TECHNICAL NOTE

CGAP

DEVELOPING RURAL AGENT NETWORKS TO ADVANCE DIGITAL FINANCIAL INCLUSION

Emerging Guidance for Funders

August 2022

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ACKNOWLEDGMENTS

This Technical Note is developed from stakeholder consultations and CGAP's research on Cash-In / Cash-Out (CICO) agent networks in five countries—China, Colombia, India, Indonesia, and Kenya.

CGAP is grateful to the external reviewers who provided comments on earlier versions of this Technical Note: Howard Miller (Independent Consultant), Nadhem Mtimet, Sauli Hurri and Lorna Grace (IFAD), and Michael Warmington (Mercy Corps).

We wish to thank CGAP colleagues Claudia McKay, Michael Tarazi, Estelle Lahaye, Emilio Hernandez, Elizabeth Kiamba and Arisha Salman who provided critical inputs, guidance, and research assistance, as well as Natalie Greenberg for her editorial support.

Thanks also go to the authors and contributors to the CGAP Technical Guide, "Agent Networks at the Last Mile," and Technical Note, "Agent Network Journeys Toward the Last Mile: A Cross-Country Perspective," which this Technical Note builds upon.

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EXECUTIVE SUMMARY

RURAL DEVELOPMENT IS CENTRAL to realizing the 2030 Sustainable Development Goals (SDGs) agenda because nearly 80 percent of the world's poor live in rural areas (UNDESA 2021). Moreover, rural populations have less access to education, health, electricity, sanitation, and other services, leading to marked rural-urban disparities, discontent, and discord.

It is widely accepted that financial services for the poor and excluded is a key enabler in advancing several SDGs. However, increasing access to, and usage of, financial services in rural areas is not easy. These areas tend to be poor, remote, sparsely populated, and poorly connected by weak infrastructure. This makes rural markets more expensive to serve for financial service providers and less attractive compared to urban markets. Digital financial services (DFS) can help lower costs for providers, which is essential for reaching poor customers at scale.

While the term "digital financial services" suggests that everything can be conducted on a phone, a network of human touchpoints known as cash-in / cash-out (CICO) agents is critical, especially in rural economies which are predominantly cash-based. Rural customers need financial access points where they can convert physical cash into e-money and back. Without the confidence that e-money can easily be converted into physical cash when needed, many customers hesitate to accept e-money payments. Further, since rural populations are characterized by a long history of financial exclusion (and low financial and digital literacy) CICO agents are uniquely positioned to provide the awareness, trust and capacity building needed to advance formal finance.

CICO agents are individuals or commercial entities, like small retail shops or even roaming sale agents, contracted by financial service providers (FSPs) to act as an interface with customers and distribute their services. CICO agents tend to be in close proximity to the communities they serve, enjoy their trust, and are familiar with their customers' needs, enabling them to drive adoption and usage of DFS. Female CICO agents are also positioned to advance women's financial inclusion; underbanked women customers exhibit a strong preference to transact with female agents, even when they are not easily accessible, and especially when female customers have high account balances. The agents provide a range of services from opening and helping operate e-money accounts, converting cash to e-money and back, conducting over-the-counter payment services (like bill payments, remittances) and troubleshooting.

The importance of CICO agents to rural areas goes beyond the distribution of DFS. The frontier nature of rural economies imposes high distribution costs on goods and service providers catering to these markets, including governments. CICO agent networks can be leveraged by these providers to distribute or facilitate payments for a wide variety of essential goods and services such as off-grid electricity, water, education, pharmaceutical and nutritional products, and fast moving consumer goods. They can also make government-to-person payments like social protection payments and humanitarian assistance, which can help poor households improve their wellbeing, take advantage of opportunities to generate incomes, and build resilience to prepare for shocks.

The significance of CICO agent networks has been underscored during the COVID-19 pandemic when several countries including India, Mexico, the Philippines, Vietnam, and Pakistan declared CICO agents "essential service providers," allowing them to remain open during the pandemic, distribute emergency relief payments, make

other social transfers and keep remittances flowing (GPFI and World Bank 2021). Other countries, such as Ecuador, made policy changes to support expansion of agent networks by relaxing entry requirements and simplifying agent onboarding procedures, leading to a doubling of the number of agents (Baur-Yazbeck and Johnson 2020, Cavallari 2020).

