



Gender Equality and Food System Resilience

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Gender (In)Equality as an Outcome in Food Systems



- Polycrises exacerbate gender inequalities such as in food security, incomes, and livelihood opportunities
- Why? Women have greater vulnerability to shocks and stressors due to:
 - Structural barriers (e.g. patriarchal norms, unequal laws such as those governing land rights)
 - Being marginalized in food systems
 - Lower adaptive and coping capacity

Bryan et al. 2024; Bryan, Ringler and Meinzen-Dick 2023;
Bryan, Ringler, and Lefore 2022



Heat stress and other climate extreme events increase women's labor in agriculture relative to men's

- Labor force survey data covering 30 African countries show heat waves and drought reduce labor intensity in agriculture
- Women's labor contribution increases relative to men's
- Following heat stress in Tanzania, men reduce labor supply to family farms while women's labor remains the same, female heads' labor increases

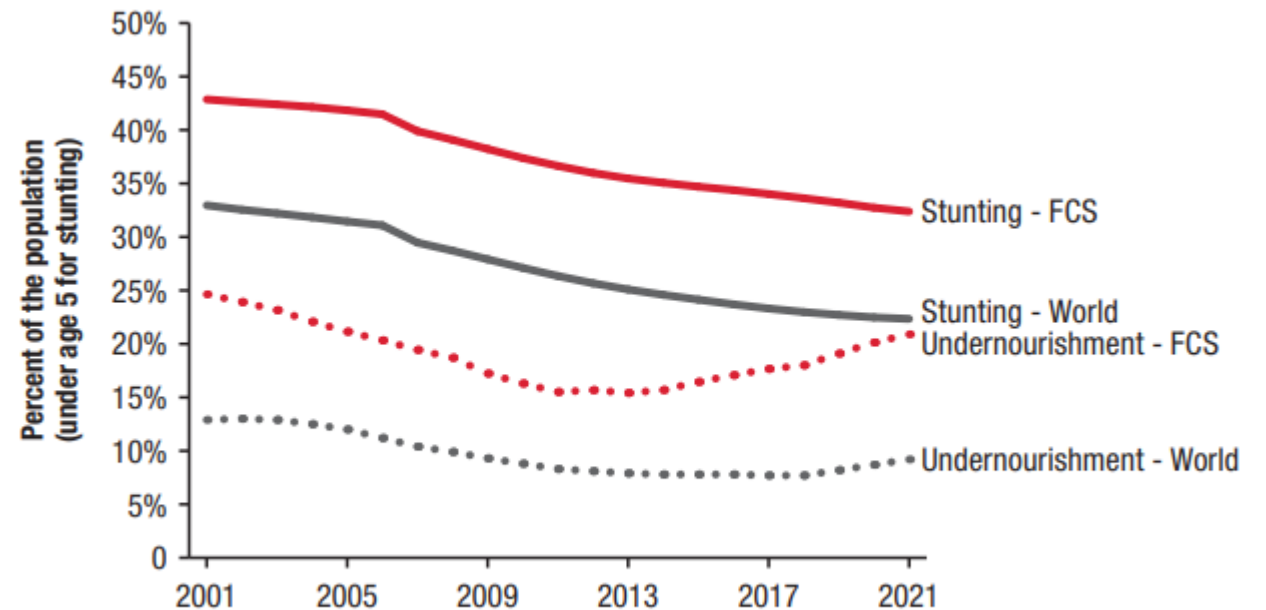
[Lee et al. 2021](#); [Nico and Azzarri 2024](#)



Women in fragile contexts are especially vulnerable to shocks and stressors

- The worst food security and nutrition challenges are increasingly concentrated in the most fragile settings with multiple compounding shocks and limited institutional capacity to respond ([Abay et al. 2025](#))
- Women and children have unique vulnerabilities in these contexts
 - E.g. armed conflict increases the indirect health and mortality risks faced by women and children, including acute and chronic malnutrition ([Bendavid et al. 2021](#))

