledge I obtained through the AWARD Fellowship, I applied for and obtained a number of promotions. I was

promoted to Senior Associate and assigned to set up the Livestock Program at the Ethiopian Agricultural Transformation Agency (ATA). After completing my term at ATA, I joined the Africa Governance Initiative as a Governance Advisor, and since September 2014 | have been working as a Delivery Advisor to the government of Ethiopia. I also expanded my networks, and have since joined the African Association of Agricultural Economists.

During this journey, I received invaluable advice and personal insight from my mentor, Aster Zaoude, whose guidance and friendship I am grateful for.

# Nina Wambiji, 2013 Post-**Doctoral Fellow, Kenya**

At the start of my AWARD Fellowship, I aspired to be an internationally recognized scientist who applies modern marine research skills, energy and leadership to empower fishing communities and all stakeholders to sustainably utilize marine and fisheries' resources along the Eastern Africa coastline. I also wanted to conduct research and set up a molecular lab, be promoted to a senior research officer by the end of the AWARD Fellowship, and improve my leadership and conflict management skills.

During my fellowship I worked very closely with my mentor, Dr. Santie De Villiers, and benefited from

opportunities to conduct collaborative research projects. Some of these have involved regional researchers from Mauritius, Tanzania and South Africa.

This has been an exciting time for me as I have learned much about myself, and how to work effectively with others—whether as a leader or as a team member. After the AWARD Leadership Skills Course, I became a team leader for Fisheries Research in a World Bank-funded project tackling stock assessment research and improving fishing gear to ensure environmentally sustainable fishing. I have also learnt how to delegate, work as a team, and give and receive feedback in all my endeavors. These things have made me a more effective person.

I have begun the process of setting up a molecular fisheries research laboratory, of which some equipment for the molecular work has already been bought. I have been accepted as a Research Fellow at the 'Biosciences eastern and central Africa' facility—an internationally acclaimed laboratory hosted at the International Livestock Research Institute (ILRI)—where I am conducting research on the diversity of rabbitfish. This fish is an important marine fish and a staple food among the coastal community in Kenya.

The most useful course of the program, I found, was the AWARD Science Skills Course where I learned how to write scientific articles and grant proposals. I also liked the fact that this course provided me with a richer experience through the AWARD Fellows sharing their skills and knowledge. I have since participated in the writing of five regional proposals; two of them in collaboration with my mentor Dr. De Villiers, and other colleagues. I have received funding as a Principal Investigator in one regional fisheries project, and as a co-investigator in another.

I like the mentoring concept of the AWARD Fellowship. I am sharing the skills and knowledge I gained with my students and AWARD Fellow Mentee. This helps me to practice what I learn in the fellowship.

Thanks to AWARD for the chance to shape my career. I am now more prominent as a member of several committees at my place of work, and national taskforces on fisheries research in Kenya.



#### Miriam Siriri, 2013 Post-Bachelor's Fellow, Uganda

When I joined the AWARD Fellowship program, I was the coordinator for an initiative that sought to bring together civil society organizations and public universities to collaborate on agricultural issues. The initiative brought together agricultural knowledge that can bridge the gap between farmers and researchers to effectively improve agricultural productivity for rural households.

But this did not feel like a position that would fulfill my career goals as I had outlined at the start of the

fellowship. I sourced for and found another position as a Monitoring and Evaluation (M&E) specialist within a United States Agency for International Development (USAID)funded agriculture policy project: Feed the Future. This project assists policymakers to improve the policy, legal, and regulatory frameworks that affect agricultural production and trade as well as enable farmers and agribusinesses conduct business. I am pleased with the role as it will help to build my expertise in agricultural policy.

After the AWARD Science Skills Course, I finalized my MSc studies in agriculture economics, which then provided opportunities to embark on other complementary study programs in M&E and management.

I have also increased my professional networks as a result of the AWARD Fellowship. For example, I am involved in an initiative to determine the success factors for improving household income and nutrition among women and youth within households in the districts of Iganga, Kamuli, Namutumba and Kaliro in Eastern Uganda. From the findings of this collaboration, the initiative will come up with a memorandum of understanding on how to execute the recommendations that will benefit women and youth improve their household income and nutrition.

# Judith Oyoo, 2013 Post-**Bachelor's Fellow, Kenya**

When I won the AWARD Fellowship, I was excited to set about outlining my career development plan, and defining how I would achieve my vision in line with my professional path. I envision contributing to the eradication of hunger in sub-Saharan Africa by empowering smallholder farmers through training on good agronomic practices, leadership, group dynamics and market links and access.

Before taking part in the AWARD Fellowship program, I was timid, lacked self-confidence, was unfocused and thought I only lived to earn a salary. The AWARD Leadership Skills Course helped to shape my personality, improve my relationship with others by developing my listening skills, and boosting my confidence. These newfound qualities contributed to my professional image and resulted in me getting more responsibilities. For example, my colleagues now trust me so much more that they appointed me to be part of the committee of Tigoni Welfare Association, which manages our money, to ensure that their money is handled well. It is also evident that my line managers have more confidence in me since I joined the AWARD Fellowship program—I was recently appointed as the head of flower section in my center.

The AWARD Science Skills Course was very useful in improving my science skills such as data analysis, which came in handy when I was analyzing the data from my MSc research project.

I have been able to publish a paper in a peer-reviewed journal as a main author and co-authored three others. I have also presented four scientific papers on my work in conferences, and they have further been submitted for publishing.

With support from my mentor, Dr. Miriam Otipa, I have worked on developing 12 Green & Yellow Lists which will act as a diagnostic tool for determining crop pests and diseases. Furthermore, I joined five professional associations where I receive technical reports from two associations quarterly, and have been selected to peer review articles for a reputable journal that has now improved my science skills. I felt empowered when I was able to successfully carry out my first consultancy assignment with a non-governmental organization in Kilifi County where, together with my mentor, we demonstrated effective climate smart technologies.

Through the AWARD Fellowship, I got the opportunity to travel outside my country for the first time in 2014, thus broadening my experience from national to international. I successfully applied for a three-week training facilitated by the International Centre for Development-Oriented Research in Agriculture on linking research to local rural innovations in Wageningen University, The Netherlands. This was fully supported by the Netherlands Fellowship Program, which I participated in. Thank you AWARD for shaping, tuning, directing and releasing me to influence the lives of other women and young girls. You have increased my worth.

### Claire Mugasa, 2013 Post-Doctoral AWARD Fellow, Uganda

Since I joined the AWARD Fellowship program, I have made achievements in various aspects of my career such as the transition from lecturer when I began the fellowship to senior lecturer. I am responsible for overseeing the graduate students' office in the College of Veterinary Medicine, Animal Resources and Biosecurity at Makerere University, and in charge of graduate research (both master's and PhD). Through the AWARD Science Skills Course and the AWARD Women's Leadership and Management Course, I gained valuable skills that I now apply in my day-to-day duties, as well as in asserting myself as an upcoming senior lecturer. By understanding my personality, applying the principles of teamwork and leadership skills acquired from the program, I am able to manage my new responsibilities well.

I have written several research proposals involving qualitative data collection, and so far one of these proposals has passed the first stage of screening, thanks to the short course on research methods sponsored by AWARD. I was also confident enough to volunteer to be the team leader in writing this collaborative proposal. Through this proposal, I have expanded my professional network to include three international entomology researchers from Benin, Nigeria and Tanzania. I am also actively involved in social science research, specifically gender issues affecting agricultural production in areas with natural disasters in Uganda. My involvement has been encouraged by my mentor, Professor Christopher Rubaire-Akiiki of Makerere University, who introduced me to some researchers in his network at the beginning of the fellowship. Now I am more knowledgeable in writing and applying for holistic research project grants with both quantitative and qualitative components.

I have since supported my AWARD Fellow Mentee to complete writing and submission of two manuscripts for publication—prerequisites for attaining her PhD.

# Flower E. Msuya, 2014 Post-Doctoral Fellow,

Tanzania

When I joined the AWARD Fellowship program, I articulated five main career goals comprising: developing devices for deep water farming of the higher valued but environmentally sensitive seaweed; adding value through production of plant growth stimulators; producing resistant varieties of seaweed; writing research proposals and journal articles; and producing a book on seaweed. I am glad to say that I am well on my way to achieving these goals, thanks to the support and guidance from my AWARD Mentor, Professor Keto Mshigeni.

The AWARD Science Skills Course taught me how to write winning proposals, such as one to design a deep water farming device to combat the problem of seaweed breakage, which was submitted to the Western Indian Ocean Marine Science Association and accepted. I have also submitted two other proposals, one to disseminate the deep water farming technology to coastal communities in Zanzibar, and the other on value addition. I have written two scientific publications together with colleagues in Tanzania and abroad. I am also honored to contribute to my mentor's book on the seaweed Sargassum as a co-author.

My professional network has also increased, as I was invited to give a public lecture at Bremen University, Germany, where I talked about my work on the deep water seaweed farming technique and value addition. I was also invited to a conference in Egypt to talk about how climate change impacts seaweed farming. In both cases, my talks were well received and triggered a lot of interest from participants.

I have enjoyed supervising postgraduate students: a master's student who completed her studies in 2014 as well as a PhD student who has just begun her studies. These achievements were possible after becoming an AWARD Fellow and learning how to be more assertive, as well as working with diverse people. The great support from my mentor has also made a world of difference.

# Yenealem Bezawit, 2014 Post-Bachelor's Fellow, Ethiopia

When I started the AWARD Fellowship in March 2014, I had the opportunity to set out clear career goals, which included ultimately beginning my own agribusiness enterprise. At this time I was working as a program analyst at the Ethiopian Agricultural Transformation Agency (ATA). Shortly afterwards I was promoted to a program associate in the wheat and barley value chain team. Wishing to diversify my experience and increase the scope of my work, I requested the management to assign me to another team, but was given the opportunity to work with the livestock value chain team which was not my preferred option.

The management's decision was communicated to me while I was undertaking the AWARD Leadership Skills Course, and right after I had participated in the AWARD Enhancing Negotiation Skills for Women Course. I decided to put the lessons learnt into practice and worked with the course trainer on crafting my response, which involved politely declining the offer and communicating my interest to work in yet another team. I then used the negotiation skills I learnt to get to work in the area of my interest within the office of the chief executive officer.

Currently, I work as the agribusiness manager at Diageo, which provides me with knowledge and networks that take me a step closer to my career goal of starting my own agribusiness and improving the lives of smallholder farmers.

My mentor, Amrote Abdella, has been crucial in the advancement of my career. One of the greatest lessons I took from her was the challenge to try all opportunities and not to be afraid of failure. This includes not getting discouraged by the minimum requirements set for any job or study, even if they are higher than mine. Through this coaching, I got the confidence to apply for a job that required more years of experience than what I had and I was able to clinch it.

In the past year, I participated in an international course titled Adapting to Climate Change for Agricultural Growth, organized by the Danish International Development Agency (DANIDA) in Copenhagen, Denmark. I also got admitted into a graduate study program at the University of Applied Science in Berlin, Germany, but have deferred this to 2016 so as to gain some experience in my new role.

# Mary W. Gateri, 2013 Post-Bachelor's Fellow, Kenya

At the start of my fellowship, I was required to come up with a career development plan. Thereafter I became quite focused and more serious in my work. In spite of my advanced age, I enrolled for MSc studies in Horticulture at the University of Nairobi in September 2013. I have since completed the course work and embarked on the research project, and anticipate graduating in December 2015.

To improve my professional associations, I presented and published two research papers; one in the ACTA Horticulturae and the other in the proceedings of the 8<sup>th</sup> International Conference on Mushroom Biology and Mushroom Products (ICMBMP), both of which were peer-reviewed. I also enrolled for membership in the World Society for Mushroom Biology and Mushroom Products to enhance networking, collaboration and partnership. Within the AWARD Fellowship, I undertook several courses such as the AWARD Leadership Skills Course and the AWARD Science Skills Course, to grow my research and leadership potential.

I have also learned how to mentor young and upcoming scientists, and I am proud to share that my mentee, Susan Kabachia, successfully joined the AWARD Fellowship program in 2015. I also carried out a successful rolemodeling event at Ngandu Girls High School and also became, on request, a mentor to three girls who joined the Jomo Kenyatta University of Agriculture and Technology to pursue agriculture studies.

Now I strive to demonstrate excellence in leadership, for example by facilitating the National Mushroom Steering Committee meeting during a stakeholders' workshop in 2013. Through this committee, an association has been formed to help solve the challenges faced by mushroom farmers in Kenya. The association also hopes to partner with foreign investors connected by Agri-Profocus Kenya to develop the mushroom industry in Kenya. I was also appointed to the National Steering Committee of Agri-Profocus Kenya, and in this position I will conduct training sessions for East African farmers on mushroom production technologies, and coordinate the set-up of a large spawn production facility that serves the region. To share knowledge on mushroom production, I am publishing a book titled A Manual for Mushroom Production and Marketing in Kenya. I am grateful to AWARD for the fellowship opportunity that has transformed my career.

# Victoria Bulegeya, 2013 Post-Bachelor's Fellow, Tanzania

Spending two years as an AWARD Fellow has been the best thing in my career and life in general. I began the fellowship as a junior professional, employed as an agriculture scientist. I was working in cotton breeding at the Agricultural Research Institute (ARI) in Morogoro. The AWARD Fellowship provided me with a mentor, Dr. Everine Lukonge, who is a successful cotton breeder. Dr. Lukonge provided me with guidance and advice on how to further my career as an agricultural researcher. Despite not being in the same geographical area, my mentor was able to communicate with me through e-mails and phone calls to exchange ideas and information. I was fortunate to spend two weeks at her

research institute, ARI in Mwanza, where I learnt about experimental design for breeding tests and cross pollination in cotton trials.

The AWARD Fellowship was a game changer in my life. It connected me to other scientists in Africa working in different disciplines in agriculture. This opportunity was crucial for my career advancement as I am now able to engage with other scientists easily. also joined an international professional association, the American Crop Science Society, through which I can access current information on crop research and production.

The AWARD Leadership Skills Course was my first opportunity to attend a course that builds my non-technical skills as a scientist. Through the course, I was educated on how to be a good leader and shown which skills I should improve on to enhance my confidence and personality. The course also gave me practical knowledge on how to handle different situations at my work place.

In general, the fellowship opened doors in my budding career. Now I walk confidently, believing in myself and in what I am doing as I know it impacts smallholder farmers' lives in my country, and in Africa. During my fellowship I was able to obtain a scholarship to pursue graduate studies in crop science and horticulture at the Ohio State University, U.S.A. Thank you AWARD.

#### Edidah Lubega Ampaire, 2013 Post-Master's Fellow, Uganda

At the beginning of my AWARD Fellowship, I set three goals: to develop a research niche, to position myself to help women and girls realize their potential, and to grow my writing and communication skills to communicate science.

My AWARD journey began when I was recruited as a post-master's fellow in 2012, while still undertaking my PhD studies at the University of Pretoria. I completed my PhD program and graduated in September 2013. One of my long-held dreams has been to work at the United Nations. When I shared this with my AWARD Mentor, she advised that to make this a reality, I should focus on gender and policy. I therefore integrated this into my career development plan. Through the AWARD Fellowship, I have improved skills in science and gender research by conducting field research, writing scientific publications and networking with others. It is noteworthy that when I joined the AWARD Fellowship program, I did not have any publications to my name. In the space of two years, besides technical reports, I have published five papers as lead author in two of them. Additionally, I have developed three manuscripts for submission as lead author, as well as two policy briefs.

Before the AWARD Fellowship, I would not have dared to apply for any job for which I did not feel fully qualified. However, I applied for a

scientist position at the International Institute of Tropical Agriculture (IITA) in 2014 and applying the knowledge and skills obtained from the AWARD training, I was able to emerge as the best candidate at the interview, despite having only received my PhD the previous year. I have since moved a step higher in the career goals I set for myself. In my role as project coordinator, my network has expanded widely and I have become significantly visible at important fora. I coordinate a multi-agency collaborative project with initiatives in both Uganda and Tanzania. To be successful in this role, where I manage public-private partnerships, I have put into use the soft skills that I learned during the AWARD courses such as conflict resolution, assertiveness, good communication, and team leadership.

# Jelly Changa, 2014 Post-Doctoral Fellow, Tanzania

At the start of my AWARD Fellowship, I set out to increase the productivity of dairy cattle owned by smallholder farmers in order to improve these farmers' livelihoods. I intended to accomplish this by training farmers and increasing their access to affordable technologies.