Given the importance of CICO agent networks in promoting financial inclusion, facilitating access to basic services, and advancing several development outcomes, and given the increased interest of governments in digitization during the COVID-19 pandemic, funders should consider supporting the expansion of CICO networks in rural areas as a priority. Although many development funders recognize the importance of these networks and rely on them to distribute financial assistance or improve value chains, not enough is being done to expand them in a sustainable way. More is needed to build viable agent networks that serve poor rural customers.

DFS providers invested extensively in developing their distribution network in recent years. Yet CICO agent networks lag where they are needed the most—at the last mile, in rural areas, where most of the world's poor and underbanked live. Fifty percent of the rural population in India, Indonesia, Pakistan, Bangladesh, Tanzania, Kenya, and Uganda—which are among the world's most underbanked countries—live more than five kilometers away from the nearest financial access point, compared to only 10 percent of the urban population and 20 percent of the peri-urban population (Unnikrishnan et. al. 2019).

There are market system-wide barriers that hinder the expansion of agent networks beyond urban areas, such as low demand for DFS and CICO agents, a limited supply of traditional CICO agents, unviable businesses models, restrictive regulatory environments, and a weak supporting rural infrastructure.

These barriers can be mitigated through innovations across the market system, as illustrated in Figure ES1. These innovations aim to encourage DFS providers to tailor use cases for rural customers, reduce costs by developing alternative agent profiles and management processes and increase revenues by aggregating financial and non-financial services at the agent level. They often require market actors to leave their comfort zone to leverage technologies and partner with organisations outside financial markets (e.g., fast-moving consumer goods providers, agribusiness, or e-commerce players that operate rural service points).

Although these solutions exist, market actors, including both providers and regulators, often lack the incentive or capacity to implement them. For example, DFS providers often replicate their urban market operations in rural areas, without conducting thorough market research and sufficiently tailoring their products and distribution strategies, which results in unviable rural agent operations and the consequent belief that rural areas are not an addressable market. The inability to appreciate the potential of rural markets stems from a historic lack of familiarity with rural customers and uncertainty of financial returns on rural investments. But such a one-size-fits-all approach leads to low customer uptake and an unviable business model, creating a vicious cycle. Similarly, policymakers and regulators may fail to see why agent networks are critical to digitizing financial services or appreciate all the supporting measures needed to encourage development of these services at the last mile. Lastly, rural customers themselves may be limited in their ability to adopt DFS solutions due to low digital literacy and account penetration, social barriers, and the status quo bias toward the use of cash.

Development funders are uniquely positioned to leverage their financial resources, technical knowledge from global or regional experience, and convening power to align the incentives of various market actors and build their

capacity, so that they design and implement self-sustaining solutions to expand rural CICO agent networks. Figure ES1 describes the various interventions funders can make across each component of the market system – supply, demand, regulation, and infrastructure.

This Technical Note is targeted at development funders (donors and DFIs) and provides high level guidance based on CGAP's prior research. **Section I** introduces CICO agents and describes their importance in advancing sustainable development goals and financial inclusion. **Section II** explains the various market system-wide barriers to expanding rural CICO agent networks, solutions to address these barriers, and what funders can do to create the incentives and capacity among market actors to design and implement these solutions. **Section III** concludes by discussing implications for funders.

