

Next-generation research for sustainable and gender-equitable development

Technological advances have the potential to deliver a wealth of new insights for improving global development, but there is a major gap in the feedback loop: information from technologies like remote sensing, open data, social media and social networks, big data, and AI rarely makes it back to local communities. [Our research](#) plans to address this issue by improving how information is sourced, interpreted, and relayed to community members, especially women and those in rural areas, so that it can empower them directly.

Geospatial technology can be employed to [improve agricultural production and rural livelihoods](#). This is particularly impactful for women who often have less access to such information, as well as extension services and agricultural inputs. Our current work includes a [social network survey analysis in Ghana](#) that examines the drastic differences between the social networks of a woman and her spouse.

This research is helping to inform local implementers on the best ways to utilize social networks to spread agricultural information to all farmers in a community, and it will be combined with a randomized evaluation of a program implemented by the International Potato Center (CIP), to understand how social networks may affect project impact. We aim to expand this research by utilizing remote sensing to assess plot characteristics and then providing this information to farmers, so they can use these findings to tailor agricultural inputs and monitor the health of their farms.

Our future research is also aimed at understanding the impacts of providing land owners, especially women, with maps showing demarcated parcel boundaries. In instances where property rights may not be formalized or formal titles are difficult to access, parcel maps contain valuable information to help resolve boundary disputes and give landowners more security. Providing this information, often not formally mapped or inaccessible to individuals, to local communities stands to improve women's empowerment. We'll work together with local communities to determine the type of parcel map to distribute and ensure it is fit for purpose.

In both rural and urban spaces, women's employment outcomes in developing countries have consistently lagged behind those of men. Our current work involves [partnering with an online job board](#) (Afriwork, formerly Freelance Ethiopia) in Addis Ababa and implementing a randomized control trial to improve job seeker applications and lower barriers to employment through tailored support. The information produced from this trial—in particular, how it differentially impacts men and women—will be provided to job seekers to empower them to improve applications and job-seeking behavior. In the future, we hope to expand the scope to investigate both the impact and cost effectiveness of various job seeker support activities, including CV and cover letter guidance, interview tips and mock interviews, and tailoring job search activities.