Thanks to the AWARD Science Skills Course that included grant writing, I have since developed and submitted two proposals in collaboration with my mentor to raise funds for my dairy productivity projects, one of which is at the final review stage. I have also improved my scientific writing skills and prepared a paper on calf health, management and growth in smallholder dairy farms. My visibility and collaboration have also greatly improved and I am a co-investigator in two projects in my institution, in which we are focusing on enhancing smallholder farmer food security through improving animal productivity.

Through my field work, I have developed both national and international professional networks that have yielded additional collaborative opportunities, and a joint scientific paper that will be published soon. AWARD also facilitated my membership in two professional associations: the World Association for the Advancement of Veterinary Parasitology and the Tanzania Association of Women Leaders in Agriculture and Environment. I am grateful to AWARD for the opportunity to learn a lot from other professionals, and to grow my networks in veterinary parasitology.

# Hewan Demissie Degu, 2013 Post-Doctoral Fellow, Ethiopia

My AWARD Fellowship gave me muchneeded confidence; confidence that has enabled me to pursue my dreams to the fullest. I found the training, in both technical and soft skills, to be well-structured and beneficial. By outlining my goals in the career development plan, I was able to map out how to achieve them. I won an AST opportunity that took me to DuPont Pioneer and Iowa State University in the U.S.A., where I got to improve my scientific skills. Additionally, while there, I was able to get along well with people, thanks to the leadership and interpersonal skills I gained.

Because of my AWARD training, I have been able to grow a strong and high-level international network that I did not have before. From the Science Skills Course, I gained indepth understanding of proposal and research paper writing. These skills were strengthened when I enrolled in both national and international professional associations such as the **Biological Society of Ethiopia**, Society for Experimental Biology, Society of Biology, and National Society of Plant Breeding. Membership to these associations gave me easy access to current research. Because of this, I managed to write three papers, one of which has been published in a leading international journal. I will publish the other two in 2016 as part of my application process for promotion at my current institute, Hawassa University.

My networking with professionals in my area of expertise increased through LinkedIn. In addition, I created a Facebook group for molecular breeders. Currently, I have 20 members. I was also successful in advising two students who got excellent results in their thesis evaluation.

The AWARD Fellowship helped me to do the unthinkable. Currently, I am relishing the challenge of setting up protocols related to the establishment of a new plant biotechnology laboratory, which I will lead at Hawassa University.

# Linda Kairuthi Ethangatta,

# **Post-Doctoral Fellow** 2014, Kenya

At the start of my AWARD Fellowship, I aimed to improve the livelihoods and nutritional care of young children among smallholder farmers. To this end, I have followed a public-private partnership approach, bringing together my institution the African Nazarene University, the Ministry of Agriculture, vocational training institutions, and the community, through a women's group.

I sensitized the smallholder farmers on how to use appropriate technology and effective storage to reduce postharvest losses, as well as how to process and market farm produce for income generation. I felt really proud of these women when they managed to produce various tomato products like paste, puree, and jam. I also plan to train them in the production of dairy products.

As a direct result of the fellowship, I have continued to enhance my leadership skills and influence. I was elected secretary of the Private Universities Research Consortium when it was formed. I also led a team at my institution to run the **First International Conference** on Information, Technology and

Communication for Sustainable Development in May 2014. I led a team of senior faculty members at my institution who developed and published research guidelines for master's and doctoral degrees. Using the gender-responsiveness knowledge gained from AWARD, I introduced and taught a gender course in the monitoring and evaluation program at the university.

To increase availability of the knowledge generated from my work, I am developing a Nutrition in Development textbook intended for university, tertiary institutions, and non-governmental organizations.

# **Rehrahie Mesfin** Gebrehiwot, 2013 Post-Master's Fellow, Ethiopia

At the start of my AWARD Fellowship, I aimed to improve the productivity of livestock by generating improved technologies and training both female and male smallholder farmers to attain self-sufficiency.

I am currently undertaking my PhD research on dairy feeds. This study is a step forward in my career development plan. The knowledge I gained from AWARD has helped to strengthen my research skills, especially in the production of scientific articles. Consequently, I have developed three scientific papers for publication.

My network has grown to include AWARD Fellows, Mentors and staff, increasing my communication with regional professionals. I am currently working on my PhD research activities successfully, thanks to this network. Through sharing of experiences with different professionals in the AWARD family, I have developed confidence and high self-esteem. This has resulted in improved ability to convince and positively influence the people with whom I am collaborating in my research.

My leadership and management skills have grown from participating in various AWARD courses and conferences. Because of this, I can confidently guide and direct research teams working with me. The courses have also sensitized me to consider gender aspects in my research activities, especially in my field work. I have been formally mentoring one junior researcher, in addition to introducing AWARD to many other junior researchers so that they can apply and participate in the fellowship.

# Alganesh Tola Gemechu, 2013 Post-Master's Fellow, **Ethiopia**

March 2013 marked the beginning of my AWARD Fellowship journey. At that time, I was not highly motivated in the job I was holding. The AWARD Mentoring Orientation Workshop opened my eyes to potential opportunities and energized me to regain my assertiveness, visibility,

networking, and leadership qualities. In October 2013, I was put in charge of the dairy microbiology and chemistry laboratories at my institution, the Holeta Agricultural Research Center which is part of the Ethiopian Institute of Agricultural Research. I became aware of international certification standards for laboratories at the time. Although I was the lone researcher in the laboratory, I kept standards very high and recruited five junior researchers in April 2014. By June 2014, I had validated the methods used in our laboratories on seven parameters and applied to get the International Standard Organization (ISO)/ IEC 17025 international accreditation. The ISO/IEC 17025 outlines the general requirements for the competence of testing and calibration laboratories. Following rigorous external audits, we received the certificate for accreditation. This makes my laboratory the first at my institution to get such an international recognition.

In enhancing my scientific writing, I published a journal article and a book in 2013. Currently, I have three publications in the pipeline, one of which is on gender responsiveness in value chains. I also have four ongoing and five new research activities. At the same time, I am a trainer for milk producers and processors on clean milk and milk products' handling. Wishing to impart what I have gained through the AWARD Fellowship to others, I supervise master's students, guide and mentor junior researchers, and continue to lead a growing team of nine technical and support staff.

As part of my career advancement plans, I have applied for a promotion to the position of senior researcher, and I have also applied for admission into a PhD program. I have truly benefited from the AWARD Fellowship and the opportunities it opened up for me!



### Wangari Karuri, 2014 Post-**Doctoral Fellow, Kenya**

My research interests include finding effective means of increasing the productivity of sweet potato through effective pest control, with nematodes being a major pest. At the beginning of my AWARD Fellowship, I developed a career development plan to enable me to achieve my goals. My development purpose is to use my biotechnology skills to improve the livelihoods of smallholder farmers.

Using the grant proposal writing skills I gained through AWARD, I have written a proposal that resulted in a research grant from UK-AID to carry out research on nematodes attacking sweet potato. Additionally, I was awarded a one-year post-doctoral fellowship to research on the effect of climate change on sweet potato production. Under this fellowship, I have established networks with other scientists from Africa and the United Kingdom, having become a member of the Society of Nematologists. I am also supervising and mentoring young scientists. In addition, I have improved my interpersonal skills as well as research skills.

# Gaudiose Mujawamariya, 2013 Post-Doctoral Fellow, Rwanda

When I joined the AWARD Fellowship, I worked as a research coordinator at an institution in my country. Although my work was exciting, as an agricultural and development economist I found it unfulfilling.

The Mentoring Orientation Workshop was an eye-opener. I was able to visualize where and what I wanted to be in the future and take concrete decisions towards reaching my purpose. As a result, I applied and successfully interviewed for a position at African Rice Center in Tanzania in October 2013, after successfully organizing the first-ever international scientific conference at my old institution. I succeeded thanks to the techniques that I learnt from AWARD, and the advice and encouragement from my mentor.

I can say that I am flourishing, and working on promoting scientific research especially in the field of applied economics and value chain development in the rice industry. My aim is to improve returns and livelihoods for all value chain actors in agricultural production and marketing. Having done the science courses offered by AWARD is an advantage to my work, as my skills have greatly improved. Additionally, I am now more aware of the gender issues and as such I integrate them in my research approach for maximum impact. I also acknowledge that the leadership skills obtained from AWARD are very helpful in working well not only with my colleagues, but also with partners from different countries. Because I was able to successfully conduct the rolemodeling event at my old secondary school and win the Young Rice Scientist award at the International Rice Congress, I can confirm that I am now in the right place and moving in the right direction. I am grateful to AWARD for setting me in motion.

# Catherine Kadogo Kitonde, 2013 Post-Master's Fellow, Kenya

The highlight of my AWARD journey was winning the coveted AWARD AST placement, where I got an opportunity to conduct advanced research at Dow AgroSciences laboratories in the U.S.A. I now feel a lot more confident about my scientific research skills because of this experience. During my research attachment, I managed to identify and isolate three novel pesticidal and herbicidal compounds from medicinal plants. I also formulated and tested them in the laboratory and greenhouse. I have visited international laboratories that have state-of-the-art equipment and facilities, tapped research novelty and explored possible collaborations at Dow AgroSciences that will help me continue with agricultural research on management of crop pests and diseases.

I have published two papers and submitted a third one to a reputable journal. I also presented my research at an international conference in June 2015, in South Africa. I have managed to fundraise US\$11,667 for my research project.

During my AWARD Fellowship, I joined a PhD program in crop protection, and I am currently writing my thesis with the intention of graduating at the end of 2015. The competency I have gained in science, leadership, and negotiation skills has enabled me to be promoted to the position of Tutorial Fellow at my university. I was previously a graduate assistant. I now have increased confidence to interact and lead a large number of undergraduates and to train postgraduate students in pesticide discovery skills.

I feel I am demonstrating leadership and service to the community as now I am a board member of the children's home where I was raised. As a community advocate, I have influenced young women to invest in education. I have mentored a young woman scientist and used my life experiences during the AWARD role modeling event to motivate and inspire young women and men to succeed in their lives.

My visibility and confidence got a real boost when I gave two seminars at Dow AgroSciences, represented AWARD at Hunger Solutions Network, and gave a speech about my career and life experiences in Africa to women at the Innovation Network in the U.S.A. My professional network has also

grown as I am now a member of four professional associations. All these resources have enabled me to acquire and apply more scientific knowledge and information to my research work.



# Nessie Dietrich Luambano, 2013 Post-Doctoral Fellow, Tanzania

When I began the AWARD Fellowship, my goal was to increase the productivity of smallholder farmers through sustainable management of plant parasitic nematodes.

I have since won three fundraising proposals totaling US\$500,000; one of which was funded by the Bill & Melinda Gates Foundation (BMGF). The Gates Foundation-funded project aims to establish effective and sustainable management of the major parasitic nematodes affecting the banana plant. The other two projects involve research on healthy banana seedling systems, and on safe pest and crop management strategies in the vegetable value chain, respectively.

Since becoming an AWARD Fellow, I have published three papers in highimpact journals; and collaborated with my mentor in one. My visibility has grown, as evidenced by my participation at three international conferences in 2014 alone. I have been invited to other science and leadership fora by not only AWARD but also by the Gates Foundation and the Bellagio Center where I increased my

international network. Membership in four associations—three international and one national have not only increased my network, but also provided me with a sounding board for ideas, and collaboration opportunities.

In giving back to my community, I organized a role-modeling event at a primary school that also served as a fundraiser for building classrooms. This is in addition to mentoring seven junior scientists and training two junior women scientists in field research.

# Catherine Macharia-Mutie, 2013 Post-Doctoral Fellow, Kenya

At the start of my AWARD Fellowship journey, I set out my purpose as improving child and maternal nutrition by bettering women's livelihoods. My career goal was to get a senior position with influence on local and international policy in nutrition. At that time, I worked for the government and was at a crossroads having just recently completed my doctoral studies. Fast forward to two years later, and I now serve in a senior capacity in monitoring and evaluation at the Global Alliance for Improved Nutrition with influence on nutrition policy at the national, regional, and international level

l attended an international conference on nutrition, the biennial CGIAR Science Forum in Bonn, Germany, as an early career scientist in 2013. My publication record includes two papers published in international journals: Public Health Nutrition and Critical Reviews in Food Science and Nutrition. On scientific collaboration, I have been involved in the design and proposal development of a nationwide nutrition project. At the same time, I have partnered with other nutrition professionals to develop a monitoring and evaluation protocol for a national micronutrient program. Additionally, l am a collaborator in a study funded by the International Atomic Energy Agency where I also supervise a PhD student. My professional reputation and visibility have increased, leading to an invitation to review a manuscript for the British Nutrition Society's international journal.

In giving back, I have served as a role model to graduating students, motivating them to pursue their career dreams in nutrition.

# Stella Nabwile Makokha, 2013 Post-Doctoral Fellow, Kenya

Since becoming an AWARD Fellow, my scientific productivity has increased. I have produced five brochures for smallholder dairy actors, a training manual for trainers in the dairy value chain, conference papers that I have presented at national and international conferences, as well as papers for publication in scientific peer-reviewed journals. To bring information closer to users, I have developed a video documentary, as well as published articles in *Mifugo* News, a regional magazine for dairy smallholders in East Africa.

As my professional reputation has grown, I have been invited to review scientific papers for regional journals as well as provide technical support to local governments.

My career has grown since winning the AWARD Fellowship to include a promotion to a senior principal researcher position at my institution, where I supervise two Master's students. The AWARD training courses have helped me to become more assertive, and in turn, I have gained more recognition and responsibility. My increased professional activities have resulted in more consultancy opportunities, and I have registered a consultancy company as a step forward toward my ultimate goal of forming a farmer resource center to educate smallholders on appropriate practices and technologies. All this has been possible thanks to the AWARD Fellowship.

# Delphina Peter Mamiro, 2013 Post-Doctoral Fellow, Tanzania

My participation in the AWARD Fellowship has resulted in increased collaborative research with local and international partners. Out of these collaborations, I have published six papers in high-impact journals, including the Journal of Plant Studies, Journal of Environmental and Earth Science, Journal of Plant Sciences, and Plant Disease. I had a chance to go for a research attachment (not AWARDfunded) at Ohio State University, where my professional networks grew immensely. Other scientific publishing outputs include three chapters in books.

In other research collaboration activities, together with partners, I have won three research project funds from USAID through Innovative Agriculture Research Initiative. I am a research team member on three projects that aim to improve the nutrient content of foods, tomato productivity and quality, and soil health.

My visibility has increased as a result of attending two international conferences in Nepal and South Africa. For my AWARD role-modeling event, I trained a women's group on how to cultivate oyster mushrooms. I am also mentoring several junior researchers, including two PhD and four MSc students who have since graduated.

FROM LAB TO FARM | TRACING THE JOURNEYS OF THE 2013 AND 2014 AWARD FELLOWS



# Martina Mariki, 2013 **Post-Bachelor's Fellow**, Tanzania

In the career development plan that I developed during the AWARD Mentoring Orientation Workshop, I set out to complete my master's studies, enroll for doctoral studies, and establish my own start-up. I have since graduated with my master's degree and have currently enrolled as a PhD candidate with a full scholarship at the same university. I expect to graduate in 2016, marking the accomplishment of the short-term plan I made at the start of my AWARD Fellowship.

I have developed a mobile phonebased application system that can be used by smallholder farmers in keeping farm records for better farm evaluation. After attending the AWARD leadership skills course, I gained enough confidence to launch my mobile application development startup, achieving all three goals set in my career development plan.

My professional network has also grown. I am a member of the Institute of Electrical and Electronics Engineers Computer Society, Nutrition Society of Tanzania and my university's Women Association in Science Technology, Engineering and Math. These networks have helped me get an Assistant Lecturer position at a local university.

My visibility and professional profile has greatly improved; resulting in numerous invitations and media interviews. I was invited to attend

the ICT4Ag conference in Rwanda as the main speaker, and my work was published in the conference proceedings. I will also publish a paper in an international journal, following my presentation at the International Journal of Art and Science conference in Boston, U.S.A., in May 2015. I was featured on a national television segment during the 2014 World Women's Day celebrations where I shared my experiences as a woman, scientist and a researcher. I was also featured in InfoDev's Women in Tech Entrepreneurs annual articles.

In giving back, I mentor many young women, alongside my official AWARD Fellow Mentee. Together with other AWARD Fellows at my institution, I have participated in forums to promote AWARD and encouraged other women scientists to apply for the career-building fellowship opportunity. As a result, other women from our institution won the AWARD Fellowship in subsequent years; building a critical mass of AWARD Fellows, Mentors, and Fellow Mentees at my institution.