FIGURE ES1. **Solutions markets actors can implement to expand agent networks and interventions funders can design to support market actors**

Solutions to be implemented by market actors	Funders' possible interventions
Solutions to increase *supply* of CICO agents • Diversify agent revenue through financial and non-financial service aggregation at agent level, with a service offer mix that responds better to customer needs. This might include support to inclusive technologies, like e-commerce platforms, embedded finance products, etc. • Develop alternative agent profiles, more relevant and available in rural context • Outsource agent management processes to existing network managers • Create additional incentives (beyond profits) to serve as CICO agents • Leverage technology to decrease costs of agent management	Raise providers' knowledge of rural markets and innovative business models (TA, knowledge sharing) Create networking opportunities among DFS providers, and potential partners De-risk pilots to test business model innovations (TA, grants)
Solutions to boost *demand* for CICO agents • Tailor DFS and agent use cases for rural customers, rather than simply replicate the urban experience • Digitize G2P and P2G payments, as well as agricultural value chain transactions, which often represent high volumes of transactions in rural areas and can help kick start the adoption of e-money • Mitigate gendered norms related barriers to DFS use • Raise awareness about DFS and agents among rural customers	Co-fund market research to identify flows to digitize, best agent profile, etc. Support communication campaigns on DFS and CICO agent services (advocacy, TA) Help digitize G2P, P2G and Ag. Value chain payments (advocacy, TA) Encourage providers to adopt customer centric approaches (TA) Help understand and mitigate restrictive gender norms (advocacy, TA)
Solutions to support enabling *policy* and *regulation* • Design regulations to test and enable key innovations, such as alternative agent profiles, agent management outsourcing, agent non-dedication and non-exclusivity. • Create safeguards to protect customers • Develop mechanisms to incentivize or even mandate DFS providers to expand into rural markets	Foster public-private dialogue Foster enabling regulatory environment (TA, advocacy) Advocate for customer protection (TA, advocacy)
Solutions to build supporting *rural infrastructure* • Improve financial infrastructure like bank and postal branches • Expand access to ICT infrastructure like mobile phones, high speed internet • Expand coverage of identity management systems like biometric- enabled national IDs • Design for agent interoperability and non-exclusivity • Develop the data infrastructure and promote data-based decision making for both providers and policy makers	Co-fund infrastructure diagnostics Co-fund rural infrastructure development (ICT, ID, physical, payment interoperability, etc.) Promote evidence-based decision making by providers and public market actors (TA, advocacy, grants)

SECTION 1

CICO AGENTS MATTER FOR FINANCIAL INCLUSION AND DEVELOPMENT GOALS

Who are CICO agents?

The emphasis of the 2030 Sustainable Development Goals on 'leaving no one behind' highlights the importance of designing and implementing solutions that can reach households, enterprises and communities that are often excluded or underserved. Many of the world's rural poor are vulnerable to exclusion because they live in remote, sparsely populated and poorly connected areas with weak infrastructure. It is hard for both businesses and governments to reach them and provide goods and services in an economically viable way.

Agent-based models provide an alternative path to last mile service delivery. They have long been used in the health sector to improve maternal and child health, and to deliver public health services (Agarwal et al. 2019, Nyqvist et al. 2018, Tanvi 2014). Even in the off-grid solar energy sector, agents have played a transformative role in helping to deliver clean and affordable electricity to more than 100 million people (GOGLA 2020). The financial sector is not different, and providers increasingly rely on Cash-in / Cash-out agents (also called CICO agents) to serve customers in markets where the expansion of brick-and-mortar branch networks is not feasible. Typically, agents are remunerated based on variable costs (unlike bank branches which incur fixed costs like rent, salaries etc.), which changes providers' costs structure and significantly lowers the risk of expanding agent networks.

CICO agents are individuals or commercial entities like small retail shops, contracted by financial service providers (FSPs) or their intermediary partners known as Agent Network Managers (ANMs), to act as an interface with customers and distribute the FSP's services. They are quite literally the face of FSPs, as customers often turn to them to learn how to use a service, to ask for their opinion on whether a service is worth trying, and also to resolve problems when they arise. Some agents are dedicated (CICO is their sole operation), while others are non-dedicated (providing CICO services in addition to their core business, such as operating a shop). Non-dedicated agents are particularly common in rural areas.

