

MISSING LINKS: ADDRESSING THE RESEARCH GAP ON THE HIDDEN MIDDLE IN AGRIFOOD SYSTEMS¹

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This policy paper highlights the persistent evidence gap surrounding the "hidden middle"—the midstream and downstream services that connect smallholders to markets. Despite their growing role in agrifood systems, these segments remain largely overlooked in impact evaluations. As food systems evolve with urbanization and shifting consumer demand, midstream and downstream actors—including, processors, aggregators, retailers, wholesalers, and logistics providers—have become central to how food moves from farms to consumers (Reardon, 2015; Barrett et al., 2022).

The structure of agrifood systems shifts markedly as countries develop. In low-income contexts, primary agricultural production dominates, and food supply chains tend to be short and localized. As countries urbanize and incomes rise, however, the share of off-farm activities in agrifood system increases substantially. Yet the pace and pattern of this transformation are uneven across countries and commodities, making it all the more urgent to understand how different actors within the hidden middle contribute to inclusive and efficient food systems. Yet most empirical research continues to focus on producers and public goods, offering little insight into the performance, challenges, or potential of the MSMEs that operate the hidden middle. Where evidence does exist, it is often narrow, geographically concentrated, and insufficient to inform large-scale policy decisions.



INCATA: Linked Farms and Enterprises for Inclusive Agricultural Transformation in Africa and Asia Project funded by the Gates Foundation and implemented by Rimisp, MSU, IFPRI-Asia and Tegemeo Institute

Project objective

The INCATA initiative examines the relationship between commercial small-scale producers (cSSPs) and micro, small, and medium enterprises (MSMEs) in the hidden middle of agrifood value chains to explain how it underprises and contributes to an inclusive agricultural transformation.

Work streams

The project works around two work streams, (i) LSMS-ISA data analyses for six African countries, and (ii) Horticulture and aquaculture value chain analyses in Kenya (led by Tegemeo Institute) and in Odisha, India (led by IFPRI), and aims to answer four research questions:

Research questions

- 1. What are the prevailing patterns of commercialization among small-scale producers (SSPs) and the key policy- and non-policy-related factors that shape their engagement with "hidden-middle" MSMEs?
- 2. Which cSSPs and MSMEs succeed in raising incomes, investing, adopting new technologies, and accessing larger or higher-value markets during the transformation process—and why do others lag?
- 3. To what extent does a greater commercialization of SSPs and the expansion of MSMEs translate into poverty reduction and advances in women's economic empowerment (WEE)?
- 4. Which investments and policies have the most significant potential to accelerate the symbiotic co-development of cSSPs and MSMEs?

WHERE IS THE EVIDENCE CONCENTRATED?

The landscape of impact evaluations and systematic reviews is heavily tilted toward upstream interventions, such as smallholders and public goods. Among 276 rigorously reviewed studies:

- ▶ 52% address upstream interventions targeting smallholder producers such as input provision, certification schemes, and on-farm storage.
- > 21% evaluate public goods, particularly roads, irrigation, and electrification.
- Only 27% of studies address the hidden middle.

Within the upstream and public goods categories, some areas have relatively abundant and robust evidence. For example, input provision, electrification, roads, and irrigation infrastructure show consistent positive impacts, as well as interventions regarding innovation, certification, organization, and producer-level storage. In comparison, evidence on credit and insurance shows mixed results, while the evidence on processing is too scarce to draw reliable conclusions.

The hidden middle, by contrast, remains severely under-evaluated. Within the 27% of studies that address it, nearly half focus on a single mechanism: contract farming, a model often designed to bypass rather than strengthen intermediary actors. Moreover, contract farming typically accounts for less than 10% of cultivated land in most low- and middle-income countries, leaving the majority of producers outside its reach.

Only two broad conclusions can be drawn with confidence: contract farming tends to benefit participating producers, and value chain—wide interventions can be effective when they include midstream actors. In contrast, most other hidden middle functions—such as aggregation, storage, processing, intermediation, and food retail—are supported by no more than four impact evaluations each. Moreover, services like training, credit, market information, and ICT are usually assessed from a producer perspective, overlooking the MSMEs that provide these services. Yet these firms account for between one-third and two-thirds of agrifood system value added in developing countries. This imbalance in the evidence base leaves policymakers with little guidance to design interventions that reflect midstream realities.

WHERE IS THE EVIDENCE MISSING OR INSUFFICIENT?

A number of critical blind spots emerge:

- **▶ Limited coverage across functions:** 14 of the 16 identified hidden middle categories lack enough evaluations to support evidence-based recommendations.
- ▶ **Producer-centric framing:** Services like storage, processing, and market information are commonly analyzed as farm-level interventions, rather than as functions managed by MSMEs or value chain actors. Few studies assess policies targeting private storage providers, cooperatives acting as storage hubs, or SMEs offering storage as a service—revealing a major gap in the evidence on midstream logistics and service provision.
- ▶ **Geographic bias:** 62% of studies are from Sub-Saharan Africa, with half of these focused on just four countries (Ethiopia, Kenya, Tanzania, and Uganda). Latin America and much of Asia remain underrepresented. Most sources are formally published studies in English, potentially excluding high-quality evaluations from local government agencies, NGOs or development partners.
- ▶ Methodological limitations: 75% of studies rely on quasi-experimental designs, with potentially weak controls for bias that have not been appraised by the review. Few studies isolate the effects of specific intervention components within multi-faceted programs.

In low-income countries, the hidden middle to be less developed, tends limiting opportunities for evaluation. These midstream and downstream actors (such as aggregators, processors, wholesalers, and logistics providers) typically emerge and expand alongside urbanization, shifting consumer preferences, and economies of scale. As agrifood systems complex, **MSMEs** more play increasingly central role, but such dynamics are still nascent in many developing contexts, where supply chains remain short and localized and where most of these evaluations come from.



WHAT NEEDS TO CHANGE?

Three core shifts are needed:

- 1. Expand the focus of research and evaluation: Future studies must explicitly target the MSMEs, services, actors and institutions operating between farms and consumers. These include wholesalers, logistics providers, processors, retailers, and the coordination mechanisms that connect them.
- 2. **Reframe service delivery:** Impact evaluations should assess how services like credit, training, innovation, and ICT function when delivered through or to midstream actors, not just as farmlevel inputs.
- 3. Diversify geographical and methodological approaches: A broader geographic lens, both within low-income countries beyond Sub-Saharan Africa and across more developed contexts, is needed to generate more generalizable insights. Future evaluations must make explicit efforts to isolate the effects of hidden middle interventions, rather than embedding them in broad, multi-component programs where attribution remains unclear.

METHODOLOGY

The review screened over 1,200 abstracts, eventually retaining 276 documents (229 impact evaluations and 47 systematic reviews) based on rigorous methodological standards. Studies were identified through public databases such as 3ie, IFPRI, CGIAR, OECD, and the World Bank, supplemented by targeted searches on Google Scholar. Priority was given to studies published from 2010 onward. While offering robust insights, the review is constrained by regional concentration (notably in Sub-Saharan Africa), potential publication bias, and difficulty in isolating the effects of multi-component interventions.

Strengthening agrifood systems requires greater attention to the midstream and downstream actors that connect farms to markets. The current evidence base remains skewed toward upstream interventions or models that bypass the hidden middle, leaving a critical blind spot around the services and enterprises that sustain food flows. This gap reflects an outdated view of food systems and limits the policy tools available to meet evolving challenges. Closing it is essential for designing effective, future-ready interventions.