# Maureen Nanziri Mayanja, 2014 Post-Master's Fellow, Uganda

When I joined the AWARD Fellowship program, my field research on food insecurity in pastoral and agropastoral communities in the Ugandan rangelands had already begun. The AWARD Science Skills Course

revealed the gaps in my knowledge. The skills I gained have been quite useful in writing and data analysis for my PhD thesis. My research is also more gender-responsive, having highlighted vulnerable groups for policy targets in my revised drafts.

I have since completed my PhD research and have started the process of generating knowledge from the PhD thesis. I am exploring avenues for dissemination—through submission to international peer-reviewed journals and conferences. Thanks to the AWARD Fellowship, I am on track to achieve my targets of completing my PhD thesis, publishing two scientific articles and presenting my PhD research at two international conferences.

# Esther Gloria Mbabazi, Post-Bachelor's 2013, Uganda

When I won the AWARD Fellowship, I was not as confident, determined, or as focused as I am today. I was a young, unemployed bachelor's degree-holder trying to trace my path in life. I had just began a master's degree program, but was unclear on what the future held for me.

All that changed after the AWARD Mentoring Orientation Workshop. I received a flashlight that lit my seemingly dark world. It brightened my path and enabled me glimpse into my future. This light is a lifetime companion. I am a much better person now. I am now in charge of my own destiny.

My ultimate goal is to be an influential person who positively impacts others through empowerment and capacity building so that they can stand on their own and influence their destiny. This professional journey involves completing my master's degree, securing employment as a research assistant, mentoring others, and pursuing a doctoral degree in the near term. I can comfortably say, I am on my way to success and I have started living in the future I desired.

l am now a research assistant at a prestigious organisation, IITA. The AWARD Fellowship was one of the achievements that helped me stand out and outshine the other applicants for this position. I successfully submitted my MSc thesis and will graduate this year. I plan to begin my PhD studies in two years' time.

My job involves working closely with rural farming communities. I have changed farmers' lives by equipping them with knowledge on record keeping, conducted cost-benefit analyses of their farm produce, and introduced them to looking at farming as a form of business. On scientific productivity, I showcased a poster of my work at a conference, thereby increasing my visibility. I am also developing manuscripts for publication in a peer-reviewed journal.

In giving back, I am mentoring a junior mentee who is currently working on her MSc research in Ethiopia as well as an intern at my institution. I am a role model to various students in my former school. As I go along my AWARD journey, I look forward to

becoming more influential, and to use this influence to transform the lives of smallholder farmers.

# Prisila Andrea Mkenda. 2014 Post-Bachelor's Fellow, Tanzania

In my career development plan that I created at the AWARD Mentoring Orientation Workshop, I set out to use my skills to educate smallholder farmers in rural areas on the effectiveness of biological materials in controlling insect crop pests-both field and storage. Through AWARD, I have undergone training to improve my science writing, analysis, and leadership skills. As a result, my scientific productivity has increased, leading to the publishing of two papers in peer-reviewed journals. also graduated with a master's degree.

Sharing my experience, knowledge, and networks with other AWARD Fellows and mentors has helped me to grow in my career. I have since been promoted from a tutorial assistant to assistant lecturer at my institution. My visibility within the institution has grown, with appointments to two committees, namely, the faculty's research and publication committee, and the project and proposal writing committee.

By helping me enroll for membership at the International Association for the Plant Protection Sciences, AWARD has moved my networking to the next level. Through these networks, I have

access to various grant proposal calls to which I have responded.

I hope to benefit many people from what I have gained from the fellowship.

# Beatrice Wangui Mugo, 2014 Post-Bachelor's Fellow, Kenya

Had it not been for my mentor, I would never have known of the AWARD Fellowship, let alone applied for it. At the start of the fellowship, my mentor and I agreed that I needed to build my confidence in order to achieve my career goals. The AWARD Leadership Skills Course equipped me with useful knowledge that I have built on to increase my professional network at my place of work and within the AWARD Fellowship program. I have also shared with others the skills I gained through this training.

For my role-modeling event, I gave a motivational talk to 58 girls, encouraging them to take up agricultural science as a career choice. This event served to increase my confidence further by raising my visibility within the community.

I intend to continue developing my work with farmers on increasing arrow root production despite resource challenges. In collaboration with my mentor, I have written and submitted one funding proposal and will engage in further fundraising efforts to realize my dreams of working with farmers.

# Dancilla Mukakamari, 2014 Post-Bachelor's Fellow, Rwanda

At the start of my AWARD Fellowship, I committed to achieving a number of milestones in both my career and research. Despite remaining in the same position at my organization, I have enrolled for a Master's degree in Biodiversity. Joining the Society for Conservation Biology, an international professional association, has created opportunities for me to learn from and share with other researchers and professionals.

I published and presented a paper on my research at the International Conference on Indigenous Knowledge Systems and Environmental Ethics in April 2015. At the conference, I enjoyed the opportunity to widen my network to include potential collaborators and donors for my research on improving the livelihoods of rural women through indigenous vegetables production.

# Annet Abenakyo Mulema, 2014 Post-Doctoral Fellow, Uganda

Since winning the AWARD Fellowship, I have made significant progress towards the career and research goals I set in my career development plan. My interpersonal skills have improved, resulting in me becoming more assertive, more communicative, and a better team manager. I now serve on

a staff club committee and supervise one research technician. I have also improved my conflict resolution skills and seen a rise in my confidence.

I have joined six professional networks where I share my work. In addition, I have attended conferences, workshops, and large meetings to widen my network and increase my visibility. Becoming a member of the International Association for Feminist Economics has opened up international professional networks for me. I also keep track of my publications on Google Scholar using the software 'Publish or Perish' and have created electronic science libraries using Zotero.

On my scientific productivity, I have published two manuscripts in peerreviewed journals, with one more under review. I have also written six blog posts, three briefs and a gender strategy for our project. My publications are shared on ResearchGate, within my institution, and other platforms. I contributed to three research proposals which will be funded internally.

Drawing from the AWARD Science Skills Course, I have trained staff at my institution and three collaboration partners on how to integrate gender in their work. We have identified butter processing as one of the enterprises that women control. Using innovation platforms, we intend to implement different interventions to increase women's access to and control of resources.

# Faith Milkah Muniale, 2013 Post-Bachelor's Fellow, Kenya

At the AWARD Mentoring Orientation Workshop in February 2013, I felt like a new world of possibilities had opened up to me. As I drew my career development plan, I was determined to acquire new scientific and leadership skills, increase my visibility, mentor young girls in agricultural research and development, and widen my networks. I am grateful for the positive encouragement from my AWARD Mentor. I must confess that before the AWARD Fellowship, I was in a career wilderness of some sort and had given up on career opportunities. Today, as I look back, I am proud of how much I have grown and achieved professionally. The fellowship changed my life for good! I am self-aware, more confident, and above all, I have learned how to balance my work and family life.

The AWARD Fellowship was a springboard for me. I learned how to write scientific articles, and as a result, have published two scientific papers in peer-reviewed journals. I have also presented papers at two international conferences that were published in peer-reviewed proceedings.

I managed to complete my MSc thesis and graduate. I am now in the process of looking for a PhD placement and I am very clear on the research I want to conduct following my experience in the fellowship. The network I built at AWARD has had a positive impact on my work and organization since I get

recommendation letters whenever I need them, and I have worked with the scientists I met in AWARD on various assignments in their countries.

I attended two specialized trainings in The Netherlands and in the U.S.A. that were independently funded but AWARD played a major role in opening up my world of possibilities.

My role-modeling event has spawned into a mentorship program for high school girls that I participate in alongside other women.

# Kananu Murungi, 2013 Post-Doctoral Fellow, Kenya

In the time that I have been an AWARD Fellow, I have accomplished so much. During this time, I got a postdoctoral fellowship at an international research center to investigate nematode ecological interactions. I established and equipped a functional laboratory for research and training in below-ground plant-nematode interactions from scratch. I managed to identify attractants and repellents and my research results are currently being patented.

I have also published three papers in peer-reviewed journals, while two more papers on my research are undergoing review. I have presented my research findings at four international conferences; acting as a chair in one scientific session. I collaborated with international partners including the US
Department of Agriculture on a coffee berry borer project. In joining two additional professional associations, I expanded my international networks. I have won funds for four research projects from international and regional donors, including the Regional Universities Forum for Capacity Building in AFRICA (RUFORUM). To cap it all, I was one of the winners of the coveted AST placement.

Within my institution, my visibility has increased, resulting in leadership opportunities such as serving as the coordinator of postgraduate studies and efficacy trials in the Department of Horticulture. I have also served in two departmental committees, in addition to acting as secretary of the department's board. On the national stage, I am the deputy secretary of the National Horticultural Association in my country. During my post-doctoral fellowship, I was appointed leader of the Nematode Chemical Ecology Research Laboratory.

In terms of capacity building, I supervise four doctoral and six master's students, and act as the lead university supervisor in 70 percent of the cases. I have also trained three undergraduate interns and currently mentor two junior women researchers. For my rolemodeling event, I conducted a seminar for post-graduate scholars: 26 men and 14 women.

#### Edna Nduku Mutua, 2013 Post-Master's Fellow, Kenya

When I began the fellowship, my goal was to enroll for a higher-level degree, publish more, and secure a promotion at my place of work. During the fellowship, I accomplished all three goals. I enrolled for a PhD in Gender and African Studies in January 2014 and moved to the position of graduate fellow from that of research technician. My research has become more genderresponsive, as evidenced in my current study on how ways of life can increase or decrease a community's vulnerability to malaria and Rift Valley Fever. This progress has enabled me to go onto the next step of my career, which was to become a Graduate Fellow.

I published a review on gender and value chain analysis and contributed to the development of four policy briefs. I won the competitive AST placement, and got a chance to attend world-class training on public sector monitoring and evaluation at Stellenbosch University.

In giving back, I conducted two rolemodeling events for undergraduate and post-graduate students at my institution on the role that social scientists play in advancing agriculture. Through the AWARD Fellowship, I have made significant strides in my career in a v<mark>ery sho</mark>rt time.

#### Phyllis Wambui Muturi, 2013 Post-Master's Fellow, Kenya

At the beginning of my AWARD Fellowship, I was a PhD student in Uganda. My goal was to work with a CGIAR centre as a research intern, graduate with a PhD, secure employment with an upcoming university, and become a reputable plant breeding and biotechnology professor. Soon after the AWARD Mentoring Orientation Workshop, I got a research internship at the International Crops Research Institute for Semi- and Arid-Tropics (ICRISAT) in my country. In 2014, I graduated with a PhD in plant breeding and biotechnology and got a position as a lecturer at Embu University College. While at ICRISAT, I attended a molecular biology course offered by Cornell University through the ILRI. Together with the AWARD Science Skills Course, this training helped me to focus my research on breeding for sorghum resistance to exotic and indigenous stem borers. I went on to win a doctoral finalization grant worth US\$10,000 from the Carnegie Corporation. The research identified sorghum that can be used to develop new high-yielding cultivars, the findings of which are novel. I have disseminated these findings to farmers during field visits. I have also published a scientific article in an international peer-reviewed journal.

I am now a co-principal investigator and collaborator in a proposal that won US\$25,000 from the National Council of Science. Additionally, I developed a manual for farmers on banana production in collaboration with a national university and a research institute. I have also reviewed a manuscript for the International Maize and Wheat Improvement Center through my mentor. Currently, I am developing a proposal on research to improve the productivity of *bambara* groundnuts which are cultivated by women in drought-prone areas.

The AWARD Leadership Skills Course has honed my leadership potential to the extent that I have been appointed to several roles within my institution, including examination coordinator in my department, undergraduate agriculture program advisor, member of several key committees, and secretary to the academic and post-graduate university boards. I have occasionally served as acting department chair and I mentor junior scientists so as to focus their careers in agricultural science.

Through the AWARD Fellowship, I started growing my professional network during my internship to include national and international students and scientists at the World Agroforestry Centre campus in Nairobi. Additionally, membership in several professional bodies such as Crop Science Society of America and African Crop Science Society has raised my professional networking to another level.

#### Deborah Sandra Nabuuma, 2014 Post-Master's Fellow, Uganda

Since the start of my AWARD Fellowship, I have made significant progress in my research, skills, and career. My PhD concept note was approved by Stellenbosch University and I am currently working on the full protocol with an aim to develop a food-based strategy that improves the dietary diversity and nutritional status of young children from rural smallholder farming households.

The AWARD Science Skills Course, together with Bioversity International's science communications training and the pre-doctoral course at Stellenbosch University, have been beneficial to my current work and in the development of my PhD protocol. I have also had the opportunity to present a poster at the International Horticultural Congress in Australia. This opportunity enabled me to showcase my work, network, and also keep abreast of current research in nutrition and agriculture.

At Bioversity International, where I am a research officer, I am involved in capacity building and community outreach activities. I am one of the authors of a training manual on improving food and nutrition security through banana-based farming systems and foods. We used this manual in the training of community change agents in three Eastern African countries. The AWARD mentoring and training have contributed greatly to guiding my career and propelled me forward in my career.

#### Mercy Maiwa Mwambi, 2013 Post-Bachelor's Fellow, Kenya

I set some goals at the start of my fellowship, and have accomplished three of them in two years. I graduated with a master's degree in Agricultural and Applied Economics and published an article as a first author in one peer-reviewed journal article. Two other articles are under review. Career-wise, I grew from an intern at the World Agroforestry Centre to a junior scientist in my first year of the Fellowship.

My research portfolio has grown to include four research genderresponsive surveys on dairy production in Kenya and Uganda with the East African Dairy Development consortium project that World Agroforestry Centre is a part of.

Because of the leadership and science skills training, I am more visible, networked, and confident; confident enough to have presented papers at three international conferences in Belgium, Tunisia, and Australia.

In giving back, I have conducted a role-modeling event in two high schools in my home area, motivating students to perform well academically and have a clear vision of their careers.

#### Hellen Namawejje, 2014 post-Master's Fellow, Uganda

When I drew up my career development plan at the beginning of my AWARD Fellowship, my number one goal was to complete my PhD. In order to graduate from my institution, one must have two published papers, two manuscripts, a thesis, and lastly, must successfully defend their thesis. To date, I have published two papers in high-impact journals and two more papers have been accepted in peer-reviewed journals. I have made significant progress with my PhD thesis, and look forward to graduating on time, thanks to the vision set in my career development plan.

I am also a member of the Association for Advancement of Science, facilitated by AWARD. This has been useful in exposing me to the latest scientific discoveries as well as achieving a level of excellence in scientific writing. I have learnt that one problem can be solved through various methods in order to achieve comparable results. I applied this in my own research.

While in the U.S.A. last year, I met leading researchers during an Ecology and Evolution of Infectious Disease workshop. After sharing my research with them, I was able to get two collaborators, with whom we wrote a scientific paper and submitted it for publication. With this collaboration and networking, I am greatly encouraged to work on achieving my

goals. =

#### Devotha Godfrey Nyambo, 2014 Post-Bachelor's Fellow, Tanzania

In my career development plan that I created at the start of my AWARD Fellowship, I set out to achieve three short-term goals: to graduate with my master's degree, become an assistant lecturer, and enroll for a PhD degree. One year later, I have graduated with a Master of Science in Information and Communication Science and Engineering degree and I am enrolled at the University of Cape Town for my PhD studies; having won a scholarship from the Organization of Women in Science for the Developing World

From my MSc research work, I have published five papers in peerreviewed international journals and conference proceedings. As part of a project team, I have developed a security framework that will be used by developers of converged web and mobile applications.

On visibility, I attended international conferences in Rwanda, Uganda, Germany and Tanzania. I was also featured in a local news television channel and on radio as an example of women making progress in science during the International Women's Day celebrations. As a member of the Institute of Electrical and Electronics Engineering, I have expanded my professional networks further.

Together with other fellows at our institution, I organized a sensitization workshop that focused on getting more female students to apply for the

AWARD Fellowship. My presentation motivated ten students to apply for the fellowship. Three of them secured the 2015 AWARD Fellowship offer. Moreover, I pioneered the foundation of a Women Association in STEM (science, technology, engineering, and mathematics) at my institution, in which I hold the vice chairperson post.

As a result of these successes. my leadership stature has grown immensely, and I am currently a mentor to two female junior scientists at my institution.

