



**Advancing agent networks and merchant payments for
financial inclusion in low- and middle-income Countries
(LMICs): An Evidence and Gap Map**

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Abstract:	



Title registration for an evidence and gap map:

Advancing agent networks and merchant payments for financial inclusion in low- and middle-income Countries (LMICs): An Evidence and Gap Map

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Title of the EGM

Title: Advancing agent networks and merchant payments for financial inclusion in low- and middle-income Countries (LMICs): An Evidence and Gap Map

Background

In low- and middle-income countries (LMICs), expanding agent networks and Merchant payments are crucial to improving access to digital financial services (DFS) such as mobile money and agent banking (Acimovic et al., 2020; Bianchi et al., 2021). These services enhance financial inclusion, benefiting women, low-income households, SMEs, and small businesses. For instance, evidence from Uganda shows that mobile money agents significantly increase savings, borrowing, and remittances (Munyegera & Matsumoto, 2017), while women using mobile-based microfinance loans have improved business profits and capital (Riley, 2019).

However, despite their importance, both quantitative and qualitative evidence on how agent networks and merchant payments are organized, incentivized, and expanded to promote financial inclusion is limited (Akhtar et al., 2023). The Retail Finance Distribution (ReFinD) initiative led by the Institute of Statistical Social and Economic Research (ISSER) seeks to address these gaps by supporting research to improve merchant payments and agent networks' efficiency and reach, promote innovation, and inform policy and practice in Digital Finance Service.

Moreover, the existing evidence is fragmented and often presented in highly technical formats, making it challenging for policymakers to access and apply it in decision-making (Choudhary & Jain, 2023). For this reason, the International Centre for Evaluation and Development (ICED), in collaboration with ReFinD, will develop an Evidence and Gap Map (EGM) on advancing agent networks and merchant payments for financial inclusion in LMICs with focus on Sub-Saharan Africa (SSA), South East Asia (SEA) and South Asia (SA). The EGM will consolidate existing evidence, identify research gaps, and guide future studies and interventions. It will also include studies commissioned by ReFinD to assess the program's contribution to the evidence base.

Additionally, ICED will build the capacity of ISSER and ReFinD grantees to co-create and develop the EGM through hands-on training in search strategy development, screening, coding, and data extraction. The EGM will also foster collaboration among researchers, policymakers, and practitioners, promoting evidence-informed decisions that advance financial inclusion in LMICs.

The study seeks to address the following objectives:

- Systematically review and synthesize existing evidence on the development of agent networks and merchant payments in LMICs.
- Identify gaps in the current literature and prioritize areas for further research and intervention.
- Facilitate evidence-based decision-making among policymakers, practitioners, and researchers.
- Assess trends in the volume and nature of studies commissioned before and after the ReFinD initiative to understand its contribution to the research ecosystem on agent networks in LMICs.

Why is this EGM needed in light of existing EGMs?

There are a few Evidence and Gap Maps (EGMs) that have been developed in the area of financial inclusion and digital finance; however, they have focusing primarily on the demand or user side of financial services. The supply side, which is crucial for ensuring the sustainability and scalability of financial inclusion, remains underexplored.

For instance, Mader et al. (2022) developed an EGM that reviewed various financial services, including agent networks and merchant banking, but the emphasis was largely on the impact of these services on end users rather than on the structural and operational mechanisms that enable them. Similarly, the Center for Financial Inclusion (2023), in its Digital Finance Evidence Gap Map, examined financial services such as mobile money and mobile banking but the outcomes again focused on user-level impacts like adoption and usage, without addressing the supply-side that sustain agent and merchant networks.

To date, there is no known EGM that has explored agent networks and merchant payment systems, their organization, liquidity, infrastructure, incentives, and expansion strategies from a supply side perspective. This proposed EGM therefore fills an important gap by consolidating and mapping the existing evidence on agent network development and merchant payments to inform policy, practice, and investment decisions that strengthen the delivery and sustainability of digital financial services.

Suggested dimensions

The EGM will be organized using an intervention–outcome framework, where the primary dimensions are types of interventions and financial inclusion outcomes. The broad and sub-categories of the intervention and outcomes have been explained the intervention and outcome sections respectively.

Intervention(s) or problem

The interventions for this EGM have been categorised into four groups– Agent and Merchant Network Development; Capacity Building and Institutional Strengthening; Digital Financial

Infrastructure and Innovation; and Policy, Regulatory, and Market Enablers. The table below shows these broad intervention categories, their respective sub-categories, definitions and some examples or indicators which are likely to be used in various studies or evaluations.

