

# HOW DID INTEGRATING QUALITATIVE EVIDENCE WITHIN A SYNTHESIS IMPROVE OUR UNDERSTANDING OF THE IMPACT OF FOOD SYSTEMS AND NUTRITION INTERVENTIONS ON WOMEN'S EMPOWERMENT AND GENDER EQUALITY?

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# Qualitative evidence synthesis brings deeper insight into the ways in which food systems and nutrition interventions impact women's empowerment



*In line with the need to conduct more policy-relevant research, there appeared to be an increasing acceptance of the need to engage with broader types of evidence ... qualitative evidence can, for instance, help us better understand issues related to process and implementation of complex interventions. It can also improve our understanding of barriers and facilitators of intervention effectiveness.*

**Birte Snilstveit<sup>1</sup>**  
Director – Synthesis and Reviews Office, 3ie



There is a growing consensus that synthesizing qualitative evidence can improve our understanding of complex sociopolitical dynamics that underlie challenges such as food insecurity and women's rights.<sup>2</sup> While quantitative synthesis of program effectiveness has long been acknowledged as a valuable tool for decision-makers, qualitative evidence can complement such knowledge and potentially answer other questions that quantitative evidence cannot unravel alone.<sup>3</sup>

For our own synthesis, we used an “effectiveness plus reviews”<sup>4</sup> approach, which combined quantitative and qualitative evidence to fully assess the impact of food systems and nutrition interventions on women's empowerment outcomes. This synthesis is based on a large body of evidence in the fast-growing field of food systems and nutrition impact evaluations curated in [3ie's Food Systems and Nutrition Evidence Gap Map \(FSN E&GM\)](#). We used qualitative evidence from the included impact evaluations and targeted searches related to 42 programs evaluated in the included papers.

A recent synthesis of this body of evidence demonstrated that women's empowerment interventions can positively affect food security, affordability, and availability.<sup>5</sup> However, little was known about how women's empowerment and food systems interventions can lead to mutually positive outcomes.<sup>6</sup> The goal of our rapid evidence assessment (REA) was to fill this gap.<sup>7</sup>

The integration of qualitative evidence in the REA improved our understanding of the complex dynamics between food systems and gender norms. It helped to answer questions such as: *Are there unintended consequences of food systems and nutrition interventions, including adverse effects? Which contextual, population, implementation, or “intervention feature” factors are reported as barriers to or facilitators of program effectiveness?*

In this learning brief, we share our experience integrating qualitative with quantitative evidence, highlighting how mixed-method synthesis offered nuanced insights and provided better recommendations for policymakers, researchers, funders, and program designers.

# Highlights

## Results of our search for qualitative evidence and synthesis approach

- **42 programs** were identified in studies that evaluated the impacts of food supply, consumer behavior, and food environment interventions on women's empowerment outcomes.
- **432 resources** were identified through a targeted search for qualitative evidence on the identified programs.
- **162 studies** analyzing primary qualitative data were assessed for quality, 62 of which were included in our analysis.
- Using an **inductive synthesis** approach, we identified descriptive themes on program context, design, implementation, and population characteristics. We then combined them to generate analytical themes on barriers, facilitators, and unintended consequences of the programs.

## Insights from the qualitative synthesis

- **Barriers limiting program benefits:** social restrictions on women's ownership of resources and participation in decision-making, systemic challenges such as unfavorable inheritance laws, external issues such as unfavorable political conditions or conflicts, program design-related issues

such as unclear management strategy, and program implementation challenges such as inadequate skills of program teams.

- **Facilitators of program success:** liberalization of gender norms, legal backing of women's rights, integration of risk factors into program design/implementation plans, testing, and piloting of intervention components.
- **Unintended consequences:** additional burdens on women, dependency on programs, escalated family disputes, enhanced reputation, and influence of women in their communities.

## Experiences of the qualitative integration process

- Targeted searches of implementers and funder websites helped to identify documents relevant to the program in question while saving time and resources.
- The limitation of the targeted search strategy for qualitative documents means we could have missed some relevant documents that would have been captured in a systematic search.
- Langer, Tripney, and Gough's (2016)<sup>8</sup> quality assessment tool facilitated our appraisal of the qualitative evidence. We modified the tool with several probing questions to reduce subjectivity.
- Inductive coding with a pre-structured coding scheme kept our line-by-line coding focused on the research question.