#### Abigael Nekesa Otinga, 2014 Post-Doctoral Fellow, Kenya

Since becoming an AWARD Fellow, I have become more visible professionally. I was among the three selected RUFORUM alumni out of 1,020 to contribute to the 'Building the Africa We Want' documentary.

My profile has further increased with membership to the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America. As a result, I have more opportunities to promote my work. I was selected to represent a collaborative project I work on in South Africa during a coordinators' meeting in late 2014. At my institution, I have organized and implemented the project's kick-off workshop for international participants from eight countries.

Consequently, my stature within my institution has grown, as evidenced by my appointment as a vice chairperson of the board of Green Farming Visions Organization in mid-2014. Winning a US\$64,988 grant has further increased my visibility within the organization. I have since submitted one other proposal.

My work with farmers has included the dissemination of results of my research on the RUFORUM groundnut project.

#### Phoebe Anyango Sikuku, 2014 Post-Doctoral Fellow, Kenva

My stature as a leader has gone up since becoming an AWARD Fellow. I have been appointed examination and time-table coordinator and chairperson for the course restructuring committee in charge of revising courses.

On science productivity, I published a paper in an international journal as a first author, and another as a co-author. On research, I am collaborating with a national research organization on hybrid rice adaptability trials. The African Agricultural Technology Foundation adopted results from this research in their work with rice farmers.

In June 2014, I was invited by the Regional Rice Centre of Excellence to present my research findings at their conference in Tanzania sponsored by the Eastern Africa Agricultural Productivity Project. Further recognition has come from an invitation by the national research institute to facilitate training for rice extension officers training. I also facilitated training for rice farmers, majority of whom were women.

Mentoring students at my institution has been my way of giving back. In 2014, I mentored five undergraduate students who were interested in agricultural sciences.

#### Gladness Elibariki Temu, 2014 Post-Master's Fellow, Tanzania

I have realized increased growth in my research and fundraising since becoming an AWARD Fellow. I am a principal investigator supervising two research assistants for two projects on aflatoxin assessment of soil in my country. One of the projects that I developed together with international and regional partners won US\$867,000. The second project aims to increase the productivity of yams and is funded by the National Funds for Advancement of Science and Technology. From 569 concept notes, mine was selected for full proposal development and will be funded to the amount of US\$51,000. Under this project, I will supervise one MSc student. I also have another concept note under review and I have been published in a peer-reviewed journal.

I graduated with a PhD in Biotechnology in late 2014 and was promoted soon after from assistant lecturer to lecturer.

For my role modeling, I gave a presentation to secondary school girls who visited our department in early 2015, inspiring them to take up science subjects.



#### Virginia Wangechi Wangondu, 2013 Post-**Doctoral Fellow, Kenya**

In the time that I have been an AWARD Fellow, my scientific productivity and collaboration have increased. I have published two papers in high impact factor journals as the lead author, given oral presentations at two international conferences, and submitted two abstracts for another international conference to be held later this year. My visibility has been further increased by dissemination of my research output on my institution's website, Google Scholar, and ResearchGate.

A highlight of my fellowship was when I won a coveted AWARD AST placement to undergo an Environmental Leadership Program (ELP) at the University of California, Berkeley. Being an ELP alumnus has certainly expanded my professional network.

I was a collaborator on a funded proposal (US\$78,000) to organize the 1<sup>st</sup> International Training Course on Mangrove Ecosystems in the Western Indian Ocean Region, in Kenya, at

which I was a co-host and trainer. The course was supported by the Western Indian Ocean Marine Science Association, of which I am a member. I am also a member of a national professional association and two international professional associations.

I have taken up mentoring in earnest since becoming an AWARD Fellow by increasing the number of supervised students at undergraduate and post-graduate level. My mentee has also progressed well and I am impressed by her energy, passion and achievements in science and research in the short period we have interacted. My role-modeling will be at a secondary school, but I will not stop there. I intend to continue with my role-modeling at other schools.

#### Patricia Wangui, 2014 Post-Bachelor's Fellow, Kenya

One of the goals that I set in my career development plan at the start of the AWARD Fellowship was getting a Master's degree. I enrolled for one, and obtained a scholarship to study in the United Kingdom from April 2015. My career progression also included a promotion to manager for the biggest project in my organization.

In fundraising, I have developed three successful funding proposals as the lead person in two, and a major contributor in a third. The pitching techniques that I learned through the AWARD courses have helped me secur<mark>e a US\$100 million grant over a</mark> 10-year period for our organization.

I have put the skills I gained from the leadership course to good use. I am a founder member of a steering committee that coordinates conservation agriculture donor projects here in Kenya. Recognition has followed, and as a result, I represent my organization in various agriculture stakeholder meetings.

My visibility has increased, more so when a United Nations Development Programme conservation project under my docket was selected for a field visit during the 9<sup>th</sup> International Conference on Community-Based Adaptation to Climate Change that was held in my country in April 2015.

#### Belinda Akinyi Weya, 2013 Post-Bachelor's Fellow, Kenya

Since winning the AWARD Fellowship, I have made many strides in my career. In my career development plan, I purposed to be more assertive. When my employment contract expired, I confidently asked for an extension based on a presentation of my achievements, and got it. My performance evaluation has significantly improved because of the guidance I receive from AWARD.

My visibility as a scientist has grown following my oral presentation at the regional 13<sup>th</sup> African Crop Science Conference in Uganda. Membership to professional bodies has provided me with up-to-date reading material which has broadened my horizons. Additionally, my network has increased to include AWARD Fellows, Mentors, Fellow Mentees, together with their extensive professional networks.

My mentor and university supervisor have helped me in my science writing. Coupled with the science skills training, my scientific productivity is set to increase with two journal papers under development. My misconception of gender was corrected, and I now segregate my data to include young female and male groups, instead of clustering them as one group.

In return, I have been mentoring another female scientist who drew her own career development plan. During my role-modeling event, I outlined the benefits of careers in agriculture to 1,100 secondary school students and hope to influence many more.



# West Africa at a Glance

Number of AWARD Fellows by country





## West Africa Fellows' Journeys

#### Yemisi Jeff-Agboola, 2013 post-Doctoral Fellow, Nigeria

Over the course of her career in agriculture, Yemisi Jeff-Agboola has gained a deep appreciation of the various dynamics that impact on the productivity of farmers. She is now more convinced than ever before that she chose the right career path, as she sees the encouraging initial results of her collaborative research projects and women farmer empowerment initiatives in Nigeria. Currently, she is a lecturer at the Department of Biological Sciences, Ondo State University of Science and Technology, Okitipupa, Nigeria.

She leads a multi-partner project involving researchers, artisans and farmers to develop viable aflatoxin control methods and low-cost feeds from alternative materials like cassava peels. Aflatoxin infestation in grain leads to grain losses of more than 70 percent in Africa after harvest, and it also presents a big challenge in livestock feed safety. She is excited by this research because of its potential to make livestock production profitable for Nigerian farmers and to contribute to curbing post-harvest grain losses.

One of her greatest challenges was how to be effective, visible and successful as a female scientist in a male-dominated field, but she struggled to get ahead in her career. However, thanks to her mentor, the late Dr. Mojisola Edema, she was introduced to the AWARD Fellowship program which has made a world of difference in her career. Dr. Edema, herself an AWARD Fellow in 2009, conducted her role-modeling event at their institute, and after listening to her she was inspired to apply to join the fellowship. She envisioned herself achieving her goal of becoming a much more visible scientist.

During the AWARD Fellowship, she found some courses particularly useful in providing her with the insights and practical tips that she needed to be more effective and move her career forward. She especially benefited from the AWARD Science Skills Course. and the Women's Leadership and Management Course. She discovered that she had the power within her to change the world for the better. These skills have been invaluable to her as she has used them to get promotion at work from research scientist to lecturer. Additionally, through her professional networks, she has initiated international collaborative research projects, which have increased her supervisor's visibility and enhanced research opportunities for colleagues and students alike. All this has helped her to negotiate effectively for an accelerated promotion which is under review, and to be co-opted into the Initiative Group at her university. Additionally, she recently submitted a proposal for the establishment of a Centre for Gender Responsive **Research and Development Programs** 

at her university. The program outlines a strategy for integrating gender into research; and will involve collaboration with other institutions in cross-program research, capacity development, and knowledge sharing.

Through the fellowship's Advanced Science Training placement, she was attached at the University of Missouri, Columbia, U.S.A. sponsored by Novus International. Here, Jeff-Agboola worked closely with Prof. David Ledoux, a leading animal science researcher, researching on the efficacy of Toxiban MAX (a biological control agent) on reducing the toxicity of aflatoxin in broilers. She also learnt how to produce poultry feeds. This has been most useful to her as she works with various African and US partners to develop feeds from cassava peels in Nigeria. She is excited by the prospects of this research.

During the AST attachment, she also received a number of invitations to share about her fellowship experience as well as her research. The most notable of these high profile events were: a panel discussion at the 2014 Grand Challenges Meeting at the Bill & Melinda Gates Foundation in Seattle; the 2014 World Food Prize Event in Des Moines, Iowa; the Global Good Collaboration Workshop on Alleviating the Harmful Effects of Aflatoxins on People, Livestock and Crops in Bellevue, Washington DC; and the Food and Agricultural Policy Meeting, also in Washington DC, through the Farm Journal Forum. She also took part in community development programs organized by the University of Missouri which earned her a letter of appreciation and an International Memorandum of Understanding from the University as an ambassador.

With a desire to share the benefits of her AWARD Fellowship experience more broadly with women agricultural researchers and smallholder farmers in Nigeria, she set up a nongovernmental organization—Voice of Women from Lab to Farm (VOWLAF) —which is collaborating with local and international organizations including

"Jeff-Agboola is a very determined and self-confident young woman, and this has contributed and will continue to contribute to her professional success. She was also quick to take advantage of every opportunity that came her way.

In my view, as a result of this fellowship, Yemisi has enhanced her ability to develop practical solutions to improve incomes and livelihoods of African smallholder farmers. In many of our discussions during her fellowship she was always looking for ways to make a difference in the lives of her countrymen."

Professor David Ledoux, Animal Science Research Centre, University of Missouri, U.S.A.

the Farm Journal Forum, Women Thrive Worldwide and the Global Alliance for Improved Nutrition.

"Thanks to AWARD, I now look forward to my future with confidence as I strive to influence agricultural policy in Nigeria and Africa!" says an enthusiastic Jeff-Agboola.

#### **Delphine Aissata Bama** Nati.2013 Post-Masters Fellow, Burkina Faso

My family comes from a small village, and I am trained as a rural development engineer. I am passionate about improving the livelihoods of people in rural and peri-urban areas, and especially on making farming more environmentally sustainable in the fragile areas in my country.

I am one of the few female agricultural engineers in West Africa. I am particularly concerned about the negative effects of farmers' migration during the dry season, which lasts up to nine months. Both men and women farmers do not really work during this time, which has negative implications on food security.

Some of my current research involves testing 11 improved rice varieties, selected under a 'Stress-tolerant Rice for Africa and South Asia' project managed by the International Rice Research Institute and Africa Rice. The rice varieties are being tested for their capability to thrive in anti-salinity dams, and to mitigate impacts of climate change.

I am also researching on potatoes in the Dori area of Burkina Faso, and designing drip irrigation systems for the production of potato seed—which is currently imported at high cost.

I am happy when I see farmers interested in some of the technologies I offer. I love sharing my experience, not only through publishing, but also by teaching farmers, upcoming scientists and extension agents. I am thankful for the opportunities offered through the AWARD Fellowship.



#### **Folasade Olabimpe** Adeboyejo, 2013 Post-Master's Fellow, Nigeria

When I started my AWARD Fellowship, I was at the first step of the research officer grade at my organization. Thanks to the goals I set in my career development plan, I have leveraged my newly-acquired skills from the AWARD Leadership Skills and Science Skills Courses to move up not one, but two rungs to the position of principal research officer in the institution. I have also concluded bench work on my PhD research and I am now at the final stage of writing my thesis.

On science productivity, I have developed seven value-added products from an underutilized indigenous fruit that are at the initial stage of patenting. In addition, I have co-authored three journal publications and been the first author of conference proceedings. I am currently collaborating on a research project with my AWARD Fellow Mentee and Mentor and we are at the final stage of writing a paper for publication.

My visibility has also increased since joining the fellowship, as I presented a paper at an international conference in Canada, and have since become a member of three international associations that have presented opportunities to network at international level—with other professionals in my field.

Since joining the AWARD Fellowship program, I have earned four international and regional accolades, namely: the Netherlands Fellowship Program (2015), Developing Country Sponsorship award (2014), Nestlé Nutrition Institute Africa award (2013), and African Nutrition Leadership Program (2013).

In advocacy, I have joined forces with other AWARD Fellows to sensitize students in my state on studying for a science-based career and being aware of the need for gender balance in all spheres of life. In addition, I conducted a motivational role-modeling event for more than 120 secondary school pupils and university students, researchers, and farmers. I have also volunteered to teach a course on food technology at the state university, in addition to mentoring a junior researcher who has since won the 2015 AWARD Fellowship.

#### Ayodeji Oluwatosin Adedire, 2013 Post-Master's Fellow, Nigeria

I have achieved most of the career and research goals that I mapped out at the start of the AWARD Fellowship. Because of these achievements, I was promoted twice at my institution. Some of my other achievements include the attainment of my doctorate degree, co-authoring two articles in international peer-reviewed journals, and presentation of papers at four international conferences. My network has also expanded after joining three international professional associations.

The skills I learned through AWARD have enabled me to mentor students in my faculty in addition to my AWARD Fellow Mentee. I have become a role model in my community partly because of the role-modeling event I conducted at a secondary school in my town.

All these achievements have enhanced my visibility and opened up opportunities for me to serve in various committees in my institution, including a stint as acting head of department for three months.

#### Lyabo Bosede Adeoye, 2013 Post-Master's Fellow, Nigeria

My training as an AWARD Fellow has reoriented my work and research to become more gender-responsive. Since winning the fellowship, I have effectively developed and implemented capacity building activities for female farmers in vegetable production and processing to reduce post-harvest losses. In addition, I have provided smallholder farmers with information to help improve market access. I used the skills taught in the AWARD Science Skills Course to write five papers that have been published in international peer-reviewed journals. These same skills have helped me with my PhD studies following the completion of crucial stages such as data collection, post data seminar, submission, ratification of abstract, and thesis title registration. A PhD degree is all that is now required for a promotion to the next professional level, that of chief research officer.

#### Jemima Omonigho Adepehin, 2014 Post-Master's Fellow, Nigeria

The AWARD Fellowship journey has changed my career and research tremendously. Through support from AWARD networks, I was named a 2014 fellow of the Borlaug LEAP fellowship. This fellowship revived my then-static doctoral research by giving me greater access to requisite research equipment and materials. This opportunity has opened doors to wider and valuable professional networks comprising scientists from international organizations such as the University of California, and reputable regional organizations. The possibility of future collaborative research with a good number of professionals in this network is now feasible.

On scientific productivity, I have developed two manuscripts, one of which is being reviewed for potential publication in an international peerreviewed journal. This research is a product of collaborative research with another scientist on water quality assessment in one of Nigeria's metropolitan cities.

The AWARD Fellowship has encouraged me to mentor junior scientists in my field. One of my mentees has shown progress in her education by enrolling for a master's degree. She is preparing to present part of her degree research at a conference, whose proceedings will be peer-reviewed and published. I have also shared the science and proposalwriting skills gained from AWARD courses with other junior scientists hoping to secure research grants.

#### Victoria Adetunji, 2014 Post-Doctoral Fellow, Nigeria

Since joining the AWARD Fellowship, I have published four papers and currently have four abstracts accepted by two international peer-reviewed journals. These articles focus on biofilm control using probiotics, surface interaction, sanitizers, and nutrient control.

My professional network has increased to include national, regional, and international professionals in my field. This has led to research collaboration with other scientists within my institution, the country, and West Africa region.

Institutionally and nationally, my portfolio has broadened, resulting in various appointments such as post-graduate coordinator in my department, external examiner at another national institution in charge of two master's and one PhD theses, acting sub-dean at my institution, and member of an inter-university delegation to improve facilities and equipment in my state.

The gender- responsiveness considerations in my work and research have also increased. I currently train women in productive mixed farming practices, processing, and packaging of milk and meat products, with an aim to improve their livelihoods.

#### Joy Geraldine Adiele, 2013 Post-Master's Fellow, Nigeria

During my fellowship, I experienced a breakthrough in my career and personal life. I published three papers in various journals, and attended international science meetings of three professional associations in the U.S.A.