Agents typically provide the following services to customers:

- Opening and managing an e-money account[1]
- Converting e-money into cash and vice-versa (CICO)
- 'Over the counter' (OTC) payments and remittance services[2]
- Information and marketing services, and troubleshooting

Customers usually first open an e-money account with an agent and then use their mobile phone to transact. However, given that most economies are still heavily cash based—in which customers have most or all of their income and expense flows done in cash, especially in rural areas—clients will continue to use agents to cash in and cash out from their digital accounts, enabling them to make digital transactions. Clients may also choose not to open an account, and instead make 'over-the-counter' transactions, in which agents use their own account to execute transactions for and on behalf of the client.

As financial services continue to be digitized while unbanked people get concentrated in hard-to-reach, often rural, markets with low digital literacy and weak infrastructure, agents assume an outsized importance in helping these people access and use digital financial systems. This is an essential step toward gaining efficient and easy access to a variety of non-financial goods and services that will help them seize opportunities to improve their wellbeing or build resilience to cope with shocks to their livelihoods (*See Figure 1*). CICO agents are building blocks in the digital infrastructure that helps providers, governments, and companies reach rural populations at scale.

CICO agents advance Sustainable Development Goals

CICO agents advance a range of development outcomes by making it easier for populations in cash-based communities to receive remittances, salaries or social transfers or pay for goods and services such as health care, transport, inputs, and electricity and general commerce. This enables poor people, especially women, to capture opportunities and build resilience to improve their wellbeing. Here are some examples of CICO achievements around the world:

Poverty. In Kenya, households that had access to a mobile money agent within one kilometer increased their per capital consumption and were able to lift themselves out of poverty, with effects being pronounced for female-headed households (Jack and Suri 2016). Over a decade since its inception, the M-Pesa mobile money service lifted 194,000 households—two percent of Kenyan households—out of poverty by increasing financial resilience and savings and enabling women to shift their occupation from agriculture to business.

Food security. In Zambia, CICO agents helped promote smallholder food security, productivity, and resilience by enabling farmers to access savings and digital credit to purchase farm inputs like drought resistant seeds and solar irrigation pumps (Mercy Corps Agrifin 2020).