# Overview of the rapid evidence assessment

1

We started with studies in 3ie's largest living E&GM:

**2,333 impact evaluations** and  
**199 systematic reviews**  
on **food systems interventions**

2

We identified a subset of studies that evaluated the impacts of food systems interventions on women's empowerment outcomes based on the following **eligibility criteria for inclusion**

### Participants

from low- and middle-income countries and of any age and gender



### Interventions

focused on food supply chain, consumer behavior, and food environment

### Comparison

groups of any type (e.g., business as usual, pipeline, waitlist, or alternative interventions)



### Outcomes

of women's empowerment associated with resources, agency, and achievement

### Study design

including quantitative experimental or quasi-experimental designs



### Others

Completed studies; published in English; published after the year 2000; published in any format

3

We included

**44 impact evaluations of**  
**42 programs on food**  
**systems interventions**

which we synthesized using **meta-analysis** to assess their effectiveness

4

We included

**62 primary qualitative studies &**  
**432 descriptive project documents**

related to programs included in the quantitative impact evaluations. We conducted a **quality appraisal of the qualitative studies** and **thematically synthesized** them to get insights into the barriers to, facilitators and unintended consequences of the programs

# Where did we source and how did we process the qualitative evidence?

**We conducted a targeted search for qualitative evidence on the 42 programs**, evaluations which were included in the FSN EG&M. First, we tracked citations for each main study to identify accompanying qualitative papers. To be comprehensive, we complemented this with open searches for the programs in Google and Google Scholar, as well as searches within the programs' websites.

**These searches yielded 494 relevant resources**, including research articles and reports, project documents, implementers' notes, and news and blog posts that specifically described or evaluated the programs.

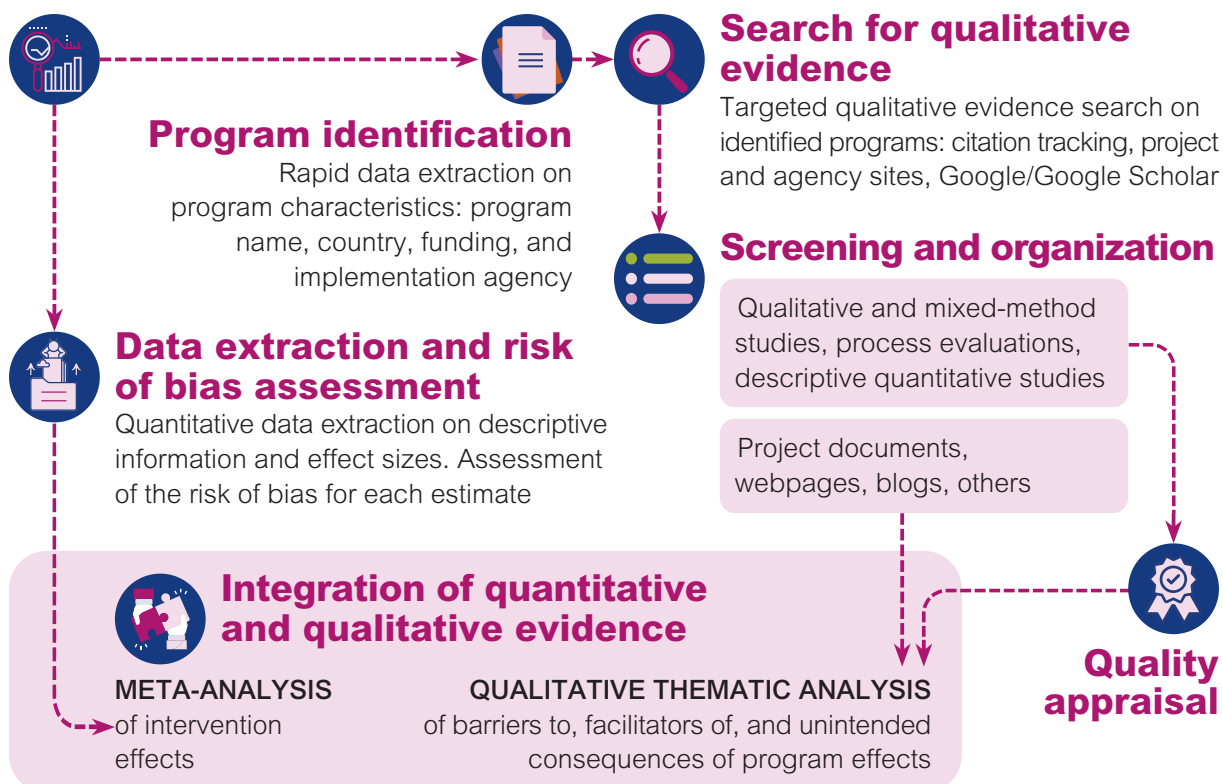
**We assessed the trustworthiness of evidence** for 162 primary data-based qualitative, mixed-method, descriptive quantitative studies, and process

evaluations using a modified qualitative and mixed-method appraisal tool.<sup>8</sup> Our assessment rated 62% of the qualitative studies as critical quality (and thus not usable in the analysis), 15% as low quality, 22% as moderate quality, and 1% as high quality.