Table 1: Intervention domains, sub-categories, and examples

Category	Sub-category	Definition	Examples
Agent and Merchant Network Development			
	Network Expansion and Reach	Interventions that aim to grow and strengthen agent and merchant networks, especially in underserved and rural areas, to improve access to financial services.	<ul style="list-style-type: none"> • Recruitment and licensing of new agents and merchants • Rural deployment incentives • Share of agent networks among providers • Start-up support in low-access areas
	Liquidity Support	Measures that enhance the liquidity for agents and merchants to deliver financial services efficiently.	<ul style="list-style-type: none"> • E-float financing schemes • Cash management systems
	Infrastructure Support	Interventions enhance the infrastructure available to agents and merchants to deliver financial services efficiently.	<ul style="list-style-type: none"> • Access to POS devices, connectivity, and power banks (solar kits, boosters)
Capacity Building and Institutional Strengthening			
	Training and Skills Development	Initiatives that enhance the knowledge, skills, and competencies of agents, merchants, and financial service providers to improve service quality and sustainability.	<ul style="list-style-type: none"> • Agent certification programs • Customer service and compliance training • Digital and financial literacy for merchants • Gender-sensitive training modules
	Institutional and Regulatory Capacity Support	Programs that build the technical and managerial capacity of financial service providers, regulators, and policymakers to sustain inclusive digital ecosystems.	<ul style="list-style-type: none"> • Central bank digital finance training • Support for agent/merchant supervision • Technical assistance to fintech associations

Digital Financial Infrastructure and Innovation			
	Technology and System Modernization	Investments in digital and payment infrastructure that enhance transaction efficiency, reliability, and interoperability.	<ul style="list-style-type: none"> • Real-time transfer payment systems • National payment switches • Digital ID integration for onboarding • API-based interoperability between banks and Fintechs
	Product and Service Innovation	Development of new or improved financial products and delivery mechanisms to support inclusion through agents and merchants.	<ul style="list-style-type: none"> • QR-code and contactless payments eg. tapping a contactless-enabled card, phone, or wearable device • Mobile money app innovations • Bundled savings or insurance products for merchants
	Security and Surveillance	Innovations that aim to improve security at the agents' or merchants' business location	<ul style="list-style-type: none"> • CCTV camera systems installation
Policy, Regulatory, and Market Enablers			
	Regulatory Reforms and Policy Frameworks	Reforms that enable innovation, reduce barriers to entry, and promote safe, competitive, and inclusive agent and merchant operations.	<ul style="list-style-type: none"> • Simplified KYC for low-value accounts • Licensing frameworks for non-bank agents • Gender-inclusive digital finance policies
	Consumer Protection and Risk Management	Measures to safeguard customers and agents from fraud, unfair practices, and operational risks.	<ul style="list-style-type: none"> • Digital fraud monitoring • Data protection frameworks • Consumer complaint mechanisms • Tariff posting
	Market Development and Incentives	Initiatives that create enabling environments and partnerships	<ul style="list-style-type: none"> • Fintech sandboxes • Merchant digitization subsidies

		for scaling digital payments and agent networks.	• Transaction fee reductions or incentives
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Population

This EGM's population focuses on supply-side actors involved in advancing agent networks and merchant payments for financial inclusion in LMICS, with specific geographic focus on Sub-Saharan Africa (SSA), South Asia (SA), and Southeast Asia (SEA).

Target Populations include:

- **Retail and banking agents:** Intermediaries who provide financial services on behalf of formal financial institutions such as banks, mobile network operators, or fintech companies. E.g. mobile money agents, banking correspondents, or cash-in/cash-out operators who facilitate deposits, withdrawals, fund transfers, bill payments, etc.
- **Merchants:** Individuals or businesses that accept and process digital or electronic payments for goods and services. E.g. small and medium-sized enterprises (SMEs), shop owners, and digital payment merchants, etc.
- **Financial service providers and regulators:** Institutions and organizations that design, manage, or regulate agent and merchant payment systems. E.g. Banks, microfinance institutions, fintech firms, Central Bank, etc.
- **Technology and Infrastructure Enablers:** Entities that develop, maintain, or provide the core technology and platforms that power agent and merchant payment ecosystems. E.g. software platform providers (agent management systems, payment switch operators), point-of-sale (POS) terminal manufacturers, and telecommunications network providers.
- **Aggregators, Distributors, and Super-Agents:** Intermediaries that manage and support a network of sub-agents, providing liquidity, training, and logistical support. They are crucial for scaling networks into rural or hard-to-reach areas. E.g. super-agents, distributor companies, and network orchestrators.
- **Donors and Investors:** Organizations that provide funding, technical assistance, or catalytic capital to develop and expand agent networks and merchant payment solutions. E.g. development finance institutions (DFIs), impact investors, and international aid agencies.