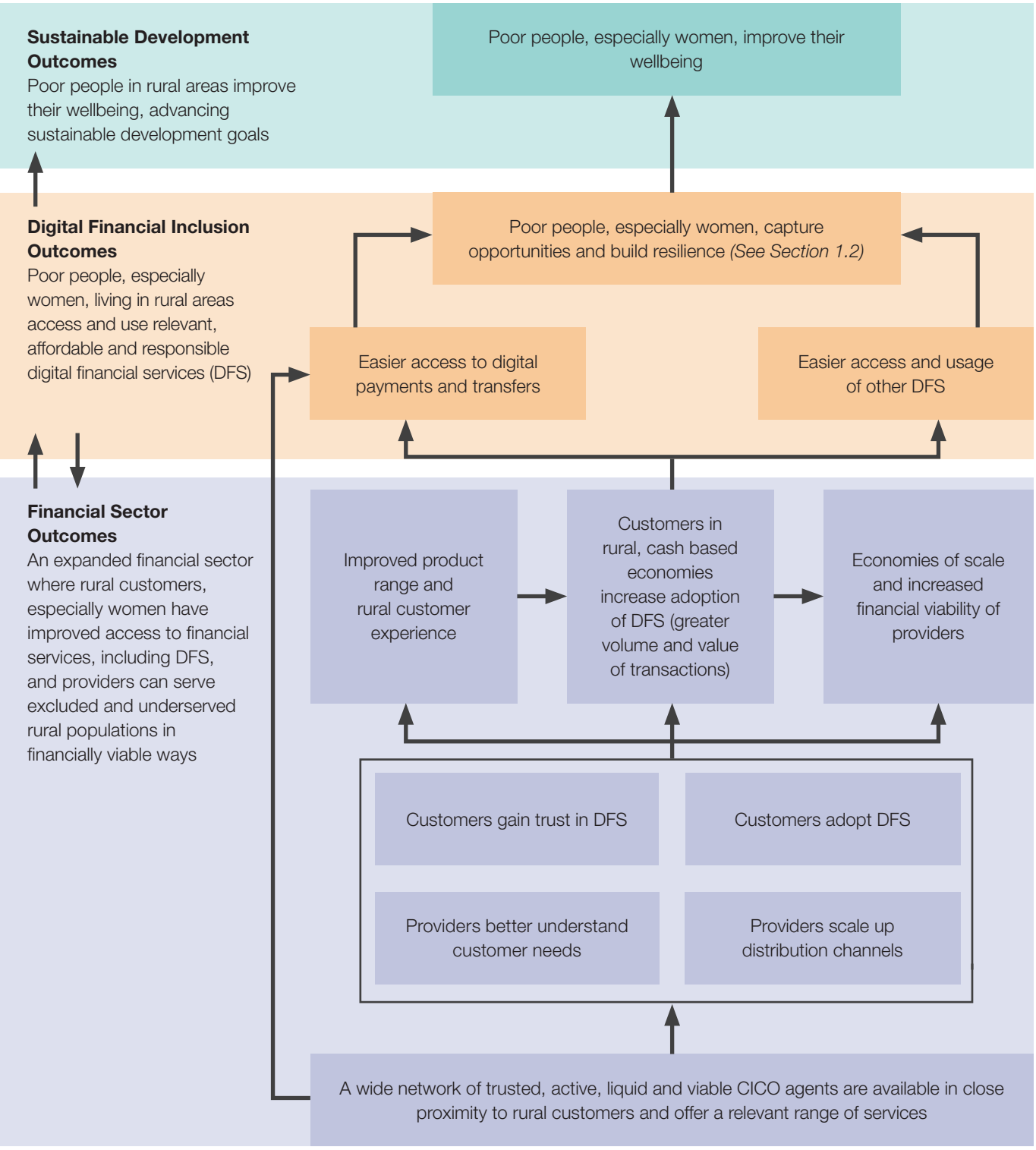
Gender equity. Gender-intentional agent networks can mitigate women's barriers to accessing financial services and provide pathways to women's economic empowerment. In India, when women-led savings groups acted as banking agents, female clients found them more accessible and approachable than male agents. It also led to fewer inactive accounts, a greater share of first-time account holders, higher customer satisfaction and lower agent attrition (Pinto et al. 2020).

Quality education. Research on teacher payment systems from Liberia, Lesotho, Uganda, and Zambia suggests that digitizing payments and delivering pay locally, through agents, can help decrease teacher absenteeism, prevent school closures, and increase teacher morale (Mulkeen 2010).

1 E-money refers to electronically recorded value issued against the receipt of equivalent value. The electronic value, once issued, may be redeemed for cash, transferred between customers, or used by a customer to make payments to merchants, utility companies, and other parties. E-money may be issued by banks or nonbanks. For example, in Kenya, mobile network operator Safaricom issues e-money called 'M-Pesa' to its mobile network customers against fiat currency of equivalent value that users deposit with M-Pesa agents. Users can use their M-Pesa to make remittances, pay for bills, or even convert it into cash with their agents.

2 'Over the Counter' or OTC are transactions in which clients do not use their own wallets but instead hand cash to agents who execute electronic payments on behalf of senders and receivers.

FIGURE 1. **Simplified theory of change, from expanded CICO networks to financial inclusion and SDGs**



Health. During the Ebola crisis in Liberia, humanitarian relief was provided in cash transported by helicopters to rural areas, making it both expensive and logistically challenging. Digitizing payments and strengthening mobile money agent networks offered a more efficient and viable solution, not only providing humanitarian relief, but also helping make timely salary payments to rural civil servants and health workers, reducing the risk of strikes and social unrest (USAID 2020).

Clean and affordable energy. Agents make it easier for customers in rural and remote areas to make payments and purchase top-ups for their off-grid PAYGo solar devices. In a pilot in Tanzania, increased outreach of the CICO agent network led to fewer days when customers were locked out of their PAYGo devices because of payment frictions, and increased revenue for PAYGo solar providers (Pillai and Winiecki 2018).