**Finally, we synthesized evidence from 62 high-, medium-, and low-quality primary qualitative studies and 432 descriptive qualitative papers**, using a thematic synthesis approach with an inductive coding technique. We used a line-by-line coding tool to generate descriptive themes. We then grouped these into analytical themes related to the program context, design, implementation, and population characteristics that influenced any of the overarching themes of unintended consequences of the program, and barriers and facilitators impacting intervention effects.

## Integrating qualitative evidence with quantitative evidence

### Quantitative evidence





# How qualitative evidence improved our understanding of program effects and programmatic issues

Our meta-analysis found statistically significant, yet small and positive effects of several FSN interventions on women's empowerment outcomes. However,

**limited data meant that the quantitative analysis provided minimal insight into potential sources of variations in program effects.**

We addressed this limitation by examining our qualitative findings, which gave us a greater understanding of programmatic and external factors (e.g., program design and implementation issues, context, and population characteristics) that may have impeded program success, facilitated the achievement of program goals, or led to unintended consequences:

## Barriers

- Restrictive gender norms may hinder women from benefiting from the programs by limiting their control over assets, mobility, participation in income-generating activities, and decision-making. Other such barriers include male dominance and intimate partner violence.
- Systemic challenges, including unfavorable inheritance laws, may limit women's ownership of and access to resources.
- External issues, such as unfavorable political conditions, conflicts, and natural hazards, can abruptly suspend or delay programs, hampering the progress of women participants.
- Program design-related issues, including unplanned and inadequate budgets, ambiguous policy provisions, and unclear management strategies, can undermine overall delivery and women's ability to engage with program activities.
- Program implementation challenges may limit women's ability to participate and fully benefit from programs. These challenges include: inadequate program quality, staff skills, or incentives for project teams; loss of trust and resistance from participants and communities; and women's inability to participate due to distance.

## Facilitators

- Liberalization of gender norms might improve intervention effectiveness. Some programs found that men challenged traditional gender roles, such as by engaging in joint decision-making and facilitating women's participation in economic activities.
- Legal backing also played a significant role in securing and advancing women's rights.
- Integrating risk factors into program design and implementation plans can facilitate an enabling environment by anticipating issues beforehand and being prepared to solve them.
- Testing and piloting intervention components allowed for rapid integration of learning and ensured a fit-for-purpose design.

## Unintended consequences

- Burdens on women can become excessive when program activities assign them additional social, economic, or administrative responsibilities.
- Dependency on programs occurred in some instances, such as households that reverted to food insecurity after graduation from poverty and cessation of cash transfers. This was particularly common among female-headed households.
- Escalated family disputes can result from land access provided to legally married women, due to flaws in the adjudication and titling process.
- Enhanced reputation and influence of women can occur within communities as a result of program participation.

# Implications for future programs and research: lessons from qualitative evidence

These findings can help policymakers, funders, program implementers, and researchers to enhance future programs and evaluations related to food systems and women's empowerment.

## Programmatic takeaways for policymakers and implementers based on qualitative evidence

- **A holistic, gender-transformative approach from the early stages of the project** can address restrictive gender norms found in the culture (e.g., limited mobility) and the system (e.g., laws biased against women).
- **Interventions should account for women's vulnerabilities**, such as age, poverty, rural residence, and education level, to ensure inclusive participation.
- **To sustain women's empowerment, potential burdens and dependencies created by interventions**, such as increased labor demands or administrative tasks, should be mitigated.

## Takeaways for researchers based on assessment of qualitative evidence

- Researchers should **enhance methodological rigor and transparency** in qualitative studies.
- Based on our quality assessment, researchers can **improve the trustworthiness of qualitative evidence** by focusing on the appropriateness of the research design and participant selection, transparency of the process, data-supported arguments, and reflection on contextual factors.
- **More qualitative analysis is needed to unravel the complex impact pathways** of FSN programs on women's empowerment, particularly in areas where evidence is scarce, such as programs addressing consumer behavior and the food environment.



# The research team’s experience of the qualitative integration process

Regarding our search process for qualitative evidence ...

