



Gender, Rurality, and Technology

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Technological innovation in agriculture often addresses food insecurity (SDG 2) and climate change (SDG 13), important issues for women in rural areas. However, a gender equity lens reveals inequalities in the accessibility of innovative and sustainable solutions. Access to these solutions are often restricted by the triple digital divide faced by rural women – inequalities in gender, rurality, and digital access. Barriers to information and communication technologies (ICTs) are heightened in rural areas because of a lack of infrastructure, fewer educational opportunities, and lack of electricity.

Research shows that technological solutions to agricultural problems are often implemented without the consultation of rural women, and therefore, the solutions may not reflect culturally appropriate needs.¹ Interventions need to consider that women have lower levels of access to formal training and agricultural extension programs. In regards to climate change solutions, rural women should be consulted as key agents of information and knowledge.

The application of new informational and agricultural technologies may pose risks to rural communities, including privacy, control, health, and environmental risks. To better address and mediate these risks, educational and gender inequalities must be eliminated, and a diverse set of voices must be included in decision making around new technologies.

As nations develop policies around e-agriculture (innovative designs in the use of ICTs and digital technologies in rural and agricultural domains), these policies should include a diverse set of stakeholders while prioritizing the possibilities of disaster prevention, mitigating climate change, food safety, economic opportunities, and more.²

Fast Facts

- In a study of 23 Latin American and Caribbean countries, less-educated, rural women were the least digitally connected.³
- The UN University-led EQUALS Research Group (2019) found that the global gender gap in mobile internet usage is 26% with the largest gap in Sub-Saharan Africa (34%) and South Asia (70%). The study found that access to technology is not enough to bridge the gap. In fact, the gap has grown as new technologies increase in cost. The report highlights other needs – training women and girls, increasing the number of women in leadership, and increasing the confidence of women and girls in STEM fields.⁴
- “Women receive only 5% of agricultural extension services worldwide.” Nine out of 10 countries have at least one law impeding women’s economic opportunities, including access to credit.⁵
- In Noemi Gonda’s (2016) study of a development project in Nicaragua, Gonda found that while the project intended to ‘empower’ women through improved cooking stoves and water reservoirs, unequal gender expectations were not addressed and men benefited more from an easing of their own chores.

Recommendations

A) Prioritize appropriate learning opportunities so that all women, girls, and people in rural areas can learn about new technologies that may be used in agriculture. This includes addressing Indicator 4.4.1 in the UN SDGs: “Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.”

B) Use gender mainstreaming in the development of programs that enhance the use of ICTs and other technologies in rural areas, with the involvement of rural women throughout the process of investigation and program development.

C) Climate Smart Agriculture and other sustainable food approaches must include gender transformative and gender-responsive policy, analysis, and practices.

D) Support Alliance for Affordable Internet’s affordability targets for 5GB of Broadband to be no more than 2% (or lower) of average monthly incomes by 2026 (“Journey from 1 to 5”).⁶

E) Prioritize biodiversity and local/cooperative land ownership, rather than corporate privatization and agricultural technologies that threaten biodiversity and farmer autonomy.

Suggested Readings

Food and Agriculture Organization of the UN. [“7 Success Factors to Empowering Rural Women through ICTs.”](#) December 3, 2018.

Food and Agriculture Organization of the UN. 2018. [“Gender and ICTs: Mainstreaming gender in the use of information and communication technologies \(CTs\) for agriculture and rural development.”](#)

Check out the Gender Divide Index Report and Map. [The Gender Divide Index.](#)

USAID. [“The Gender Digital Divide, StoryMap.”](#) February 4, 2022.

World Bank Group, FAO and IFAD. 2015. [Gender in Climate-Smart Agriculture: Module 18 for the Gender in Agriculture Sourcebook.](#)

Special issue: [“Gender, Climate Change and Agriculture”](#) in *Gender, Technology and Development*. Sage Publications. 20(2): July 2016.

¹ Huyer, Sophia. 2016. [“Closing the Gender Gap in Agriculture.”](#) *Gender, Technology and Development* 20(2): 105-116.

² Food and Agriculture Organization of the UN. 2018. [“Gender and ICTs: Mainstreaming gender in the use of information and communication technologies \(CTs\) for agriculture and rural development.”](#)

³ IDB. 2020. [“Digital Exclusion: An obstacle that hinders rural women’s work.”](#)

⁴ IISD. 2019. [“EQUALS Research Group Examines Digital Gender Gap.”](#)

⁵ UNDP. 2016. [Gender and Climate Change: Gender, climate change and food security.](#)

⁶ A4AI. [Affordable Internet – Journey from 1 to 5.](#)