FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

REPORT ON

GENDER INCLUSION

in Small-Scale Irrigation

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FEED THE FUTURE INNOVATION LAB FOR SMALL SCALE IRRIGATION

Considering gender for inclusive irrigation

Equitable participation of men and women in small-scale irrigation improves the resilience of households, enables climate adaptation, and bolsters nutrition and health. Women and men have different priorities and preferences when it comes to irrigation, but women face specific barriers.

Introducing small-scale irrigation can bring opportunities for empowerment and exclusion. To support equity and inclusion, projects must go beyond technology access alone. Situated outside formal public programs, companies and organizations must design market or public interventions to reach women through their preferred information sources, offer technologies suitable for multiple purposes, provide relevant financial tools and credit products, and facilitate market linkages and household cooperation that can help women turn a profit from irrigation.

Opportunities for women in irrigated production and value chains can significantly increase the overall number of people adopting and benefitting from small-scale irrigation.

Improving household nutrition and resilience through women's inclusion in small-scale irrigation

Women's level of empowerment depends on the context within which they live, the resources they have access to, and their ability to make strategic life choices resulting in well-being improvements — factors that change throughout women's lives. Women's empowerment is one of the four main pathways that link small-scale irrigation to improved nutrition for entire households. ILSSI research in Ethiopia indicates that empowerment may lead to more household resources being allocated to nutritious foods and healthcare. When women are able to make decisions about irrigation technology, irrigated produce, and proceeds, or **when women no longer have to spend time collecting water, then irrigation can be a route to women's empowerment.**

CASE STUDY 1

WOMEN IN THE IRRIGATED FODDER AND DAIRY VALUE CHAIN FIND LIMITS AND SUPPORTIVE MARKET TRADERS

Women who began producing irrigated fodder to support livestock saw significant improvements in dairy production, which studies indicate enhanced household income and nutrition, as well as climate resilience. However, the irrigated fodder/dairy value chains show significant gendered differences. Women seem to benefit less from business opportunities, participating mainly in the lower nodes of the value chain and supplying milk and processed products on much smaller scales compared to men. Gender roles limit mobility and access to finance. Traders in the dairy value chain are open to supporting women to overcome barriers and open opportunities. Projects and public agencies could support cooperative hubs to provide production, market information, and credit for inputs, to deepen women's participation in the growing dairy value chain.

CASE STUDY 2

MIXED EVIDENCE FOR WOMEN'S EMPOWERMENT THROUGH IRRIGATION

Women in Ghana who received irrigation support are becoming more involved in income-earning activities, and taking on more leadership roles, contributing a larger share of household income according to one study. Women in irrigating households have noted indirect benefits from labor saving technologies. Women said they could use time savings for other income activities. Irrigated production generated income and made more vegetables available for home consumption. However, women's control over income decisions, influence over production decisions, control over assets, and work burden did not change with irrigation in the household. Also, group-based credit for irrigation pumps did not contribute to women's assets or empowerment, in part because of norms that large assets such as pumps should belong to men. Women also lacked labor to dig wells and construct fences to protect irrigated plots. This case highlights the importance for companies and organizations to understand women's priorities and preferences in irrigation.

Designing interventions to empower women irrigators

Small-scale irrigation can be an entry point for women's empowerment if organizations and companies intentionally target women. Therefore, ILSSI developed tools such as the "Guidance for inclusive irrigation interventions" to help identify the main constraints to inclusion and actions that irrigation policymakers, private companies, and development projects can take to make small-scale irrigation more equitable.

1 Address gendered constraints to technology awareness

a. Identify and use relevant information channels to reach women for training, meetings, and demonstration events. Acknowledge that men and women learn about technologies and practices differently.

b. Design group events and training based on local women's and men's preferences, reducing gender-based barriers to participation.

2 Address gendered constraints around try-out of technology

a. Target men and women based on their distinct preferences. Men's and women's different priorities affect their willingness to invest in a specific technology.

b. Prioritize technologies and practices that align with labor available for irrigated production. For example, promote technologies that reduce labor or support women in access to hired labor for production tasks.

c. Address both demand and supply constraints on credit in the household and market. Design financial instruments with suitable terms for women to reduce risk perception and increase credit demand.

3 Address gendered constraints for continued irrigation investment and use

a. Support women farmers beyond technology access and on-farm use.

b. Support women to benefit from the proceeds of irrigation. Take steps to improve cooperation over income through household dialogue, and strengthen women's access to markets, information on prices and sales, and access to financial services. Work through women's groups for joint investments and facilitate access to irrigation service providers.

c. Encourage access to irrigation technologies that reduce women's time burden and drudgery. Situate labor-saving technologies near homesteads with new water sources (e.g., well or borehole) or water storage. Leverage water and sanitation self-supply initiatives to add small-scale irrigation technologies and training.

Building gender equity into irrigation markets and finance

Given the high demand for irrigation equipment, companies are innovating their own farmer finance models, such as asset-based finance, pay-as-you-go, seasonal repayment, and group loans. ILSSI worked with irrigation equipment companies, financial service providers, and irrigated produce off-takers to develop a more inclusive supply of credit. For example, in Ghana researchers and private-sector solar irrigation equipment suppliers developed more inclusive, gender-sensitive credit assessment criteria, benefitting both women farmers and equipment suppliers.