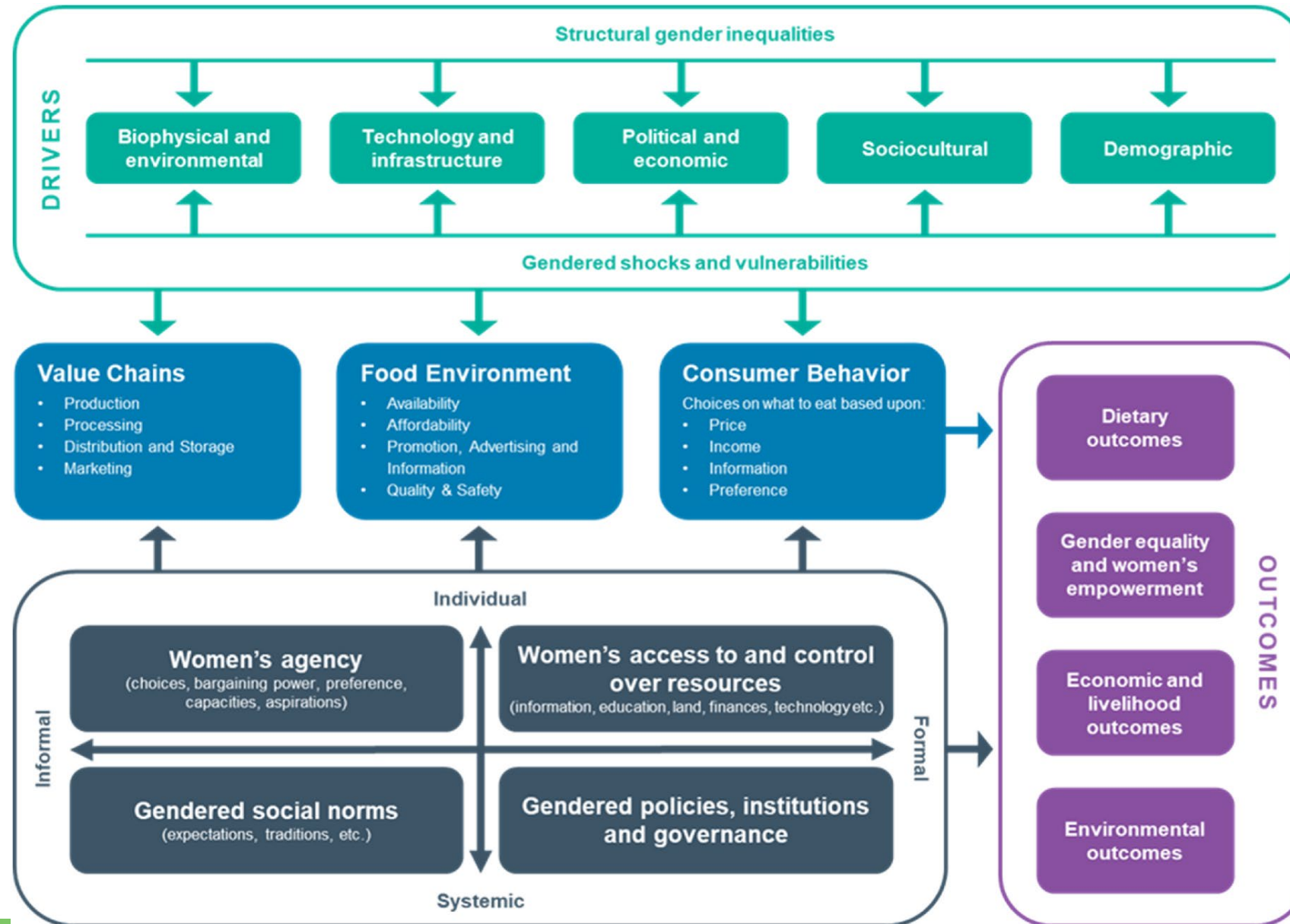
Figure: Prevalence of stunting and undernourishment in fragile and conflict-affected settings



Source: Stunting data are from UNICEF, the World Health Organization, and World Bank joint child malnutrition estimates. Undernourishment data are from the Food and Agriculture Organization of the United Nations. Both datasets are published in the World Bank's World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators>



The Gender and Food Systems Framework gives us a conceptual framework to address these issues