Climate transition. Agents can help the rural poor access and use services and products to prepare for or deal with the climate transition, for example by facilitating access to savings, credit or grants to invest in a clean energy or irrigation system, rebuild or relocate their homes. In Nigeria, insurance provider PULA leveraged agricultural input agents to register and onboard customers for their index based agricultural insurance product. This led to an increase in take up rates, from just 20-30 percent to 96 percent of smallholder farmers (Hernandez 2018).

CICO agents advance financial inclusion, especially for women

Global evidence suggests that physical distribution channels like CICO agent networks encourage greater use of DFS, especially among low-income customers. Growth in CICO infrastructure is associated with an increase in DFS uptake and use (Arabéhéty et al. 2018). For example, in Kenya, between 2008 and 2018, while the m-Pesa mobile money agent network grew from 2,000 to 148,000 agents, the number of mobile money customers also expanded—from 1.5 million to 30 million (Jack and Suri 2016, The Economist 2018). Similarly, in Mexico, between 2012 and 2018, expansion of banking agents was associated with a nearly 50 percent increase in the number of Mexican adults using agent services, which reached 31.5 million. In rural areas, the number of adults using agent services doubled, reaching 8 million (National Banking and Securities Commission of Mexico (CNBV) 2018).

CGAP's background research and pilots suggest that agents have an important role in promoting the uptake and use of DFS in several ways:

a. **Enabling initial adoption and usage**
   Most people in rural areas earn and spend in cash. They are likely to take up DFS only when they can easily convert their e-money into cash and vice versa (i.e., CICO). Agents drive adoption and usage of DFS through proximity and trust.

   Research into the long-run impacts of mobile money on financial inclusion in Kenya finds that client proximity to the nearest financial service point is a key determinant of clients' usage of DFS (Jack and Suri 2016). Given the scarcity of bank branches and other brick-and-mortar financial infrastructure in rural areas, CICO agents emerge as an alternative, creating value for rural customers by decreasing the distance, time and costs incurred by them to transact with financial service providers, and increasing convenience. CGAP's geospatial analytics in Tanzania show that households are twice as likely to be active mobile money users if they live within five kilometers of a mobile money agent (Arabéhéty et al. 2018).

   Further, well trained agents who demonstrate awareness of various financial products and have the ability to compensate for customers' poor digital literacy skills can help foster customer trust in DFS. The agent model is high touch, where customers are provided face-to-face, personalized services. Moreover, typical agent profiles are those whom local community residents trust, such as a neighborhood grocery or medical shop, mobile network retailers, microfinance credit officers etc. (Sharma and Chatterjee 2017).

b. **Understanding customer needs**
   Leveraging the deep relationships agents build with their customers, FSPs may also develop a better understanding of customer needs across geographic areas and income segments, especially around access

barriers related to social norms, gender norms, capacity issues like digital literacy, confidence etc. that may be hard to capture digitally through mobile wallets. This positions them to collect feedback on user experience and provide services more aligned with customer needs.

c. **Providing scalable distribution channels**
DFS can be delivered via multiple channels like bank branches and ATMs, but they often involve high upfront capital investments and high operating costs and cannot be rapidly scaled. Agent business models offer an alternative distribution channel that is less capital intensive, leading to lower fixed costs per transaction. Moreover, the use of mobile phones and mobile wallets decreases customer acquisition costs compared to a point-of-sale device or a bank branch. Analysis by the Bill and Melinda Gates Foundation finds that agent banking systems are up to three times cheaper to operate than branches (Veniard 2010).

The foundational level of trust and access provided by agents creates on-ramps for more sophisticated use of DFS over time. New transaction data and improved understanding of customer needs help expand the range of financial services available to low-income customers, such as credit, savings, remittances, and insurance.

CICO agents can be especially effective in advancing women's financial inclusion. Demands on women's time at home and restrictive social norms can impose mobility barriers, preventing them from travelling long distances or interacting with formal financial service providers, thus limiting their financial access. Since CICO agents tend to be closer to their customers, and drawn from the communities they serve, they enjoy greater trust, and may be better suited to serve women customers. Female agents have a particularly important role in serving women. Research suggests that women customers are on average 7.5 percentage points more likely to transact with a female agent than a male agent and transact larger values (66 percent higher) with female agents. This preference for same gender agents persists even in markets where there are fewer female agents (Chamboko et al. 2021; Jack and Suri 2016).