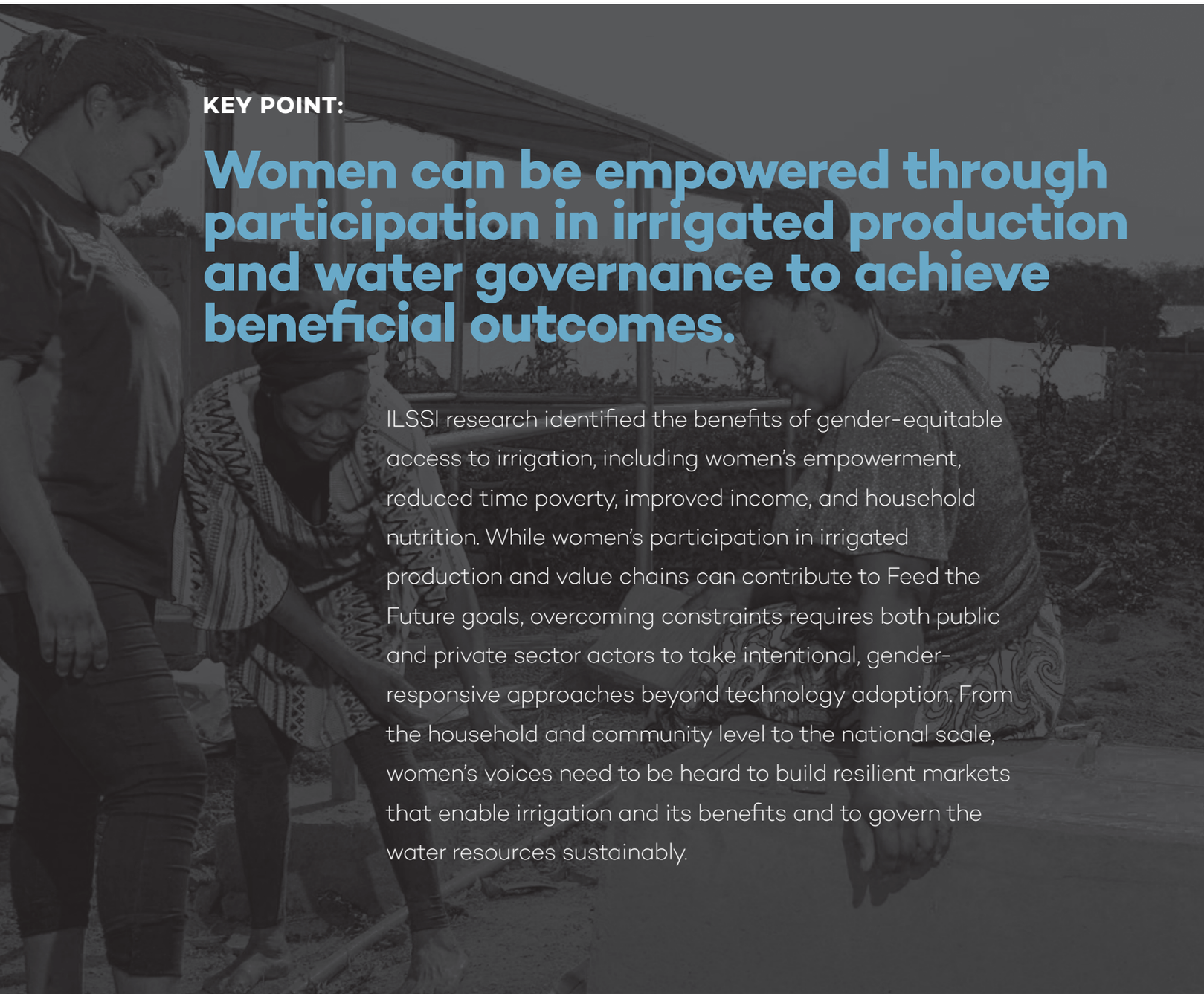
Irrigation equipment and service suppliers, and their agents, often see women as a high-risk, low-potential market segment. ILSSI helped strengthen market segmentation capacity to understand better and target women clients.

Through competitive, results-based awards, ILSSI offset the risks of four solar pump companies and incentivized the development of inclusive distribution and finance approaches.

Ensuring that women's voices are heard to improve water governance for all

As smallholder investments increase and irrigation expands, public policy and programs are needed to reduce water scarcity risks. Women's involvement will be central to effectively govern water at all scales, especially at a community level. For example, as groundwater use for irrigation expands in Ethiopia and Ghana, where the use of groundwater for irrigation has been expanding, ILSSI researchers worked with communities, using experiential learning processes, to improve water resource governance.

A key priority is ensuring that women's voices are heard when decisions are made about using and accessing collectively managed water resources.



KEY POINT:

Women can be empowered through participation in irrigated production and water governance to achieve beneficial outcomes.

ILSSI research identified the benefits of gender-equitable access to irrigation, including women's empowerment, reduced time poverty, improved income, and household nutrition. While women's participation in irrigated production and value chains can contribute to Feed the Future goals, overcoming constraints requires both public and private sector actors to take intentional, gender-responsive approaches beyond technology adoption. From the household and community level to the national scale, women's voices need to be heard to build resilient markets that enable irrigation and its benefits and to govern the water resources sustainably.

CONTRIBUTORS

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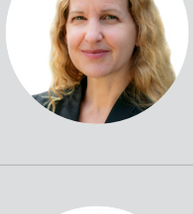

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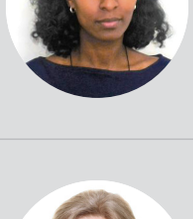

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