Njuki et al. 2022





IFPRI's Engagement and Research Approach

①

Clarifying the situation and outlook

Context analysis & future scenario planning

②

Testing, adapting and scaling solutions

Intervention development & evaluation

③

Shaping enabling environments

Policy, governance & institutional frameworks

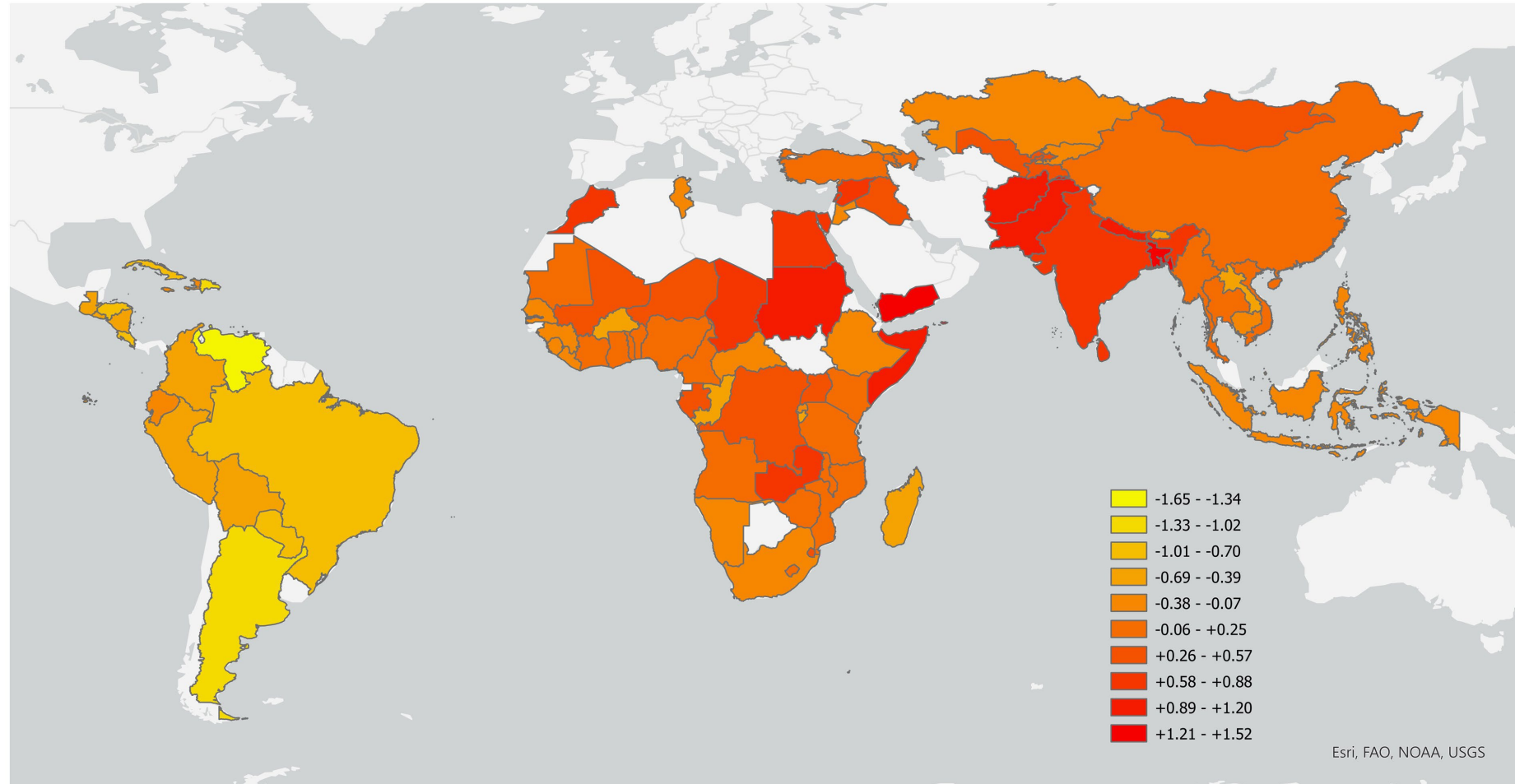
④

Strengthening research methods/capacity

Tools development & knowledge sharing



Clarifying the situation and outlook: Unequal impacts of climate shocks are concentrated in climate-agriculture-gender inequality hotspots