My best experience as an AWARD Fellow was the novel research I carried out in Uganda as part of my AST placement. I was part of a research team that established a balanced cassava-fertilizer formula that resulted in increased yields. This influenced cassava farmers in Northern Uganda to accept the use of fertilizers for sustainable crop production.

From this opportunity, I forged viable networks and collaborated with scientists from Africa, America, and Europe.

At the same time, I got doctorate admission at Wageningen University, The Netherlands, and secured a full scholarship from the Netherlands Fellowship Program. Furthermore, I became a member of the pool of international experts for the food and business applied research fund.

The mentoring skills I learned from AWARD got me selected by my institute to conduct mentorship to new and younger members of staff, which I have done on several occasions. Together with my mentee's determination, the mentorship program enabled her to produce a winning application for the 2015 AWARD Fellowship.

My motivational role-modeling event at my alma mater contributed to 20 out of 25 students in the senior class registering for the university entry exam. This was against an average of three that register each year. 14 of them chose to study agriculture and related courses.

#### Mabel Omolara Akinyemi, 2014 Post-Doctoral Fellow, Nigeria

Since becoming an AWARD Fellow, I have made a lot of progress in my career and research. I competed for and won my institution's three-year career and research grant award, which includes an annual research placement at Cornell University in the U.S.A. I will have an opportunity to be mentored by a leading research scientist in animal sciences thanks to this grant. The research focuses on identifying genes in cattle that can withstand the impact of climate change.

Two of my papers have been published in two peer-reviewed journals and I presented a paper at my professional association's national conference. The interpersonal skills I have learned through AWARD have helped me to be more patient and resilient.

#### **Omolara Titilayo** Aladesanmi, 2014 Post-Master's Fellow, Nigeria

During the two years of the fellowship, I successfully completed my doctorate degree, published two articles in international journals, and attended both local and international conferences. With support from my mentor, I successfully crossed from research to academia, which is in line with my career development plan.

As a lecturer, I have the opportunity of mentoring young scientists and therefore exercise the leadership skills I acquired through AWARD. My participation in an international conference on sustainable environment and agriculture gave me the opportunity to showcase my research outputs to an international audience as well as network with renowned researchers in my field. This increased my research visibility.

Another benefit from this experience is the increased self-confidence. I was also challenged by my mentor to explore different research grants during this period, and thus won a research grant from the Blacksmith Institute for Pure Earth in the U.S.A. I will use this grant to disseminate my research outputs in a workshop and a paper publication.

The training that I have received from AWARD has helped me to develop a listening culture, initialize, and implement new ideas, and increase my experience and expertise in my field.

#### Mary Mamle Apetorgbor, 2013 Post-Doctoral Fellow, Ghana

Since becoming an AWARD Fellow, I have been promoted to the post of principal research scientist, and my application for the position of chief research scientist is under consideration.

My professional networks have grown, leading to collaboration with agencies outside my institution on three donorfunded projects that aim to empower smallholder mushroom producers in two regions of Ghana. I currently prepare and supply oyster and oil palm mushroom seeds for sale to growers.

I have published four peer-reviewed papers in international journals and one in a national journal, an article in a professional newsletter, an extension flier, and a manuscript under review by a national journal.

I lead a team of researchers who offer advice and solve disease problems in Ghana's tree plantation sector.

I have participated in a radio program on mushrooms technology transfer and a television documentary on risk assessment of diseases in a forest plantation. I attended four international conferences in Africa, America, and Asia, as well as five regional workshops where I presented six papers and two posters, increasing my portfolio and networks with other scientists.

My AWARD Fellow Mentee defended her PhD thesis in January 2015, and has been nominated for membership in Ghana's REDD+ Gender Working group.

#### Freda Elikplim Asem, 2014 Post-Master's Fellow, Ghana

With the guidance and useful advice of my AWARD Mentor, I have been able to achieve some of the goals I mapped out at the start of my fellowship. I have graduated with a PhD in development studies, qualifying me to apply for a postdoctoral fellowship at several international organizations. My application for a lecturer position at my institution where I am currently business manager is under review.

I have prepared three manuscripts from my PhD, one of which I submitted to an international peerreviewed journal. I attended three international conferences in the region and abroad, as well as a national conference at my institution. At all the conferences I attended, I grew my network to include professionals at national, regional, and international levels in my field.

#### Grace Oluwakemi Babarinde, 2014 Post-Master's Fellow, Nigeria

I have achieved 75 percent of the goals that I set at the beginning of the AWARD Fellowship and I am glad to be moving up the ladder in my career. Achievements of the past year include the completion of my PhD program, which is a pre-requisite to getting to the senior lecturer cadre at my institution. I have also published articles in journals that qualify me for my next promotion.

As an AWARD Fellow, I was supported to become a member of the Institute of Food Technologists, and as a result my network has grown such that I am up-to-date on recent trends in my field. I attended an international conference in the region that further expanded my network to include potential international research collaborators. This has really increased my visibility. As a result, my abstract has been accepted for presentation at an upcoming international nutrition conference in Europe.

The networks, links, and skills developed have made my work more visible in my institution. I won an award of excellence as best lecturer in my department, attesting to the positive impact I have on my students. My AWARD Mentor and I won a university senate research grant to execute gender-responsive research on underutilized indigenous legumes. We disseminated our findings to rural smallholder farmers. advancement to the graduating class in my department using some of the skills that I acquired during various AWARD training opportunities. My audience admitted that this lecture made a positive mark on their career advancement.

#### Priscilla Fransico Ribeiro, 2013 Post-Master's Fellow, Ghana

Thanks to the AWARD Science Skills Course, I have made significant progress on my PhD thesis and expect to complete it at the end of 2015. A doctorate degree will set the stage for my promotion to a senior research scientist.

The opportunity to conduct advanced science training at DuPont Pioneer in the U.S.A. has exposed me to world-class research facilities and helped me acquire critical research skills. This research placement also gave me a chance to network with international scientists, some of whom I will collaborate with in the near future. While at DuPont Pioneer, I had the privilege of attending the national plant breeders meeting where I interacted and networked with renowned plant breeders.

My research on developing a maize hybrid that will be tolerant to low soil nitrogen is still ongoing. Once complete, this novel maize hybrid will be very beneficial to smallholder farmers who generally rely on expensive fertilizer products for good yields. From my research, I have developed and submitted a manuscript to a reputable journal.

To grow my network AWARD supported me to join two professional associations: one regional, and the other international. These associations have increased my network by putting me in touch with other professionals in my field. My mentorship skills grew when I began mentoring a junior researcher at my institution. My mentee has since gained admission to pursue a master's degree in biotechnology at the University of Adelaide, Australia. Having built enough confidence with my mentee, we planned and organized a seminar at a secondary school where we motivated girls to pursue careers in agriculture.

#### Oluwatoyin Bukola Chete, 2013 Post-Master's Fellow, Nigeria

In the two years of my AWARD Fellowship journey, I published two articles in international journals; one on the impact of mobile phones on female farmers' access to markets, and the other on gender analysis of maize marketing. I also wrote a winning proposal to the Netherlands Fellowship Program. In addition, I collaborated with a colleague to write a paper on economic diversification in my country. To cap it all, I was promoted to a senior program officer from a program officer. As part of my advocacy work, I organized demonstration sessions on current farming techniques for smallholder farmers in two villages. I also conducted a sensitization activity on the use of alternative energy sources for rural dwellers in two communities.

My network has grown immensely since I became an AWARD Fellow, especially after joining an international professional association in my field.

I have been giving back to communities through motivational and career talks at a secondary school, as well mentoring a junior researcher at my institution. My mentee has since coauthored two articles in peer-reviewed journals and submitted one manuscript for review.

#### Rufina Chinelo Chukwumalume, 2013 Post-Master's Fellow, Nigeria

At the start of my AWARD Fellowship, I had just won a scholarship for a three-year doctoral research program at Stellenbosch University, South Africa. I have developed and submitted research papers to reputable journals for review, presented my work at conferences, and given seminars. I am on course for completion, setting the stage for two promotions at my institution. A highlight of my fellowship was the support given to attend an international conference on neglected and underutilized species in Ghana, where I presented a poster.

From the AWARD Leadership Skills Course, my level of selfknowledge, confidence, personal, and interpersonal skills has increased. I can now manage conflict better, give useful feedback, and communicate effectively. I hope to pass on these skills to younger scientists and future scientists at my role-modeling event when I return to my home country.

#### Mercy Afua Derkyi, 2014 **Post-Doctoral Fellow**, Ghana

My career development plan has enabled me to achieve a lot within the year that I have been an AWARD Fellow. Due to the knowledge I have gained in various AWARD activities, my visibility within my institution has increased. As a result, I was appointed acting head of department, and have been co-opted as a member of various committees at my institution. I have shared the skills learned from AWARD courses with my colleagues by successfully coordinating my faculty's maiden retreat and facilitating the inception of a new graduate program that my department has since submitted for accreditation.

Knowledge acquired in proposal writing and gender sensitive research from the AWARD Science Skills Course enabled me to win a postdoctoral fellowship. With enhanced leadership skills, I presented papers at conferences and seminars in my country. My improved science writing skills have resulted in the co-authorship of three peer-reviewed journal articles.

My visibility and networks increased due to support provided by AWARD to join international and regional professional associations. I am currently deputy coordinator of the International Union of Forest Research Organizations (IUFOR) in my region, and have been instrumental in reorganizing the regional professional association that I am a member of.



#### Aissata Traoré Thera, 2013 Post-Masters Fellow, Mali

My core research seeks to solve one of the big challenges in Mali, which is to produce enough quality seed potatoes to meet demand. It requires the establishment of methods and locations for rapid multiplication of potato tubers in disease- and pest-free environments to reach the economies of scale for providing seed potatoes at prices that farmers can afford. My ultimate goal is to provide high quality and affordable potato seed to 100,000 smallholder farmers in Bamako, Mali. Currently, buying potato seed accounts for about 50 percent of production costs; reducing this cost will make a huge difference for farmers.

I am one of five African women who won a fellowship in the AWARD Francophone Pilot Program, in partnership with the West and Central African Council for Agricultural Research and Development and the Agropolis Foundation.

My interest in working with plants developed at an early age. A turning point was when in primary school I received the best score for my essay on my career ambition of becoming an agronomist. After completing high school in Bamako, I won a scholarship to pursue my university studies in Cuba.

My research involves diagnostics of the first scheme of potato seed production through aeroponics, which is a soilless technology that eliminates the risk of pests and diseases and promotes rapid and plentiful growth of seed potato tubers. The tubers are grown suspended in the air and sprayed with a combination of water and nutrients that produces many more tubers per plant than the conventional soil-based method.

I see the AWARD Fellowship as an opportunity to help me achieve my goals as an African woman scientist. It is a good inspiration to continue, and it will help me access the links and connections to pursue my PhD, develop leadership skills, learn to write winning proposals, sharpen my scientific writing, and stretch my potential not only in Mali, but also internationally.

#### Matilda Dela Dzomeku, 2013 Post-Master's Fellow, Ghana

In the two years that I have been an AWARD Fellow, my career and research skills have significantly increased. As a result, I was appointed head of the mushroom unit at my institution and I am in line for promotion to the position of senior research scientist, from the current research scientist post.

With sponsorship from AWARD, I attended and presented a paper and a poster at an international conference in India. My publication record has never been better—with five peer-reviewed articles published, and four manuscripts currently under development.

I was a significant contributor to two successful grants by USAID's Partnerships for Enhanced Engagement in Research and Empresa Brasileira de Pesquisa Agropecuária (Brazilian Agricultural Research Corporation). I am also collaborating with scientists at the Ohio State University, U.S.A., as a visiting scholar.

As a result of the AWARD sponsored membership to two international associations in my field, my network has increased. I look forward to passing on the skills I have learnt from the fellowship program to other female scientists that I am mentoring at my institution.

#### Chinelo Vanessa Ezeocha, 2014 Post-Master's Fellow, Nigeria

During the year I started as an AWARD Fellow, I completed my doctorate degree and was appointed a lecturer at an agricultural university. Because of the AWARD Leadership Skills Course, I have become more assertive and confident, and now contribute to discussions in meetings without fear.

I have published three journal articles with three more in in the pipeline. I am working on an abstract that I will submit to an international conference in my field.

The AWARD Fellowship supported me to join an international professional association where I have grown my professional network in the past few months, both regionally and internationally. My research work has become more collaborative as a result of this. Attending the national conference on food science and technology in my country cemented my newly formed networks with professionals in my field.

#### Grace Gyabaah, 2013 Post-Bachelor's Fellow, Ghana

The AWARD Fellowship has been of enormous benefit to me as a female African scientist working on natural resources. In the two years of the fellowship, I have completed my master's degree as I set out to do in my career development plan. My contributions to work groups in my institution has tremendously increased, leading to such outputs as successful project proposals, evaluation reports, guidelines, and manuals.

Joining two professional associations increased the scope of my network with professionals in my field. I gain valuable insights through my interactions with them.

The AWARD Leadership Skills Course equipped me with excellent interpersonal, conflict management, negotiation, and time management skills. I am much more aware of the contribution of women in maledominated institutions.

#### Binta Iliyasu, 2014 Post-Master's Fellow, Nigeria

The AWARD Fellowship kick-started my science career journey, with specific goals set to advance my career. I am no longer the woman in the shell, and my research is no longer on the shelf.

I have made impressive presentations, advocating for the participation of women in agricultural research from the northern part of my country where girls' child education is under threat and women's involvement in agriculture is seen as taboo. With these efforts, I hope to provide a solution to hunger, alleviate poverty, and promote rural development. As a result of my efforts, my institution has created a database of women in agricultural research in the northern part of my country to disseminate information on AWARD and related funding opportunities for women in science.

I am now more visible and confident even on the cultural front where women are to be seen but not heard. Furthermore, my research output and marketability have increased. My voice is beginning to be heard as I get noticed not only in my region, but also on the national stage.

Through AWARD, I have acquired scientific and inter-personal skills that enabled me to perform exceedingly well during the defense of my PhD proposal. With the acquisition of a PhD, I hope to move to the next professional grade at my institution, where I will make the maximum impact as set out in my career development plan. I now have an additional publication in a peer-reviewed journal, and I am making concrete progress towards the completion of my PhD program this year. The first set of a DNA vaccine against African trypanosomiasis disease is ready for primary screening and testing.

My colleagues as well as my institutional and academic supervisors see me as a role model worthy of emulation. I am working towards research collaboration with eminent scientists in my country with an aim of alleviating poverty and promoting rural development in the northern part of my country. I am also working towards gaining more scientific knowledge and skills to achieve my goals, and to put smiles on the faces of African smallholder farmers, particularly women. The AWARD Fellowship was the right motivation I needed to achieve my goals.

#### Folayemi Isaac-Bamgboye, 2013 Post-Bachelor's Fellow, Nigeria

Winning the AWARD Fellowship jumpstarted my professional journey. At the AWARD Mentoring Orientation Workshop, I clearly redefined my ambition and established a solid base for my mentor and me to work on set goals. The AWARD Leadership Skills gave me better presentation, communication, conflict resolution, negotiation, listening and feedback skills, making me a better person at work and wherever I relate with people.

I had an automatic offer of a year's membership in the Society of General Microbiology as an AWARD Fellow. The association sponsored me to attend a microbiological conference in Italy where I presented one of my research outcomes. At the event, I also met many scientists, thus increasing my network while improving my professional skills. Some of my research findings were published in a book of abstracts on biodiversity and proceedings of the international conference. The AWARD Science Writing Course exposed me to professional writing, which helped me develop better professional manuscripts and reports; a skill I have also imparted to my colleagues. As a result of my improved proposal writing, I won a Netherlands Fellowship Program grant to undergo training on food safety.

My AWARD role-modeling event, conducted together with my AWARD Fellow Mentee, increased my visibility and network. During the event, I sensitized secondary school teachers and students on the importance of their active participation in agriculture to food security.

My professional progress became so evident at work that I was promoted twice in two years and was sponsored for a post-harvest course in Israel, where I was recommended for a research collaboration with South African scientists. I have completed my master's program and have enrolled for a doctorate degree.

#### Olubukola Ajike Isah, 2013 Post-Doctoral Fellow, Nigeria

I have achieved significant growth in my research and career as an AWARD Fellow. I am ready to apply for a full professorship post from my current position as an associate professor within my institution. Three of my journal papers are to be published, while one paper has already been published in international conference proceedings, bringing my total journal publications to 20.

