

Gender Responsive Agriculture Systems Policy (GRASP) Fellowship

Fellow Profile



Position

Agriculture Technology and Policy Advisor (Rwanda)

Institution

Tony Blair Institute for Global Change

Country

Kenya

Education

MSc, Geographic Information Systems, University of Nairobi (Kenya), 2014

Mentor

Charles Opiyo, Influencing and Advocacy Manager, Global Alliance for Improved Nutrition (GAIN)

Area of Interest

Improving the design of frameworks for gender-inclusive digital agriculture policies and guidelines for their sustainable implementation

Lilian Ndungu

2022 AWARD Policy Fellow

"The sustainable and lasting adoption of the correct technology for agriculture transformation can only be realized if backed by sound and inclusive policies."

A burning desire to change the labor-intensive and weather-reliant nature of smallholder farming – as seen first-hand at her family's farm and in her village – sparked Lilian Ndungu into advocating for technology in farming, a move that has defined her career. After studying Information Technology at Kenya Methodist University and Geospatial Technology at the University of Nairobi, "I was faced with a choice to focus on a thematic area," Lilian reveals. "Agriculture and food security was an automatic choice because I was excited by the potential of technology in transforming agriculture for smallholder farmers, such as my parents."

Currently, Lilian works as an Agriculture Technology and Policy Advisor at the Tony Blair Institute for Global Change (TBI) in Rwanda. For eight years, she has worked with governments in eastern and southern Africa as an advisor with TBI – supporting them in identifying the best placed technologies to support agriculture monitoring, decision-making,

and participation in policy dialogues. "Over the course of this period, I realized that technology investments were peaking and then struggling to be sustainable," she reveals. "This is because the sustainability and lasting adoption of appropriate technology for agriculture transformation can only be realized if backed by sound and inclusive policies."

A highlight, Lilian says, has been seeing governments prioritize and use technologies that she and her colleagues have developed to improve efficiency, realize cost savings, and scale sustainable investments for smallholder farmers. For example, she led a team that designed a satellite-based sampling tool that supported the Kenya government in implementing its crop insurance scheme. This was subsequently scaled to 33 counties, reducing sampling farm identification time from one week to one day and sampling costs in each county by 70%.

Lilian's professional efforts have received recognition through several awards. As well as receiving an award from NASA in 2016 for her contributions surrounding technology in agricultural transformation and food security, she was also selected as one of the world's top 50 geospatial rising stars at the inaugural Africa Food Systems Leaders Fellowship in 2021-2022.

However, Lilian's career path as a female scientist hasn't always been smooth sailing – and juggling work and family responsibilities have proven tricky at times. "I have had to strike a balance in achieving career growth, being a present parent, and doing further studies," she reveals. Furthermore, as a new mother, she quickly realized that the workplace is not equipped to support women with children. For instance, she recalls, "my workplace did not have the facilities to cater to young mothers and their babies."

Determined to make a change, while working for the Regional Centre for Mapping of Resources for Development, Lilian successfully lobbied for flexible hours for mothers who are exclusively breastfeeding, creating an equipped lactation room, and for immunization days to be given as additional leave days. But that's not all. "I have normalized attending meetings with my son, and, in most forums, he has been accepted as a little assistant who always says hi in my meetings," she smiles.

Lilian heard about the AWARD GRASP Fellowship from one of her mentors, who said she would be a perfect fit for the program. Given her recent move into the tech and policy advisory space at TBI, she sees the Fellowship as a particularly timely opportunity.

Her focus area is on improving the design of frameworks for gender-inclusive digital agriculture policies and creating guidelines for their sustainable implementation. "While technologies are being embraced by those working in agriculture, this digital transformation is amplifying existing inequalities," highlights Lilian.

She notes that such gendered inequalities are particularly amplified in education and literacy, access to technologies and information, and resources such as markets. As such, "I hope to influence the design of policies that will lead to the digital transformation of smallholder farming systems and livelihoods. More needs to be done to effectively and sustainably prioritize 'appropriate' technologies in the face of existing inequalities, including the digital divide. I hope to create a framework that will guide this process and ensure that smallholders benefit."

In addition to making waves in the wider policy arena, Lilian is hopeful that the Fellowship will also help her develop on a more personal level. "I look forward to gaining skills in effective policy design, communication, and networking," she reveals with a smile. "I also want to share my experience and knowledge with upcoming scientists through structured mentorship forums."

Lilian Ndungu is among a growing number of women selected for the Gender Responsive Agriculture Systems Policy (GRASP) Fellowship. GRASP Fellowship is a career development program growing a pool of confident, capable, African women to lead the design and implementation of gender-responsive policies in Africa. The Fellowship is an initiative of African Women in Agricultural Research and Development (AWARD), funded by the United States Agency for International Development (USAID).