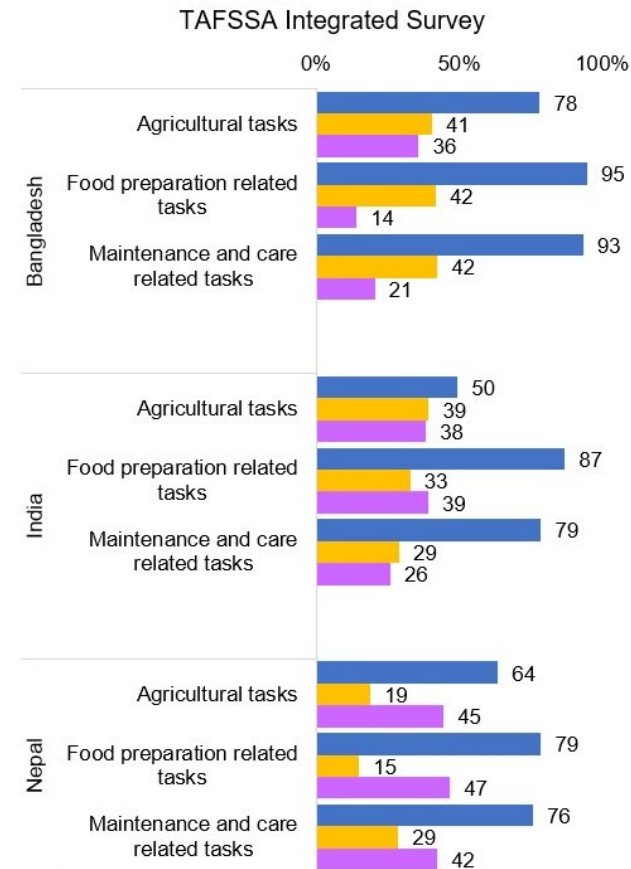


Darker orange countries show relatively high climate–agriculture–gender inequality hotspot index values -> higher risk, while lighter orange countries face lower risk. (LMICs with a white color have not been ranked due to data limitations)

[Lecoutere et al. 2023](#)

Clarifying the situation and outlook: In South Asia, women are heavily involved in agriculture yet undertake most of the care and maintenance tasks

■ Female respondents ■ Male respondents ■ Equally shared



- A 5-minute task allocation module in the TAFSSA Integrated Household Survey shows that women are heavily involved in agriculture yet undertake most of the care and maintenance tasks ([Banerjee et al. 2024](#))
- Although tasks are shared within households, workload is greater for women
- With climate change, work burden for women is likely to increase
- Implications for healthy diets: women turn to processed foods to save time



Testing, adapting, and scaling solutions: Gender- and nutrition-sensitive agriculture can increase climate resilience

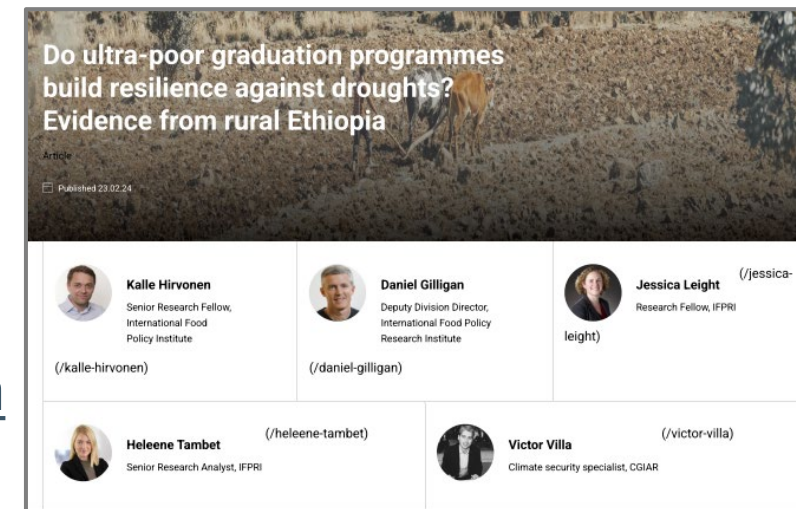


- Women's empowerment is associated with adoption of climate smart practices ([De Pinto et al. 2020](#)), household food security, better diets and nutrition ([Quisumbing et al. 2023](#))
 - In Bangladesh, women's involvement in agricultural decisions and participation in groups associated with greater crop diversification away from rice and towards fruits and other crops. ([De Pinto et al. 2020](#))
- Four years post-program, a nutrition-sensitive and gender-responsive program (ANGeL) in Bangladesh had sustained impacts on women's empowerment, consumption, and diet quality, and reduced the likelihood that households relied on harmful coping strategies ([Hoddinott et al. 2023](#))



Testing, adapting, and scaling solutions: Leverage social protection for gender equality and resilience