In the area of scientific productivity, I have developed a multi-nutrient feed block from local materials and herbs for feeding small ruminants during the dry season. I won a grant from my institution for the next stage of product development, that is, packaging and storability. I am also a member of the American Society of Animal Sciences.

Through mentoring, I have positively influenced the life of a junior scientist in my department who has since won a position in the 2015 AWARD Fellowship program. My AWARD Fellow Mentee defended her master's dissertation and submitted an article for publication from it. In giving back, I conducted a role-modeling event motivating girls in six secondary schools.



#### Abosede Felicia Iyiola, 2014 Post-Master's Fellow, Nigeria

After the AWARD Mentoring Orientation Workshop, I gained confidence to apply for a position with my country's Federal Ministry of Agriculture. Following a successful interview, I was employed as a senior land resources officer and posted to a college as a lecturer.



I have since joined an international professional association through AWARD's sponsorship, and will be presenting a paper at their conference in November 2015. The association has opened up a wide professional network for me.

#### **Cleopatra Felecia Jallay,** 2014 Post-Master's Fellow, Liberia

During the period that I have been an AWARD Fellow, I have gained selfconfidence, become more organized, and improved my interpersonal skills. Subsequently, because of the leadership skills I learned through AWARD, I am a better team player and collaborator, resulting in a better work environment. I am more involved in cross-cutting issues with the partners that my organization works with, thus building effective teams to improve livelihoods in my country.

My public speaking skills have improved and resulted in greater exposure within my organization and my community, where I have been invited to speak to the youth on their civic roles.

The AWARD Science Skills Course improved my writing, resulting in my contribution to a chapter in an upcoming publication. Other skills learned in this training have equipped me with the necessary skill to conduct assessments on prevailing food and commodity prices during the Ebola crisis in my country.

I serve as a mentor to a junior scientist, providing them with professional guidance on working with youth involved in agricultural activities. My professional network has also grown as a result of the international association membership that AWARD has sponsored. I continue to learn much from other professionals within my field.



#### Olufisayo Atinuke Kolade, 2014 Post-Doctoral **Fellow, Nigeria**

My career purpose is to utilize molecular tools to produce diseaseresistant rice varieties to improve the livelihoods of Nigeria's smallholder farmers. As outlined in my career development plan, my ultimate career goal is to become the director of a research institute.

Thanks to the AWARD Fellowship, I can say I am making headway. During the course of the fellowship I attended two crucial interviews, and was offered the position of post-doctoral fellow at a university, which puts me on the path to becoming a fully-fledged scientist, and ultimately achieving my goals.

After attending the AWARD Science Skills Course, I purposed to author four publications within a year. I am glad that I managed to publish two articles as the lead author in the American Journal of Plant Sciences and the African Journal of Biotechnology, and co-authored two other articles.

Before the AWARD Fellowship, I was not as assertive, self-confident, and self-motivated as I am now. These qualities are critical to clinching positions of leadership in my field. I have also been able to enhance my professional networks through the networking opportunities provided by AWARD and thanks to AWARD's Advanced Science Training attachment, I was assigned to an institution where I improved my skills in bioinformatics.

All in all, I am grateful to the AWARD team, and especially my AWARD Mentor, who has mentored, advised and encouraged me all the way.

#### Idongesit Umanah Mokwunye, 2013 Post-Master's Fellow, Nigeria

I am a cashew pest researcher, and in my career development plan I set out to use my expertise in crop protection to develop and facilitate participatory adoption of relevant technologies for sustainable cashew production in Nigeria.

In 2014, I won an Advanced Science Training attachment at the International Centre for Insect Physiology and Ecology (ICIPE) where I had the privilege of working with distinguished scientists on the chemical ecology of *Helopeltis*—a major cashew pest in East and West Africa. As part of this attachment, I developed a rearing protocol for this pest, and conducted preliminary field trials on the use of alternative (non-chemical) control methods, which have the potential to be safe and sustainable. This led to the development of another collaborative project with ICIPE on molecular identification of different species of Helopeltis across Africa. During this time, I also gained professional skills in volatile extraction, insect behavioral bioassay, and use of state-of-the art equipment. As part of this collaboration, I will be publishing a journal article in a peer-reviewed journal for the first time. This would not have been possible without the AWARD Fellowship.

My visibility has greatly improved through access to a wider circle of professional networks, as well as nation-wide surveys and the AWARD role-modeling event. I am a member of the Entomological Society of America, the International Association of Plant Protection Sciences, and Women Organizing for Change in Agriculture and Natural Resource Management. Thanks to my AWARD activities, my visibility within my institution has improved significantly allowing me to participate in a nation-wide cashew survey program, which resulted in a national database of cashew farmers to facilitate adoption of technologies and market links. I also authored a chapter titled 'Field Guide for Insect Pest Management in Cashew Farms' in a training manual on Good Agricultural Practices in the Management of Cashew Farms in Nigeria. As a result of all these initiatives, I was promoted to principal research officer.

During the AWARD role-modeling event, which took place in a rural school, I shared my AWARD Fellowship and scientific journey with students, colleagues, local leaders, and members of the AWARD family.

#### Pauline Mounjouenpou, 2013 Post-Doctoral Fellow, Cameroon

I can truly say that the AWARD Fellowship has helped me to become a better scientist, leader and collaborator. Thanks to the various training programs as well as the excellent coaching of my two AWARD Mentors, Dr. Noe Woin and Dr. Daniel Achukwi, my career has grown significantly.

Winning AWARD's Advanced Science Training attachment, which saw me work at the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) in Montpellier, France was a moment of great pride for me. I worked alongside and networked with leading researchers from CIRAD and the University of Montpellier in the field of food mycotoxin control and analysis. As a result of this, I was empowered to develop an international collaborative research project involving Cameroon, Côte d'Ivoire and France, which was submitted to BMGF for funding. I have also published three scientific articles in renowned journals, while two more are in preparation.

Thanks to these achievements, I was promoted to the post of senior researcher in 2013. Additionally, I was appointed chief of the Institute of Agricultural Research for Development (IRAD) Food Laboratory in November 2013 and chief of the Agricultural Research Center in December 2014. Outside my institution, I have also gained more visibility. For instance, I am often asked to give the position of Cameroon in several scientific reflection forums, including the CEN TC 415 (Traceable and Sustainable Cocoa). I have also been engaged as a consultant in upgrading the food industry and in drafting procedures for ISO accreditation of laboratories.

Through AWARD, I also became a member of the Society of Biology and the Society of Mycotoxin Research.

I thank the AWARD team for changing my life irrevocably.

#### Deborah Narh Mensah, 2014 Post-Master's Fellow, Ghana

My current career goal is to be a senior research scientist. To this end, I have so far prepared eight research articles, four of which have been published in renowned journals such as *Molecules*. To further disseminate my research, I organized five workshops and produced simplified leaflets used in these workshops. In two of these workshops, I trained 56 cassava value chain players from Sierra Leone, of whom 90 percent were women. To assist with enhancing the visibility of my research, I had a radio interview on the benefits of mushroom cultivation and consumption on *Radio Love* in Sierra Leone. I was also featured in a documentary on a mushroom production and processing training organized for some women from Sierra Leone to be used on the IITA Sierra Leone website.

Taking part in the AWARD Fellowship has also greatly enhanced my leadership skills. For instance, I am now supervising undergraduate students on their final year projects. I am also a lead investigator for the Brazilian Agricultural Research Corporation (EMBRAPA)funded Characterization, Conservation and Domestication of Indigenous Edible and Medicinal Mushrooms on Agricultural Residues project. Under this project, I led the team that conducted an enthnomycological survey in villages around the Bia Biosphere Reserve in the western region of Ghana. I am also the convenor of the editorial and publication team of the Council for Scientific Industrial Research – Food Research Institute's (CSIR-FRI) 50<sup>th</sup> anniversary international conference planning sub-committee.

I thank AWARD for unleashing the potential in me.

#### Blessing Adanta Odogwu, 2014 Post-Master's Fellow, Nigeria

One of my career goals is to use my creativity and plant-breeding expertise to stimulate and facilitate better researcher-to-farmer links, and improve crop varieties' value chains for wealth creation in Africa.

At the start of my fellowship, the goals detailed in my career development plan were to enhance research skills in plant breeding and biotechnology, and to develop the science skills necessary for career advancement.

To date, I am glad that I am on the way to attaining the goals I set out to achieve. I got accepted into a Plant Breeding and Biotechnology PhD program at Makerere University, Uganda, funded by the Carnegie Corporation and RUFORUM, Under the AWARD Advanced Science Training attachment, I had the opp<mark>ortunity to improve</mark> my skills in marker-assisted selection through working with Professor J. Kelly, a renowned bean breeder at the Michigan State University, U.S.A. By applying the skills and knowledge gained through the AWARD Fellowship, I applied for and won the highly competitive Norman Borlaug LEAP 2014 Fall Fellowship.

Through AWARD, I have joined a number of national and international professional networks to enhance my networking and visibility. These include the National Association of Plant Breeder, Crop Science Society of America, America Society of Agronomy and the Soil Science Society of America.

#### Nkiruka Celestina Odoh, 2014 Post-Master's Fellow, Nigeria

When I began my fellowship journey, I set out my professional goals which included a 12-year goal to become a renowned professor of soil microbiology.

During my AWARD Fellowship, I have had the opportunity to expand my professional networks, gain visibility and obtain additional technical and soft skills, which I apply in my day-today work. Additionally, I enrolled for my PhD studies, which I am now nearly completing.

My scientific writing and presentation skills have been enhanced through preparation and submission of research papers, and presentations at scientific conferences. The most notable conferences have been the 20<sup>th</sup> International Conference of World Congress of Soil Science in South Korea in 2014, and the Conference of Soil Science Society of Nigeria in 2015. Consequently, two of my presentations have been accepted for publication in the respective conference proceedings.

To enhance my professional networks, AWARD facilitated my membership in the American Society of Microbiology, the Women Organizing for Change in Agriculture and Natural Resource Management and Agricultural Society of Nigeria.

I have also shared my knowledge and skills with the three undergraduate students | supervised in soil microbiology.

#### Miriam Ahunna Ofoeze, 2013 Post-Bachelor's Fellow, Nigeria

I am amazed at how fast I have been able to achieve my professional goals, which I outlined in my career development plan in March 2013. In it, I stated that I would further my education, get published in academic journals, build my scientific skills, network, mentor younger women in agriculture and increase my visibility as I learn about cultural diversity in Africa.

Exactly one year after beginning my AWARD Fellowship, I was employed as a food scientist at the National Root Crops Research Institute, Umudike. I have also begun my postgraduate studies in food science and technology. I have attended three conferences so far, and prepared a number of scientific papers, six of which have been published.

Using the resources, skills and knowledge availed through AWARD, I applied for and was admitted to the Netherlands Fellowship Program in November 2014, and the Mandela Washington Fellowship for Young African Leaders.

Thanks to the fellowship, I addressed an audience of 1,700 during a rolemodeling event! This has been a big boost to my confidence. Because of the profiling opportunities presented by the fellowship, international scientists, including one from India, have approached me for a professional collaboration opportunity. Most importantly, I now work directly with rural women farmers to reduce their postharvest losses, and I also mentor younger women in my community and encourage them to take up careers in agriculture so that together we can feed Africa.

#### Ngozi Oguguah, 2014 Post-Master's Fellow, Nigeria

Thanks to the AWARD Fellowship, I was able to gain a promotion at work from senior research officer to principal research officer within the first year of the program. A transfer accompanied this from the Physical and Chemical Oceanography department to Fisheries Resources department.

I have also exceeded my publication targets and have made presentations at two international conferences. I am also working on completing my PhD studies and will utilize the science proposal writing and statistical analysis skills to further my career.

# Catherine Ebah Djedji,

### 2013 Post-Doctoral Fellow, Côte d'Ivoire

During the course of my participation in the AWARD Fellowship, I was able to defend my thesis in June 2014 with outstanding distinction. Further, I was appointed the gender focal point at Centre National de Recherche Agronomique (CNRA) and coordinator of two important projects. I have also published three papers and three technical sheets. These are just a few of my main accomplishments during my fellowship period.

I am interested in improving the productivity and processing qualities of cassava, yam and sweet potato, which are key crops in my country and our region. I have worked at the Centre Ivoirien de Recherche Technologique and CNRA, and have also consulted for the United Nations Development Organization on cassava value chain research.

During my AWARD Fellowship, I was one of the lucky fellows to be selected for the AST opportunity. I benefited from a six-month research attachment at CIRAD in Montpellier, France. The main objectives of my study at CIRAD are to improve the methodology of quality assessment of attiéké (Cote d'Ivoire's unique couscous made from fermented cassava) which currently uses both sensory and instrumental methods. I hope to ultimately discover some promising technologies and recipes to be applied to attiékébased products to increase their shelf-life and make them appealing to consumers in European, American, and Asian markets.

I give a lot of credit to AWARD for facilitating my achievements through its detailed career development program. Thanks to AWARD, my networking abilities have improved significantly. I am able to form strategic partnerships with universities, research centers, rural development agencies, international institutions, embassies, food companies, consultancies and even government ministries. This has greatly helped me in my work and research.

#### Mojisola Esther Ojebode, 2014 Post-Bachelor's Fellow, Nigeria

At the beginning of my AWARD Fellowship, I set some ambitious goals for myself in my career development plan. These goals covered aspects of research, scientific, career and interpersonal skills that I would require to advance my professional pursuits as a female scientist.

So far, the training is paying off. At my place of work, I coordinated the revival of the Young Farmers' Club that has generated interest in agriculture among students. I effectively applied the skills learnt during the AWARD Leadership Skills Course. Due to the renewed interest in agriculture, students are keeping home gardens and have established vegetable plots on the school farm.

I was admitted into an MSc program at the Nutritional and Industrial Unit of the Biochemistry department of the University of Ibadan, Nigeria, where I conducted research on the use of insecticidal plants to protect cowpea seeds in storage against insect pests. The research results were excellent! A promotional video, highlighting the commercial potential of the research compared to the use of synthetic pesticides, was produced. Additionally, a research article on the same has been accepted for publication in a reputable journal.

By joining professional associations such as the American Society for Biochemistry and Molecular Biology and the International Association for the Plant Protection Sciences, I have expanded my networks and obtained access to useful resources such as journals and other publications. Additionally, by applying the various technical and soft skills obtained during the first year of the AWARD Fellowship, I have fulfilled my research plan through interacting effectively with superiors and colleagues. I was also able to demonstrate some of the soft skills as a speaker at a youth leadership forum in Lagos, Nigeria.

#### **Blessing Chidinma** Okogbue, 2013 Post-Master's Fellow, Nigeria

My AWARD Fellowship journey began in 2012, when I participated in an AWARD Mentoring Orientation Workshop as a mentee to an AWARD Fellow. I was greatly inspired to be a part of this great movement, as I listened to the AWARD Fellows share their experiences. I was filled with great optimism that I too could do it. In drafting my career development plan, I listed several goals: to become an AWARD Fellow the following year;

to conclude my doctoral research and acquire both scientific and soft skills; and to increase my professional network. I also purposed to become a more focused, visible and influential individual.

I applied for and gained acceptance into the AWARD Fellowship in 2013. Prior to the AWARD Science Skills Course, I had never published any research papers as first author. Although I had three published papers from my MSc work, they were primarily my supervisor's writing efforts. After the science writing course in 2013, I tackled my PhD thesis, concluded the degree program in 2014, and have published six papers from my PhD thesis in both national and international journals and conference proceedings. Additionally, I was nominated for a National University Commission Scholarship Award.

#### Oluwatosin Gbemisola Oladipo, 2013 Post-Master's Fellow, Nigeria

I applied for the AWARD Fellowship, in 2012, with little idea of just how dramatically transforming the experience would be. At the time, I was working as a senior research officer and was also a PhD student. I had no leadership and mentoring skills, was poor at networking and had only a few publications to my name. Additionally, I did not have great visibility as a professional and was in few professional associations. I can testify that the resultant effects of the AWARD Fellowship are remarkable. I have been able to achieve a number of maiden endeavors. By applying the research and other skills gained during the various training workshops, I completed my PhD studies and became the first female PhD holder in Ecology and Environmental Science at my organization, as well as the first post-doctoral fellow. Additionally, I obtained a two-year post-doctoral fellowship at the North West University, Potchefstroom, South Africa. I was recently promoted to the position of a principal research officer, which automatically conferred me a leadership role as head of the consultancy unit.