This EGM's population excludes studies conducted in High-income countries, and studies that focus exclusively on demand-side users.

For equity and relevance considerations, this EGM's population will consider equity dimensions such as gender dynamics, and rural-urban disparities.

Outcomes

The outcomes for this EGM have been categorised into four folds – Access and Reach; Usage and Uptake; Quality, Reliability and Efficiency; and Sustainability and Market Development.

The table below shows these broad outcome categories, their respective sub-categories, definitions and some examples or indicators which are likely to be used in various studies or evaluations.

Table 2: Outcome domains, sub-categories, and examples

Category	Sub-category	Definition	Examples / Indicators
Access and Reach	Agent and Merchant Penetration	Extent to which agents and merchants are available and accessible to users across different locations and population groups.	<ul style="list-style-type: none"> • Number of agents/merchants per 1,000 adults • Number of agents in rural vs. urban areas • Geographic distribution of agent networks • Availability of financial service points per district
	Customer Access to Services	Measures how easily individuals and enterprises can reach and use financial services through agents or merchants.	<ul style="list-style-type: none"> • Average distance to nearest agent • Share of population living within 5 km of an agent • Number of new accounts opened through agents • Female and youth access to financial agents • Differently-abled access to financial agents
Usage and Uptake	Transaction Volume and Frequency	This indicates the extent to which customers actively use agents and merchants to perform financial transactions.	<ul style="list-style-type: none"> • Volume and value of transactions per agent • Number of active users per month • Frequency of cash-in/cash-out transactions • Number of digital merchant payments processed
	Product Diversification and Adoption	Captures the range of financial products accessed through agents and merchants, reflecting the depth of usage.	<ul style="list-style-type: none"> • Uptake of savings, credit, and insurance via agents • Share of customers using multiple services • Growth in merchant digital payment acceptance

Quality, Reliability, and Efficiency			
	Service Reliability and Performance	Measures stability and operational efficiency of financial service delivery through agents and merchants.	<ul style="list-style-type: none"> • Transaction success rates • System downtime or failure frequency • Average transaction processing time • Network connectivity and system response
	Customer Experience and Trust	Reflects user confidence, satisfaction, and perception of fairness in using agent and merchant services.	<ul style="list-style-type: none"> • Customer satisfaction scores • Number of complaints received and resolved • Transparency of fees and pricing • Perceived safety of agent transactions/ fraud perception
Sustainability and Market Development			
	Business Viability of Agents and Merchants	Measures the profitability, retention, and growth potential of agents and merchants in maintaining service delivery.	<ul style="list-style-type: none"> • Agent profitability (revenues minus costs) • Average commission earned per transaction • Retention rates of active agents • Access to working capital and liquidity
	Ecosystem and Policy Outcomes	Captures broader systemic or regulatory improvements that sustain financial inclusion through digital finance ecosystems.	<ul style="list-style-type: none"> • Number of interoperable payment platforms • Adoption of inclusive financial policies • Level of private sector investment in agent/merchant networks • Growth of partnerships among banks, fintechs, and MNOs

Study designs

This EGM includes studies, reports and reviews whether published or unpublished with these study designs: Experimental

1. Experimental study
2. Quasi-Experimental / Natural Experiments
3. Descriptive / Observational Qualitative
4. Qualitative study
5. Systematic Reviews / Meta-Analyses

Stakeholder engagement

The EGM engages the following stakeholders:

- Development practitioners: will be consulted to define our PICOS as well as use findings of the EGM to prioritise their funding decisions.
- Policymakers: will be consulted to define our PICOS as well as use and disseminate the results of the findings of the EGM.
- Academicians: will be consulted on the literature list to ensure that we do not miss relevant studies as well as use the findings of the EGM to do more research on climate change adaptation that have an evidence gap.
- International Centre for Evaluation and development (ICED) board members: make sure the EGM is conducted as planned.
- ICED and Institute of Statistical Social and Economic Research (ISSER) team: conduct the EGM and disseminate the main findings of the research through various channels.
- Retail Finance Distribution (ReFinD): provide funding to undertake the EGM; will also be consulted to define our PICOS; use findings of the EGM to prioritise their funding decisions; and disseminate the results of the findings of the EGM.
- Campbell Collaboration: Publishing and disseminating the EGM.

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Potential conflicts of interest

None of the authors has reported any conflict of interest.

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