- Social protection is a core strategy globally for addressing poverty and risk over the life-course – rapidly expanding in LMICs, including in many climate-affected settings
- If appropriately designed: Resource transfers + bundled activities can address women's inequitable access to resources, information, services
 - Protect households from adverse impacts of climate shocks (Hirvonen et al. 2023; Ahmed et al. 2024, Hidrobo et al. 2024c)
 - Support coping with and adapting to climate change (Hidrobo et al. 2024a)
 - Address some structural drivers of gender equality (Hidrobo et al. 2024b)
- Improving design of the social protection sector (which already reaches a large share of rural resource-poor at-risk households in LMICs) can be very impactful – and is our comparative advantage, given longstanding partnerships.





Testing, adapting, and scaling solutions: Increase women's access to information and financial services



- Women's lack of access to information (e.g. climate information, early warning, extension) and financial services (e.g. insurance, credit) are key constraints to agricultural productivity, the ability to cope with shocks, and adoption of climate-smart practices
 - E.g. COVID-19 disrupted women's already low access to extension services in India and Nepal and led to negative impacts on productivity (Alvi et al. 2021)
- When extension services reach women, agricultural performance improves and negative impact of climate shocks on income is reduced (Azzarri and Nico 2022)
- When women have access to climate information that meets their needs they are just as likely as men (sometimes more) to adopt CSA practices (Ayalew et al. 2025; Bryan, Kato and Bernier 2021, Bernier et al. 2015; Kato et al. 2023).
- Insurance products designed with women's needs in mind are more likely to be taken up (Kramer et al. 2024; Timu and Kramer 2023) and provide benefits for women's empowerment (Kramer et al. 2024) and consumption smoothing (Timu et al. 2023)