I have been awarded two grants—a conference and a research grant and my professional visibility has greatly increased. I have been approached to be a reviewer for five international journals. My research work has identified 10 microbial species effective at tolerating heavy metal contamination in soil, and how to naturally correct degraded mined soils for improved fertility and crop productivity.

By applying the genderresponsiveness approaches learned through the AWARD program, I actively participated in the formulation of a gender policy for my institution. I am currently mentoring younger female scientists in my field, one of whom is almost completing her PhD studies.



#### Adeola Oluwafunmiso Olajide, 2014 Post-Doctoral Fellow, Nigeria

Through the AWARD Fellowship, I have been motivated to critically think about my career and how to go about achieving my career objectives. I found the career development plan a particularly useful tool for this. I am glad that with my mentor's support, I have been able to make progress in specific areas. Thanks to the fellowship, I improved my science skills, and learnt how to use two new analysis models: the Probit Model and the Policy Analysis Matrix. I am also training my students on how to use the Statistical Package for Social Science for data analysis. I have prepared a number of scientific papers, three were published, and another three were accepted for future publication.

I also prepared three conference papers and presented one while my students, as part of their mentorship and capacity building exercises, presented the other two.

Applying the grant proposal writing skills, I have written four funding proposals on food security and climate change, two with international networks in Australia presented to the Australian Government, and the other two with my faculty colleagues, and presented to the Nigerian Government.

#### Mavis Owureku-Asare, 2013 Post-Master's Fellow, Ghana

Since enrolling with the AWARD Fellowship, I have attained significant milestones in my career, such as developing research and science skills, as well as leadership and interpersonal skills.

I enrolled for my PhD studies, and also got the opportunity to improve my research data analysis capabilities by taking part in a short Statistical Package for Social Scientists course organized by AWARD. Additionally, I won a slot in the Advance Science Training placement, which enhanced my scientific skills. My goal was to have three scientific papers published in peer-reviewed journals. I have superseded this goal by having nine research papers published.

As a result of the proposal writing training, I was able to write four collaborative research proposals with partners from Washington State University, Louisiana States University and other institutions in Ghana. After the gender-responsiveness training by AWARD, I set up a consultancy— Kasmalink Consult—to help women agro-processors, entrepreneurs and cooperatives to obtain processing services.

During the course of my fellowship, I represented AWARD on the CARE International Panel on Women in Agriculture. Additionally, I took part in the International Food and Agribusiness Management Association Conference in Cape Town, South Africa in 2014, where I played various roles including: judging the student case studies, co-moderating a symposium, and making two presentations—one was a poster and the other a paper.

#### Margaret Owusu, 2013 **Post-Doctoral Fellow**, Ghana

At the start of my AWARD Fellowship, I purposed to use my technical expertise together with my initiative, creativity and managerial skills to empower female cocoa farmers to improve their yields and incomes in order to ensure food security.

I have since been promoted at work, and now head my division and will soon be appointed senior research scientist.

I have obtained statistical analysis skills through an AWARD sponsored training at the renowned African Doctoral Academy Winter School, after winning a place in the AWARD AST attachment. My writing skills have also improved significantly following a seven-week course on scientific and proposal writing sponsored by AuthorAid and the International Network for the Availability of Scientific Publications where I also received a certificate as a trainer. l intend to train younger research

scientists with these useful skills. I am currently collaborating with colleagues to obtain funding from AuthorAid in order to conduct similar training.

I have greatly improved my interpersonal skills, and unleashed the management and leadership potential I had within me after attending an intensive two-day leadership and management program sponsored by my institute, in addition to attending the AWARD Leadership and Management Course. I have been elected as the treasurer of the Southern Sector Research Staff Association of the CSIR, Ghana, further exercising my leadership potential while enhancing my professional network. I have also become more assertive and more confident in negotiations.

I have been able to apply the science writing skills acquired and increase my publication output by five journal articles and two technical reports. My visibility has vastly improved, and I have engaged in international consultancies including one in which I was a resource person in a training program for scientists and technicians from seven African countries at the African Rice Centre in Cotonou, Benin. Together with my mentor, I am currently working as a post-doctoral scientist on a DANIDA-funded project titled Green Growth.
#### Edna Ekua Quansah, 2014 Post-Bachelor's Fellow, Ghana

I personally believe that academia cannot thrive without research. It is for this reason that I welcomed the opportunity to participate in the AWARD Fellowship to help me craft my career goals so as to become effective in both research and academia. I am interested in uplifting the livelihoods of female fish processors in Ghana by empowering them with skills and competencies in appropriate technologies.

My journey began while I was still a student and I set myself an ambitious career goal: to become a chief researcher as well as a senior lecturer. So far, I am well on my way to becoming both. I successfully completed my Master of Philosophy studies and graduated in July 2015. I have been appointed as a teaching assistant in the Department of Marine and Fisheries Sciences at the University of Ghana. I have worked closely with my AWARD Mentor who has spurred me on in this journey.

Thanks to improving my negotiation and networking skills, I have been able to achieve greater professional impact and increased the number of professional engagements. Currently, I am a member of five professional bodies—four international and one national and this has helped me improve my visibility.

### Ifeyinwa Christy Uramah, 2014 Post-Bachelor's Fellow, Nigeria

When I began my fellowship, my goals were to secure admission to pursue a higher degree in agricultural sciences, to expand the reach of the Green Generation School Program (an initiative organized for the development of agriculture among young people in Nigeria), and to contribute to the improvement of farmers' livelihoods as a supply chain associate. So far I have secured admission to undertake a Master of Business Administration course in agribusiness at the Federal University of Agriculture, Abeokuta, Nigeria.

Thanks to the negotiation skills that I acquired during the AWARD training, I successfully coordinated a memorandum of understanding agreement in April 2014 with a storage bag manufacturing company to supply bags to smallholder farmers at factory cost to increase their accessibility. In June 2014, I facilitated microfinance access to the tune of 10 million Naira (about US\$60,000) for 100 smallholder farmers to assist them strengthen their capacity to increase their production. This was negotiated as a zeroguarantee loan to the farmers with a 40 percent rebate on interest rates back to the farmers if repayments were completed as scheduled. In October and November 2014, I trained farmers on meeting industry quality standards for various produce.

To expand the Green Generation Program, I applied for and won a



US\$50,000 grant from the International Development Research Centre, which will expand the program to 100 schools in southwestern Nigeria, with 100 schools added to the program annually. This was thanks to the AWARD proposal writing skills training.

I am grateful to have been trained and mentored by AWARD. I look forward to doing my part through training and mentoring young agricultural women scientists to increase the impacts of agricultural development in Africa.



# Southern Africa at a glance

Number of AWARD Fellows by country

Country	рВ		рМ		pD		Total
Malawi	3	6	3	2	0	1	15
Mozambique	1	2	1	2	0	0	6
Zambia	2	0	1	1	0	0	4
Total	6	8	5	5	0	1	
Grand Total	14		10		1		25



# Southern Africa Fellows' Journeys

#### Chapwa Kasoma, 2014 post-Master's AWARD Fellow, Zambia

Chapwa Kasoma will be the first to admit that she never fancied herself as pursuing a career in agriculture; in fact she wanted to study medicine and even joined university to study natural sciences in preparation. However, today, she is a champion who encourages young people to pursue careers in field-based agriculture, and will not leave her Wellington boots behind when going into the fields!

She is currently working as a Field Production Supervisor at DuPont Pioneer in the Integrated Operations Department based in Mkushi, central Zambia. Her responsibilities include supervision of seed growers and field workers to ensure that they produce the best possible quality seed that conforms to DuPont Pioneer's international standards to make farming profitable for smallholder farmers. This is no easy task, and one which calls for a perfect balance of leadership, technical know-how, communication, and management skills. Before going through the AWARD Fellowship she would never have applied for such a position; being the youngest child in her home, she was laid back and did not consider herself a leader.

At university, while studying biological sciences, she got an introduction to biotechnology and its myriad

applications. Her curiosity about agriculture was sparked. Although she went on to graduate with a bachelor's in molecular biology and genetics, and land a job in the pharmaceutical industry, she longed to apply the biotechnology knowledge to agriculture; which prompted her to enroll for a master's course in plant breeding and seed systems at the University of Zambia. Here, she got a deeper understanding of the issues in agriculture that affect smallholder farmers' productivity such as poor seed quality, and resolved to do her part to make a difference.

During her master's studies she faced a major challenge when it came to conducting her research: she had been accepted for the course without a scholarship and would therefore need independent funding for the research. Additionally, her research involved combining both conventional and biotechnology approaches. She was advised to abandon her idea since she did not have the required experience in biotechnology and this kind of research in Zambia was very expensive, but she was undeterred. A chance meeting with Greenford Mchelenganga, a senior researcher who worked at the National Institute for Scientific and Industrial Research (NISIR) in Zambia, opened up the possibility of conducting her research at the Biotechnology Laboratory there. With nothing to lose she approached the NISIR Executive Director, Professor Francis Tembo, to

FROM LAB TO FARM | TRACING THE JOURNEYS OF THE 2013 AND 2014 AWARD FELLOWS

enquire about a new biotechnology laboratory at the institute and whether she could use it for her research. He offered her an opportunity to intern at the NISIR to learn about the practical side of biotechnology. She worked at the newly set-up National DNA Laboratory for five months without any results. When she had reached her breaking point, one of her supervisors, Dr. Munyinda Kalaluka (lecturer at the University of Zambia), introduced her to scientists at ICRISAT and arranged for her to work at ICRISAT in Kenya under the supervision of Dr. Santie De Villiers. Dr. Villiers helped Kasoma to complete her research which involved tapping into the genetic biodiversity within sorghum to identify variants with high sugar content for generating biofuel. This experience revealed a profound resilience that she did not know she had and it gets sharpened with each challenge she encounters.

Her journey with the AWARD Fellowship program began when she first heard about it from a friend. She looked it up and found that its mission fit in very well with her own career aspirations. At that point she was exploring career options after completing her master's. She applied for the fellowship and succeeded on her second attempt in 2013. She is grateful to AWARD since this fellowship enabled her to articulate her desire to work in an international agriculture company, and prepare a career development plan to achieve this. Six months after she wrote this goal down, she came across a job opening at DuPont Pioneer which

seemed exciting and full of possibility. She put in her application, and during the interview she employed all the skills and techniques she had learnt during the AWARD Fellowship training to ensure she stood out as a top candidate. She was thrilled to receive a job offer.

Being in the fellowship program has been transformative for her: she is no longer shy and laid back. She is now more confident, and can express herself better. She has discovered the leader within her. She also applies the gender lens in her work as she strives to empower the women field workers and seed technicians whom she supervises. She encourages them to see themselves as leaders too, and already this is bearing fruit as some women have been put in charge of the field teams comprising both men and women. The fellowship has given her the chance to improve her scientific skills and to take her mentorship activities a notch higher.

After going through the AWARD Science Skills Course, she was inspired to retrieve her MSc thesis and to extract a scientific paper from it. She presented this paper titled 'Microsatellite Marker Application in the Assessment of Sorghum Genetic Diversity' during the International Conference on Advances in Agricultural, Biological & Environmental Sciences in July 2015. It has since been published in the conference proceedings. She plans to publish many more, as she works towards her other goal of obtaining a doctorate.

Her current research, which is part of the AWARD Advanced Science Training is focusing on groundnut rust resistance, where she is working under the supervision of Dr. Damaris Odeny, a seasoned molecular scientist from ICRISAT and an expert in Genomics. Moreover, Dr. Odeny too was an AWARD Fellow from 2010-2011 which makes this collaboration more special. In their USAID-funded project, they are using advanced tools to find resistance to the groundnut leaf rust disease—one of the most disastrous groundnut diseases found in Zambia. Through the fellowship, she has joined the Agronomy Society of America, the Crop Science Society of America and the Soil Science Society of America, all of which offer her further networking opportunities as an early career scientist.

She regularly contributes to a biotechnology column in the Zambian Farmer magazine aimed at sensitizing the general public on biotechnology

and related concepts. The reader feedback has been positive and encouraging. She also organizes regular career talks to encourage young people to view agriculture positively. Together with Ridden Hamvumba, a DuPont Pioneer colleague, they are mentoring and coaching young people studying at college to choose agricultural fields.



#### Lucia Victoria Chigamane, 2014 Post-Bachelor's Fellow, Malawi

Through the fellowship program, I have been encouraged to take charge of my career through planning and being intentional about what I want to achieve.

Following interactions with my mentor, Dr. Grace Muhango who is a senior scientist, I was motivated to complete

"Chapwa is very courageous and she contributes confidently to a wide array of business discussions making good use of her higher

Additionally, she articulates her technical capacity very well, especially as she discharges her duties in a male-dominated farming community. In fact most farmers and seed growers take great note of her technical skills.

She makes sure she is engaged and visible during crucial public engagements, unlike many women, and she has earned praise

> Munyaradzi Mutsvairo, DuPont Pioneer, Commercial Lead, Zambia

the research for my Master of Science degree. Through the AWARD Science Skills Course, I acquired vital skills in research planning and collaboration which helped me get out of the maze I found myself in, while undertaking my research work. Additionally, I am regularly requested to train research assistants in research protocol and ethics, sampling, quality control and report writing.

Thanks to my newly acquired public speaking skills, my confidence has increased and as a result I have been entrusted with attending high-level consultative meetings with senior government officials, and I'm now more active in staff meetings.

My professional networks have grown since I joined the AWARD Fellowship program, having joined the American Crops and Soil Science Society, the Young Professionals in Agriculture Research and Development, and the Soil Health Consortium of Malawi, where I participate in some of their activities such as webinars and conferences.

I have found that mentoring a junior scientist has a boomerang effect, such that when I encourage my AWARD Fellow Mentee to pursue her dreams, I am also reminded about my own ambitions that motivate both of us.

### Ana Lidia Gungulo, 2014 Post-Master's Fellow, Mozambique

Before I got into the fellowship, I struggled with doing everything on my own, which often left me feeling frustrated, drained, and despondent. As I struggled to juggle my heavy workload, my mentor pointed out the importance of delegation. This was so empowering and liberating as it allowed me to do so much more by assigning less important tasks to others.

I am certainly more hopeful, confident and assertive, thanks to the program. My mentor, Dr. Rafael Uiaene, has guided my growth from academics to an upcoming professional.

I have since learned how to improve my data analysis skills through a course on how to clean data using a software known as STATA. The course was organized by Dr. Uiaene and fully funded by the Michigan State University working in Mozambique. Attending this training was part of my career development plan. I am now conducting research on screening and promotion of Striga tolerant maize varieties with colleagues from the National Agricultural Research Institute. This is under the auspices of the World Bank-supported Agriculture Productivity Program for Southern Africa in Manica, Mozambique. I will now use STATA in analysis of the household survey data gathered during this research. I plan to register for a PhD course in agricultural economics in 2016.

#### Margarida Graciete Simbine, 2013 Post-Master's Fellow, Mozambique

Working at CARE International as the project manager for the Adaptation Learning Program, a project that seeks to increase the capacity of vulnerable households to adapt to climate change, I lead a team of five and was responsible for all the activities of the project: training, reporting, and gathering and documenting lessons on adaptation. Through my work, I have written four scientific articles, two of which have been published. I have also attended five international conferences in which I presented the findings of my master's research, as well as the lessons and experience from my program.

I can attribute my achievements to my participation in the fellowship program, where I benefited from diverse training courses, comprising the AWARD Mentoring Orientation Workshop, the AWARD Leadership Skills Course and the AWARD Women's Leadership and Management Course. Additionally, the AWARD Advanced Science Training placement taught me more on my current field of work and broadened my professional network. Through memberships in professional associations, I acquire the latest scientific knowledge in the field.

Working with my AWARD Fellow Mentee has also enabled me to gain experience as a mentor, and to share the knowledge and skills acquired during the fellowship. From this, I inspired young women and men from three secondary schools to pursue careers in agricultural research and development.

Recently, I was awarded a scholarship to pursue a PhD course in agricultural technology at Tshwane University of Technology in South Africa. I am thankful to the AWARD team for helping me realize my potential as an African professional in agriculture.

# Nellie Titani Amosi, 2014 Post-Bachelor's Fellow, Malawi

Since becoming an AWARD Fellow, my confidence has grown and my professional visibility increased. I currently represent my organization, the World Agroforestry Centre, at the Sustainable Agri-Business Initiative, which promotes growth and improves public-private cooperation. My stature within my organization has grown, leading to my election as secretary of the social welfare committee.

My networks and collaborative activities have increased too, a highlight of which has been publishing as a co-author with a senior scientist from my organization's headquarters in Nairobi.