*To complement the qualitative evidence, we identified during citation searches, we searched websites of implementers/ funders. This helped ensure we only included documents relevant to the program in question.*

**Philip Orishaba**  
Research Assistant

*We adopted a few strategies to reduce the volume of search results and ensure we stayed within resource thresholds. When searching for the program, we used quotation marks around the name and added the country where the program took place (e.g., ‘Targeting Ultra Poor’ Bangladesh). If there still were too many search results, we stopped the screening for relevant records once none were included for five pages consecutively.*

**Paulo Fernandes**  
Research Assistant

*There are a few limitations of our qualitative search process and approaches we want to explore in future research. We did not systematically search for programs based on our Population-Intervention-Comparison-Outcome-Study Design (PICOS); we only ran targeted searches for the included programs in the quantitative studies. We did not contact the program agencies/researchers to ask for additional relevant publications. This means that there might be more evidence out there that could contribute to our understanding of the evidence.*

**Ingunn Storhaug**  
Qualitative Lead





# The research team’s experience of the qualitative integration process

## Regarding our appraisal for evidence equality ...

“ We modified Langer, Tripney, and Gough’s quality assessment tool with several probing questions to reduce subjectivity and consistency, and double-coding ensured our rating reliability. This tool greatly facilitated the assessment of the quality of the qualitative body of evidence. It greatly benefitted the accuracy of our analysis. However, the appraisal tool has limitations—it does not consider bias from implementer/researcher affiliation and lacks ethical consideration in research conduct. This might be a consideration and addition for our future synthesis projects.

Etienne Lwamba  
Project Lead

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## Regarding our approach to thematic analysis ...

“ For our thematic analysis, inductive coding with a pre-structured coding scheme kept our line-by-line qualitative data coding tightly wrapped around the research questions. It saved us much time and effort in data cleaning and analysis. We used EPPI Reviewer’s text coding tool; there are other more sophisticated tools, but using the same platform for searching, screening, and coding streamlined our process greatly.

Ashiqun Nabi  
Qualitative Lead

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# About this brief

This brief is based on the report, *The effects of food systems interventions on women's empowerment: A rapid evidence assessment*. The brief is authored by Ashiqun Nabi, Ingunn Storhaug, Sanghwa Lee, Pierre Marion, Etienne Lwamba, and Shannon Shisler, with support from Danish Us-Salam, Paulo Fernandes, Philip Orishaba, and Zhaocheng Gu. They are

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## Endnotes

<sup>1</sup> Birte Snilstveit. 2012. "Evidence to Policy: Bridging Gaps and Reducing Divides." Evidence Matters: Towards Equitable, Inclusive and Sustainable Development (blog). <https://www.3ieimpact.org/blogs/evidence-policy-bridging-gaps-and-reducing-divides>.

<sup>2</sup> Flemming, Kate, Andrew Booth, Ruth Garside, Özge Tunçalp, and Jane Noyes. 2019. "Qualitative Evidence Synthesis for Complex Interventions and Guideline Development: Clarification of the Purpose, Designs and Relevant Methods." *BMJ Global Health* 4 (Suppl 1): e000882. <https://doi.org/10.1136/bmjgh-2018-000882>.

<sup>3</sup> Saini, Michael, and Aron Shlonsky. 2012. *Systematic Synthesis of Qualitative Research*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195387216.001.0001>.

<sup>4</sup> Snilstveit, Birte. 2012. 'Systematic Reviews: From "Bare Bones" Reviews to Policy Relevance'. *Journal of Development Effectiveness* 4 (3): 388–408. <https://doi.org/10.1080/19439342.2012.709875>.

<sup>5</sup> Berretta, Miriam, Meital Kupfer, Shannon Shisler, and Charlotte Lane. 2023. "Rapid Evidence Assessment on Women's Empowerment Interventions within the Food System: A Meta-Analysis." *Agriculture & Food Security* 12 (1): 13. <https://doi.org/10.1186/s40066-023-00405-9>.

<sup>6</sup> SPRING. 2014. *Understanding the Women's Empowerment Pathway*. Brief 4, Improving Nutrition through Agriculture Technical Brief Series. Arlington, VA: USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project. [https://spring-nutrition.org/sites/default/files/publications/briefs/spring\\_womensempowerment\\_brief\\_4\\_0.pdf](https://spring-nutrition.org/sites/default/files/publications/briefs/spring_womensempowerment_brief_4_0.pdf).

<sup>7</sup> Basak, Kishore Kumer, Etienne Lwamba, Ingunn Storhaug, Pierre Marion, Ashiqun Nabi, Shannon Shisler, and Anil Thota. 2024. *The Effects of Food Systems Interventions on Women's Empowerment: Protocol for a Rapid Evidence Assessment*. London: International Initiative for Impact Evaluation (3ie). <https://3ieimpact.org/sites/default/files/2024-04/FSNWE-REA-Protocol.pdf>.

<sup>8</sup> Langer, Laurenz, Janice Tripney, and David Gough. 2016. 'The Science of Using Science: Researching the Use of Research Evidence in Decision-Making'. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London. <https://discovery.ucl.ac.uk/id/eprint/1493171/1/Science%20of%20Using%20Science%20Final%20Report%20April%202016.pdf>.



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