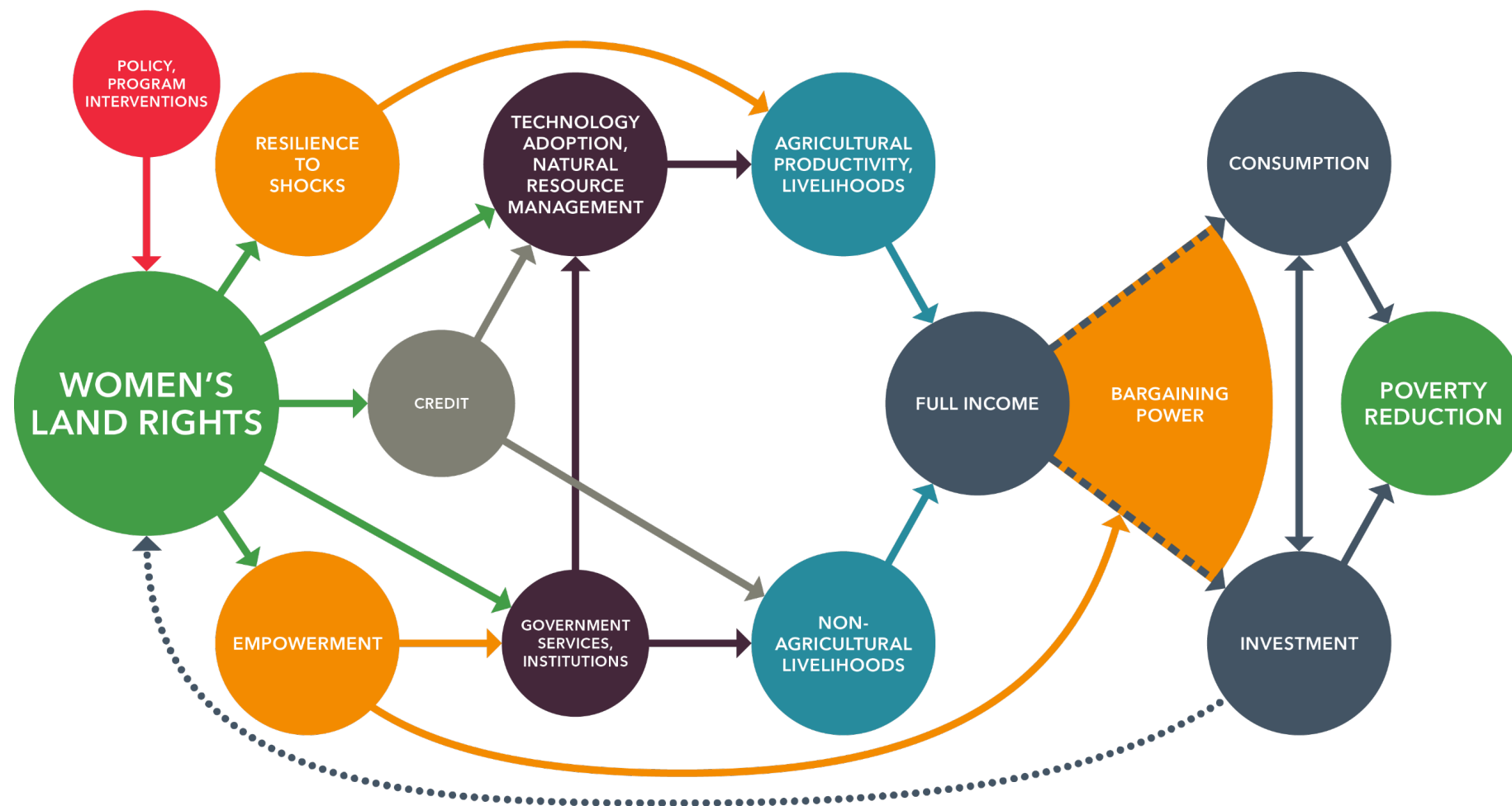


Testing, adapting, and scaling solutions: Mobilize the power of the collective through group-based approaches

- Women's group-based platforms increasingly used as a modality for empowering women and delivering services
- Evaluation of two multicountry programs spanning 11 countries in Africa and Asia showed that group-based approaches are effective in empowering women ([Quisumbing et al. 2023, 2024](#))
- SHG platforms in India have helped women build assets ([Raghunathan et al. 2022](#), improve empowerment ([Kumar et al. 2021](#)), increase knowledge of agricultural practices ([Raghunathan et al. 2019](#))
- Yet, must be realistic about using these platforms. Overloading them can detract from their core functions; not involving men is a missed opportunity ([Kumar et al. 2024](#))



Shaping enabling environments: Policies and programs to strengthen women's land and resource rights

