

Closing the Gender and Youth Gap for Healthier Soils

Women's and Youth's Agency as Levers of Change

IFPRI RESEARCH INITIATIVE

THE CHALLENGE

Healthy soils are fundamental to food security, climate resilience, and sustainable livelihoods, yet soil degradation affects up to 40 percent of the world's land, threatening agricultural productivity and leading to significant economic and environmental costs. Recurring fuel, fertilizer, and food price crises limit farmers' access to fertility-enhancing inputs and increase the risk of soil nutrient mining and land degradation, with negative consequences for both soil health and food security.

Effective soil management requires investments and informed decision-making, but these are shaped by social norms, gendered roles, and resource constraints, including women's and youth's limited access to land ownership, credit and inputs, and extension services. These same constraints also limit the uptake of women's valuable knowledge about soils and soil management. With 60 percent of youth in Africa working in agriculture, obstacles preventing them from accessing land and agricultural credit likewise dramatically lower the effectiveness of today's soil health recommendations.

Importantly, virtually all fertilizer, soil health, and plant nutrient interventions continue to overlook gender- and age-related inequalities in access to resources, decision-making power, and benefits, which reduces their effectiveness. Gender- and youth-responsive approaches to soil health management are needed to accelerate the adoption of effective practices; improve agricultural productivity, food security, and nutrition; and promote inclusive agricultural transformation.

WHAT WE DELIVER

Through in-depth gender analysis and behavioral research, IFPRI's Research Initiative on Closing the Gender and Youth Gap for Healthier Soils improves understanding of how empowering women and youth can improve soil health, leading to better social and environmental outcomes for water, food, and nutrition security, and climate resilience. Through a four-pronged approach, our work aims to inform and scale more inclusive and effective approaches to enhancing soil health, improving agricultural productivity and climate resilience, strengthening food security and nutrition, and advancing the agency and empowerment of women and youth.

IFPRI is a global leader in advancing research at the intersection of gender equality, natural resource management, and agricultural transformation, helping to shape the global agenda, national policy, and investment strategies through rigorous evidence and innovative analytical approaches. Building on decades of pioneering work on gender, land rights, agricultural innovation, and climate resilience, our work demonstrates that social, behavioral, and institutional factors are critical to the adoption and effectiveness of sustainable land and soil health practices.



OUR APPROACH

1 Clarify the situation and outlook:

- Use advanced modeling tools to understand opportunities and challenges in soil health and agricultural productivity experienced by women, men, and youth
- Develop and apply gender- and youth-disaggregated frameworks and synthesize evidence to understand how labor, land tenure, knowledge, access to resources, and social norms shape soil management decisions
- Demonstrate the costs of overlooking gender and youth in soil health interventions and identify pathways to co-design more inclusive and effective approaches that improve soil health

2 Test and scale solutions:

- Assess how empowering women and youth can improve soil health and other agricultural outcomes
- Design, evaluate, and scale interventions that simultaneously address soil health, land degradation, and gender and generational inequities
- Identify and assess financing mechanisms and incentives to expand access to soil health investments by women and youth
- Assess the role of digital and AI technologies in enhancing soil health and supporting inclusivity

3 Understand and shape the enabling environment:

- Generate and synthesize evidence to inform the integration of gender and youth considerations into national and regional strategies, policies, and investment plans
- Collaborate with partners to ensure that national-level policies are responsive to the needs, priorities, and opportunities of women and youth
- Contribute to the design and implementation of regional initiatives, including the African Union Commission's specialized Gender and Youth Integration Program of the African Fertilizer and Soil Health Action Plan 2024–2034

4 Strengthen tools, methods, and capacity:

- Advance the development of participatory soil health metrics and monitoring frameworks that center on the soil health manager to measure progress
- Develop innovative behavioral change solutions and business and finance models that support women's and youth's access to resources
- Facilitate capacity sharing and South–South exchanges on gender and youth contributions to strengthen our common soil health future

PARTNERSHIPS

IFPRI's Initiative on Closing the Gender and Youth Gap for Healthier Soils brings a distinctive interdisciplinary perspective that integrates social, institutional, and behavioral dimensions into a field traditionally focused on biophysical and agronomic approaches. By partnering with farmers and other groups committed to more equitable and sustainable agricultural production systems, it will help ensure that soil health interventions are not only technically effective, but also inclusive, scalable, and responsive to the needs and priorities of all farmers.

Our partners include grassroots women's organizations, international NGOs, farmer organizations, trade unions, universities and agricultural policy think tanks, Ministries of Agriculture, and regional institutions. Current and planned activities span Ethiopia, Kenya, Malawi, Tanzania, Zambia, India, and other countries where IFPRI maintains strong partnerships on soil health, fertilizer policy, gender equality, and empowerment of youth in agrifood systems. The Initiative also directly supports the implementation of the African Fertilizer and Soil Health Action Plan 2024–2034.

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