



2014 AWARD Fellow

**Chinyere Blessing  
Okebalama**

“I want to produce high-caliber graduates who are capable of effecting changes in smallholders’ traditional farming methods to help them increase yields.”

Position	PhD Candidate
Institution	Kwame Nkrumah University of Science and Technology (KNUST), Ghana
Country	Nigeria
MSc	Soil Science, University of Nigeria (UoN), 2010
Mentor	Professor Charles Arizechukwu Igwe, Department of Soil Science, UoN
Research Area	Development of targeted fertilizer micro-dosing to help smallholder farmers increase and sustain maize and cowpea yields, and hence incomes.

Chinyere Blessing Okebalama is the only one of the five children in her family who has attended university. She faced two hurdles—her family is not well off, and the community she comes from does not believe in sending women to university. With her mother’s help, she convinced her father to pay the fees. “My dad wanted me to do nursing which is a cheaper course, but he eventually let me go,” she says, recalling the struggle. She worked hard and graduated top of her undergraduate soil science class.

Okebalama chose soil science because it was something she could relate to. “Every school holiday, mum took us to the village and we spent time farming. We helped clear the field, plant the crops, and harvest,” she says.

As luck would have it, when Okebalama graduated, her department was top heavy with senior staff and she was immediately hired as a graduate assistant. The head of the department encouraged her to enroll for her MSc. This time, she paid her own school fees. For her research, she compared carbon sequestration in cultivated and uncultivated soils in southeastern Nigeria.

Okebalama graduated and again, luck was on her side. She won an Alliance for a Green Revolution in Africa (AGRA) fellowship to do a PhD program in Soil Fertility Studies. “It is a four-year fellowship tenable at KNUST, and I am part of the first cohort for these studies, she explains.

Okebalama is studying maize and cowpea using a technology called “targeted” fertilizer micro-dosing to improve nutrient-use

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**AWARD is a career-development program that equips top women agricultural scientists across sub-Saharan Africa to accelerate agricultural gains by strengthening their research and leadership skills through tailored fellowships. AWARD is a catalyst for innovations with high potential to contribute to the prosperity and well-being of African smallholder farmers, most of whom are women.**

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efficiency, and consequently increase yield. The recommended fertilizer application rates are too expensive for most smallholders. "Smallholders are the major food producers in Africa, but financial constraints make them unable to use new technologies and thus increase production," she says.

Soil fertility management is central to sustainable agricultural production. "The aim of my study is to advise smallholder farmers on how they can increase maize and cowpea yields with minimum fertilizer input," Okebalama explains.

Currently, Okebalama is writing her thesis and is looking forward to going back to work. She wants to start teaching because it is something that she has always loved to do. "Mum tells me that when I was in primary school I used gather my younger siblings after school and teach them, and even write reports at the end of term," she says. She feels she is in the right job, especially because it allows her to continue with research.

She owes a lot to her father and has worked hard not to let him down. "Once he invested in my first degree, he wanted me to get to the top of my career and advised me to complete my PhD studies before getting married," says Okebalama.

Okebalama is the first woman university graduate in her community and the first to work at a university. "Now I am an example that others from five villages are following," she says, pleased that the community is changing its opinion about educating women. She envisions a new Nigeria where educated women will occupy leadership positions at both state and federal levels to provide the funds needed for agricultural development. She hopes they will enforce the changes to key policies that have the potential to enable increased performance in the agricultural sector.

Okebalama's career goal is to attain a leadership position where she can engage female youth in soil and crop science. She wants them to receive training in using new technologies to improve soil fertility for sustainable crop production in Nigeria through interventions initiated by government and non-governmental organizations.

Okebalama plans to continue working with smallholders to help them improve their yields and incomes, and consequently their livelihoods. She expects the training she will receive during the AWARD Fellowship to help her become more knowledgeable and focused on her career goals. "I want to produce high-caliber graduates who are capable of effecting changes in smallholders' traditional farming methods to help them increase yields."