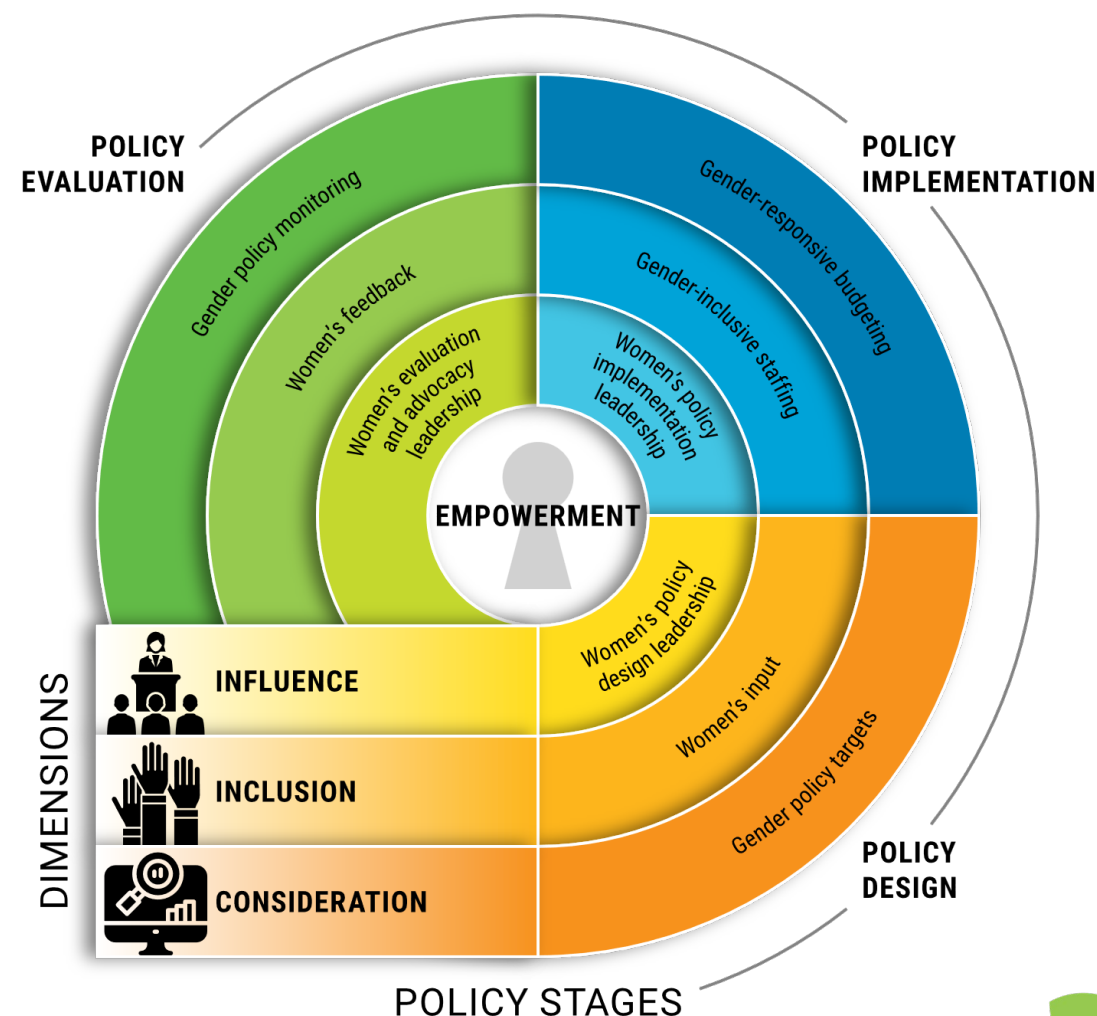


Meinzen-Dick et al. 2019

Shaping enabling environments: Strengthening women's leadership and participation in agrifood system governance

WEAGov: Policy tool to improve gender inclusivity in agrifood policy design, implementation and evaluation

- **Women's Empowerment in Agrifood Governance (WEAGov)** designed to identify entry points for increasing women's voice and agency within the agrifood policy cycle
 - Theory-based, rapid assessment tool
 - Examines women's roles across public sector, civil society, and private sector
 - Spans full policy process – not just what's on paper but also how policies are implemented in practice and budgetary allocations
 - Tracks agriculture, nutrition, and climate policies
 - Multi-method, participatory approach
 - Guides the development of context-specific, targeted recommendations to amplify voice across policy cycle



Shaping enabling environments: Long term government collaboration to identify opportunities to inform policy and investment to promote women's empowerment



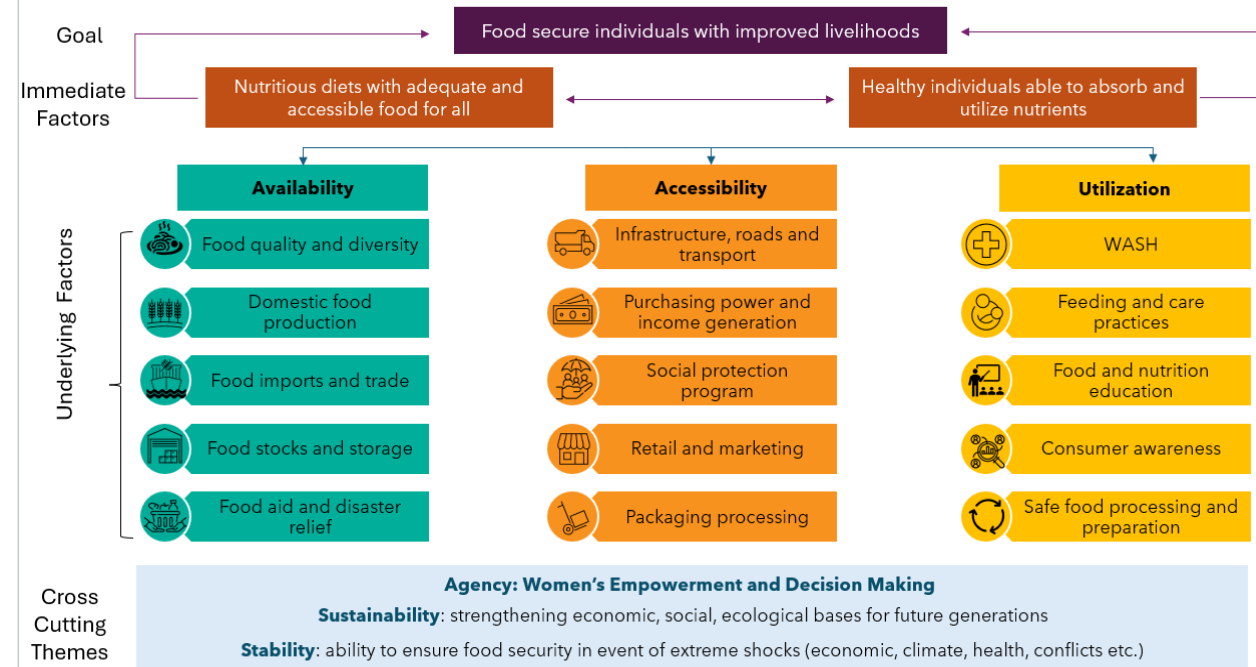
Papua New Guinea Natl. Food Security Policy (NFSP - 2025)