As an AWARD Fellow, I have joined two professional associations: the Organization for Women in Science for the Development World and IUFOR, which have expanded my professional network. In 2015, I presented my work to delegates at two global conferences in India and the United Kingdom, and in July I presented a paper at the European Conference on Sustainability, Energy, and Environment.

I put the leadership and international skills I gained at AWARD to use by mentoring an intern within my organization. My mentee has since found a better job. I collaborated with a colleague, who is a senior official at the National Smallholder Farmers Association and my mentee to conduct my role-modeling event.

# Mphatso Edda Chapotera, 2014 Post-Master's Fellow, Malawi

At the start of my fellowship, I set out to make my research on climate change more gender-responsive. To date, I have increasingly incorporated gender-responsive approaches in my work and research, resulting in two publications in international peerreviewed journals as a main author in one, and co-author in the other.

The confidence I gained from the AWARD training helped me get a new job with an international non-governmental organization as a capacity development officer managing capacity building activities at community level.

My dream is to hold a key position at either the World Bank or the New Partnership for African Development (NEPAD) in order to influence policy. Thanks to my experience so far as an AWARD Fellow, I know that this lofty dream is achievable with the right training, strategic networks and sheer hard work.

The self-confidence that I have acquired through the AWARD Fellowship's training programs has been quite empowering. Additionally, through networking with leading scientists in my field—men and women—I have gained insights that have enabled me to design initiatives in fingerling production, feed manufacturing and marketing that I have rolled out to the farming communities I work with. These are helping them improve the sustainability and profitability of the fish farming enterprises.

# Madalitso Zelda Chidumu, 2014 Post-Bachelor's Fellow, Malawi

Joining AWARD's Fellowship Program has been the best thing that has ever happened to me. It has unlocked my future and opened doors for me to have greater impact in my community and country. When I became an AWARD Fellow, my ultimate goal was to become a director so that I could make decisions that would enhance the livelihoods of women and young girls. I anticipated that it would take seven years to climb the ladder to this level. In just one year of being an AWARD Fellow, I have achieved what I set out to attain in seven years. I am the founder and director of a social enterprise that acts as a center for agribusiness incubation, girls' empowerment, and environmental sustainability.

Because of the AWARD Proposal Writing Course, I wrote a proposal to the Google-funded Women Enhancing Technology (WeTech), and was the first person in Malawi to be awarded a grant from this fund. This ICT for Development project enables young female university students to be trained and mentored in computer software skills that enable them to use scientific data to enhance agricultural research for development.

I successfully enrolled for a Master of Business Administration degree to enhance my marketing skills, an integral part of agribusiness.

I gained presentation skills from the AWARD Women's Leadership and Management Course, enabling me to present a paper at an international conference in India where I received a certificate for having the best presentation. I am a life member of the Agricultural Extension Institute in India, a rare opportunity offered to very few.

Because of my work with youth, I participated in the Young African Leaders Initiative, a flagship program of the United States President, Barrack Obama.

#### Caroline Kamanga Sibusisiwe, 2013 Post-Master's Fellow, Malawi

When I joined the fellowship program, I had just completed my master's degree and was looking for a job. Through my AWARD Mentor's networks, I found one. I have in turn mentored other junior researchers who have gone on to win the AWARD Fellowship or become mentees.

My professional networks have grown, allowing for collaboration with regional soil scientists. Through AWARD I joined three international professional associations in my field. I have since presented my research at one of my society's international conferences, and the paper will be published in an international peer-reviewed journal. I was also selected to attend the World Food Prize in the U.S.A. through my Borlaug Fellowship network.

Through AWARD, I got a chance to participate in the AST attachment at the International Center for Tropical Agriculture (CIAT) in Nairobi, Kenya. I am applying the skills I learnt in my current research which entails improving soil fertility and reducing gas emissions using biochar in conservation agriculture.

To give back, I conducted a rolemodeling event at a secondary school and motivated young girls to take up agricultural science as a career.

## Bettie Sindi Kawonga, 2014 Post-Master's Fellow. Malawi

I have achieved a great deal in the short time I have been an AWARD Fellow. In fundraising, I successfully applied for a Borlaug Higher Education in Agricultural Research and Development (BHEARD) PhD Scholarship and enrolled at the University of Kentucky, U.S.A. Of the seven proposals I have submitted, three have been funded, totaling US\$450,000 under the World Bank, Norwegian Government and World Food Prize, Tony Blair Africa Governance Initiative, and the Howard G. Buffett Foundation. Collaborators on these projects include the national government, research centers, and an international non-profit organization. My mentor and I conducted a consultancy for the national smallholder farmers association in my country and produced a goattraining manual for field staff. I am also a consultant for the U.K. Institution Review Board.

Through AWARD, I got the opportunity to grow my networks and enhance my visibility through membership in one regional, and two international professional associations. This has led to my participation in two international dairy conferences, namely, The Chicago Council's Global Food Security Symposium in Washington, DC in April 2015 and BHEARD Symposium in May 2015.

I published one article in an international journal on my country's dairy industry, and presented a paper on cow cooling investment analysis at the American Dairy Association meeting in Orlando, Florida in July.

I successfully conducted role-modeling events in 11 secondary schools in my country.

# Rosalina Mahanzule, 2014 **Post-Master's Fellow**, Mozambique

Since I became an AWARD Fellow, I have made great progress in my research work, my scientific and interpersonal skills, and in my career. On the research front, I published a working paper on the Michigan University State website on the charcoal value chain in my country. My abstract on the same research submitted to the World Forestry Congress was approved, and I will present a paper at this international conference in September 2015 in South Africa.

I was also involved in conducting research under the Building a Large Ever Green Agriculture Network in Southern Africa and presented the results in a workshop at my institution. I am writing a study proposal on the use of bamboo for charcoal production.

My professional visibility and networks have grown immensely since joining the fellowship. I am a member

of two international professional associations. In November 2014, I was invited to participate in the academic symposium for African research on food and agriculture in South Africa. My presence at this meeting gave me the opportunity to expand my network further. I was also assigned the responsibility of forming a team to create a research council in my country.

I can truly say that the AWARD Fellowship has significantly improved both my science and interpersonal skills, and I feel more confident than before. I am also working on improving my English language skills.

#### Gloria Makhambera, 2014 Post-Bachelor's Fellow, Malawi

I joined the AWARD Fellowship program with a bachelor's degree, and have now attained a master's degree in soil science. From my thesis, I have developed three manuscripts with the help of my mentor, Dr. Elizabeth Bandason and I hope to publish my first peer-reviewed article in 2015.

I have focused my research on conservation agriculture with trees that have promising results on food production and livelihoods. Through my research, I have also been involved in promoting conservation agriculture technology to smallholder farmers.

Thanks to the Science Skills Course and Leadership Skills Course, I have been invited to make a presentation on Malawi's forest status at an international conference in Japan. I have also made several presentations at various national forums. As my professional networks have grown, so has my visibility, resulting in an increase in the number of people and organizations that I collaborate with. In giving back, I am mentoring several junior researchers at my institution and within my networks.



#### Annie Mwayi Mapulanga, 2013 Post-Bachelor's Fellow, Malawi

Prior to joining the AWARD Fellowship program, I had low self-esteem, having lost interest in my own career development. It was during the AWARD Mentoring Orientation Workshop that I found renewed motivation and inspiration to restart my career progression. I was determined to focus on achieving my career goals while creating impact on rural smallholder women farmers and aspiring girls.

In setting my career and research goals, I highlighted my ambition to work for an international organization as director and research economist. Today, I feel like I have moved closer to my goal. In June 2013, I got a new job as an economist. So far, I have applied for three scholarships and enrolled for a master's degree at the University of Nairobi, Kenya. I have also written two development proposals, one of which was successful. I am looking forward to receiving funding for a research proposal submitted to the African Climate Change Program Fellowship.

My confidence was boosted with inspiration from the rallying call at the AWARD Mentoring Orientation Workshop, "...to feel the fear but do it anyway..." I take every opportunity to contribute and make presentations at work to improve my public speaking skills.

The relationship I have with my mentor has helped me realize opportunities around me, enhanced my capacity when conducting research, and promoted learning. In turn, I am mentoring a junior researcher achieve her career and research goals. This has made me develop a passion to mentor more young girls and junior researchers.

My visibility and networks have grown, and I am now member of two professional international associations. My abstract to one of the professional associations has been accepted for a presentation at an upcoming conference.

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#### Juliet Chikopela Mataa, 2013 Post-Bachelor's Fellow, Zambia

My career has grown tremendously since I became an AWARD Fellow. I successfully completed my master's studies. I am also more visible within my institution as a result of representing it at local and national meetings.

The Science Skills Course helped me develop a winning proposal on improved bean and cowpea varieties that will boost their productivity and improve the livelihoods of smallholder farmers. I am now collaborating more with my contemporaries and have grown my professional network by joining international professional associations.

I am mentoring a junior researcher and helping her pursue and realize her own career goals. At the rolemodeling event I conducted, 130 people participated, mostly girls and women and this gave me the opportunity to encourage participants to pursue careers in agricultural research. This role-modeling event enhanced my visibility within my community.

#### Kitty Mngoli, 2013 Post-Bachelor's Fellow, Malawi

At the start of the AWARD Fellowship, I had just completed my bachelor's degree. With renewed confidence and sense of purpose gained from the Mentoring Orientation Workshop, I applied for and got a job as a chief technician in the food microbiology laboratory of a national university. The science skills that I learned through the fellowship enabled me to confidently help students conduct their research and analyze their data.



I have published my first peer-reviewed article in the *African Journal of Microbiology Research*. This has given me confidence in my work and I plan on publishing many more scientific articles.

The Leadership Skills Course has improved my assertiveness, confidence, and presentation skills. I now consistently network with other professionals in the food science field. In turn, I am mentoring a junior researcher by imparting the skills I have learned through AWARD. I plan to further my education and my career thanks to the motivation and inspiration I have received as an AWARD Fellow.

# Loveness Msofi, 2013 Post-Master's Fellow, Malawi

Since becoming an AWARD Fellow, I have achieved a number of goals and continue to see my career flourish. I recently took on a lecturing role at a national university here in Malawi, thus achieving a step towards achieving the targets I set in my career development plan.

In the area of research, I have managed to conduct three projects in the area of gender and agriculture, and submitted two papers to international and local journals for publication. My work has been published in conference proceedings and abstracts following presentations at three international and one local conference. I have acquired new skills in the areas of scientific writing, leadership and management, proposal writing, decision-making, networking, public speaking, and mentoring.

# Amenye Mulwafu-Banda, 2014 Post-Bachelor's Fellow, Malawi

Before the joining the fellowship, I let many opportunities pass me by due to my lack of interest and low selfesteem. However, six months after the Mentoring Orientation Workshop, I accepted the request by my supervisor to make a presentation at a highlevel stakeholders' meeting. Drawing inspiration from the training that I had received, I accepted the responsibility. My presentation was recognized as one of the best.

Nine months into the AWARD Fellowship, I got a new job as a senior monitoring and evaluation specialist with an international non-profit organization, working on a project that supports 45 local community groups to address matters on climate change, health, and nutrition. This position is very challenging and has increased my professional networks and visibility.

In the course of my fellowship, I was called upon to conduct an introductory session on proposal development to 12 local community groups. During this training, I imparted the skills I had learned during the AWARD Science Skills Course. I am now able to demonstrate my leadership skills more confidently, and this has earned me recognition and promotion to the senior management team within my organization.

Before becoming a fellow, I did not think it was possible to attain all these goals within a year. I am grateful for the confidence boost, skills and visibility that the AWARD Fellowship provides.

#### Maggie Golie Munthali, 2013 Post-Master's Fellow, Malawi

I had just completed my master's degree when I become an AWARD Fellow. I have since been promoted to a higher position within my institution and made significant strides towards getting a doctorate. This was one of the targets I set for myself in my career development plan.

The AWARD Science Skills Course was a game-changer for me. Armed with this new knowledge, I have gone on to win a placement on the AWARD Advanced Science Training, and my research placement was at CIAT in Kenya. During my attachment at CIAT, I developed my PhD proposal that earned me an admission at three international universities. Consequently, with the same proposal, I was awarded an Organization for Women in Science for the Developing World Fellowship to pursue my PhD at the University of Pretoria. I also developed a successful proposal for a Borlaug Fellowship, which will commence in September 2015, in U.S.A.

I have published two papers in international peer-reviewed journals and have grown my networks since I became an AWARD Fellow, thanks to memberships in three international professional associations.

The leadership skills I learned have increased my confidence and visibility. At a seminar on regional economic cooperation in China, I was selected to deliver the opening speech. Prior to becoming a fellow, this is something I was incapable of doing. As part of my outreach activity, I have conducted a role-modeling event at a primary school that had more than 1,200 participants.



Before I won the AWARD Fellowship, I did not have any motivation to grow my career. I had developed a bad attitude towards my work and was dissatisfied with my job. Soon after I attended the Mentoring Orientation Workshop, I was motivated to apply for another job within my institution.

I currently head a team of eight and coordinate all our satellite offices. I am more visible within the organization, participate in meetings with senior members of staff, and have been recommended for promotion to a senior officer position in less than a year.

Being a fellow has motivated me to apply for readmission to my master's degree program, which I had earlier abandoned due to my lack of motivation.

My professional network at my institution has grown tremendously by joining an international professional association augmented by local as well as international work travel.

# Sonia Ines Naidoo, 2013 Post-Bachelor's Fellow, Mozambique

I have achieved so much in my career and research since becoming an AWARD Fellow. My first target was to complete my master's degree, and I achieved this in in April 2015.

I submitted a paper to an international journal and have made a total of five scientific presentations at four science symposia and at a national professional association conference in 2014. Thanks to the skills I obtained from the AWARD trainings, I won second prize for the best presentation, and my master's research presentation was voted the best at one of the conferences.

With my growing profile, I have received coverage from the local media in my country. I participated in a meeting organized by AWARD Fellows to advocate for the visibility of researchers and scientists in Mozambique. My research networks have increased to include other sweet potato research groups in my country, as well as regional and international peers. I am mentoring students within my institution and two junior women researchers. I have also conducted a rolemodeling event for secondary students, encouraging them to take up agricultural science subjects during the course of their studies.

# Sharon Ngonde Ndandula, 2013 Post-Master's Fellow, Zambia

Being selected as one of Africa's best women researchers was the starting point of my 'metamorphosis'. A rebirth into a powerful, visible, and resourceful professional occurred. It was exciting to see that I am progressing to that position where I will achieve my goals in accordance to my career development plan. A few months into the AWARD Fellowship, I acquired a senior position albeit in a different organization.

At the various meetings I have attended, I have ensured that I have interacted with other delegates and built professional networks that prove beneficial to my work. The AWARD Leadership Skills Course was also very instrumental as it made me a better team leader.

I have learnt new skills—both scientific and interpersonal, which enable me to excel at my tasks. Working with schools in rural Zambia, I have shared the knowledge gained from AWARD with girls and young women as a way of encouraging them to strive for a better

life. Through my role-modeling event, I shared with the girls the importance of education as well as gaining an interest in science-related subjects to enable them become future scientists who will solve their communities' problems.

I came to AWARD a timid girl who was unsure of herself. Through the fellowship, I am proud to say I have become more confident, assertive and ready to make a difference in the lives of those around me. I am not there yet, but I will continue setting my goals and striving to attain my dreams for all the women and girls in Africa. This is only the beginning.

# N'sira Aurea Sylla, 2014 **Post-Bachelor's Fellow**, **Mozambique**

Through the AWARD Fellowship, I was able to develop and apply presentation and communications skills when sharing my ideas. This helped me to bring out hidden talents like being a master of ceremonies during an event at my institution. Learning to give constructive feedback has allowed me to improve my working relationship with my colleagues.

After attending the Leadership Skills Course, I used newly acquired communication, conflict management, and negotiation strategies in order to reclaim my first author status on a research paper that I had earlier been denied. I also had the opportunity to work at a new section within my institution. Because of my increased leadership capacity, I have been promoted to training coordinator of this newly established fruit center section.

As the training coordinator, I lead two international collaboration projects. One is in the area of fruit processing and the other in cashew nut processing.

I am now a member of an international professional network. This has given me access to resources that support my day-to-day tasks, and has offered me the opportunity to participate in seminars on banana research.





AWARD is a catalyst for innovations with high potential to contribute to the prosperity and well-being of African smallholder farmers. We equip top women agricultural scientists across sub-Saharan Africa to accelerate agricultural gains by strengthening their research and leadership skills.

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