- PNG Rural Household Survey (2023) designed with the PNG Dept. of Ag and Livestock (DAL) & PNG Institute of Natl. Affairs (INA) informed:



- IFPRI is supporting DAL to reformulate the PNG-NFSP including:
 - Fostering multi-sectoral collaboration among Depts. of Ag & Livestock; Health; and Education
 - Updating rural livelihoods data using 2023 survey
 - Highlighting women's contribution to on- and off-farm labor, and household wellbeing
 - Promoting women's empowerment, agency and decision making
 - Enhancing women's capacity, knowledge and access to productive resources

Conceptual Framework of PNG National Food Security Policy



Strengthening research methods/capacity: Building capacity of NSOs to track progress in women's empowerment



WEMNS: Measuring women's empowerment in large- scale, multi-topic surveys

- Survey-based, short (<15 mins to implement), direct measure of empowerment, aligned with SDG5 and other SDG gender targets
 - Piloted in **Bangladesh, Guatemala, Nepal, Malawi** using phone and face-to-face surveys, in urban and rural samples
 - Same methodology as multidimensional poverty indices: counting based, decomposable, enables users to compare across sub-populations
- In partnership with FAO under the 50x2030 Initiative to Close the Agricultural Data Gap – WEMNS (+MDDW) and national statistical offices, was integrated in agricultural surveys in **Liberia, Sierra Leone and Tanzania**



Photo credit: DATA, Bangladesh.

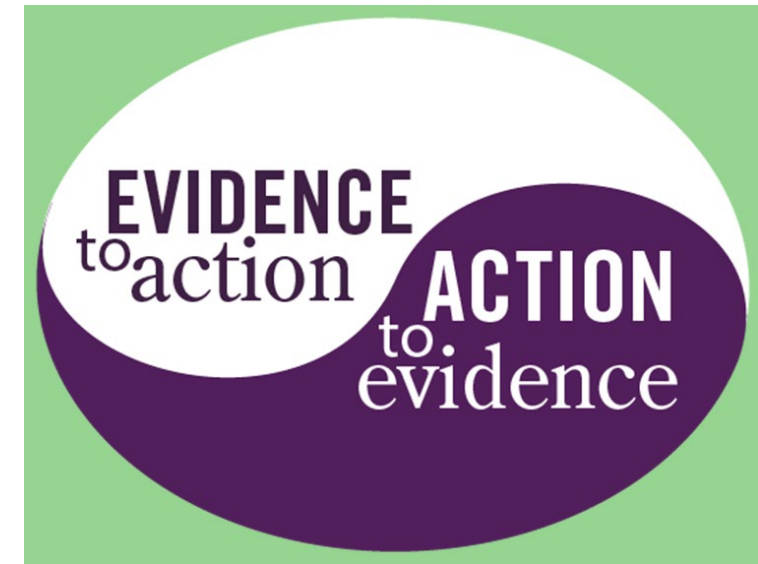


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Priorities for future research and policy action

- Generate **timely evidence** on climate-gender-nutrition hotspots, involving communities and crowdsourced data; track implications for gendered workload across settings (rural, urban)
- Build the **evidence base on the benefits and cost-effectiveness** of promoting women's empowerment and addressing gender inequality for climate resilience, adoption of innovations, and environmental sustainability of food systems=> with limited funding, prioritization is important
- Strengthen **governance at community and local levels**: women's groups can provide an ear to the ground; support **policy change and leadership at national levels**
- Continue **strengthening capacity and co-creation of tools** to assess impacts of gender- and climate-sensitive interventions at scale and across settings





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