CICO agents remain necessary even when digitization is well underway. As people's incomes and expenses are digitized, one might expect that the need to cash out and the role of CICO agents would be reduced, leading to the eventual decline of agent networks. However, global experience suggests that it takes a long time to get to this point of maturity, and that even in highly digitized economies, there is a role for agent networks. In fact, very few countries have seen a decline in the use of cash and CICO agents as a result of digitization (Bech et al. 2018).

COVID-19, digitization, and the growing impetus for CICO agent networks

The COVID-19 pandemic has accelerated the proliferation of digital finance globally. Public health concerns and restrictions on mobility and economic activities increased the demand for contactless financial services to keep trade and commerce flowing. Further, governments around the world scrambled to provide emergency relief and assistance to the poor and vulnerable, in a fast, reliable and safe manner, embracing digital means to make social protection payments (GPFI and World Bank 2021). A World Bank study of global policy responses finds that at least 58 governments in developing countries have used digital payments to deliver COVID-19 relief (Gentilini et al. 2021). Beyond relief payments, countries also included changes enabling the adoption of DFS in their COVID-19 regulatory responses.

This rapid shift to digital highlighted the importance of CICO agent networks, especially in hard-to-reach rural areas. Mobile money enabled the flow of remittances when traditional over-the-counter providers like banks or money transfer operators were inaccessible. Despite an initial contraction, international remittances were remarkably resilient during the pandemic, reaching $540 billion in 2020 (World Bank and KNOMAD 2021). Non-bank agents played a key role in expanding the number of financial access points, beyond bank branches and ATMs, providing recipients with cash-out options (IFAD and the World Bank 2021). Several countries, including India, Mexico, the Philippines, Vietnam, and Pakistan, declared CICO agents "essential service providers," allowing them to remain open during the pandemic (GPFI and World Bank 2021).

Countries that relied on physical cash-out points to deliver their G2P payments made changes to allow the expansion of their agent networks. For example, in Ecuador the regulator for financial cooperatives relaxed the requirements for operating agent networks and onboarding agents, while financial sector regulators enabled non-financial service providers like pharmacies and grocery stores to act as cash-out points, leading to a doubling of the number of agents in the country (Baur-Yazbeck and Johnson 2020, Cavallari 2020).

The experience of countries as they increased their adoption of DFS during COVID-19 builds on the cornerstone of digitization, provides impetus for funders to support the expansion of CICO agent networks in rural areas, and aligns this agenda with countries' own national strategies to recover and rebuild post-pandemic.

SECTION 2

SOLUTIONS TO EXPAND CICO AGENT NETWORKS TO RURAL AREAS

The shortage of CICO agents in rural areas is a constraint to both financial inclusion and the achievement of development goals. Although many development funders recognize the importance of these networks and rely on them to distribute financial assistance or improve value chains, not enough is being done to address this shortage in a sustainable way. More is needed to build viable agent networks that serve poor rural customers.

Market system-wide barriers make it difficult to expand CICO agents to rural areas

Despite the myriad benefits and importance of agent networks to emerging market economies, they lag where they are needed the most—in rural areas, where most of the world's poor and underbanked live. BCG analysis found that more than 50 percent of the rural population in India, Indonesia, Pakistan, Bangladesh, Tanzania, Kenya, and Uganda live more than five kilometers from their nearest financial access point such as a bank branch, ATM, or agent (Unnikrishnan et al. 2019), in comparison to only 10 percent in urban areas and 19 percent in peri-urban areas.

DFS agent networks do not expand into rural areas because there are structural challenges and a lack of incentives and capabilities among various market actors. Four categories of barriers can be identified (see Figure 2): unviable businesses models with high costs and low revenues, low demand for DFS and CICO agents, restrictive regulatory environments, and a weak financial, ICT and identity management infrastructure.

FIGURE 2. **Market system-wide barriers to expanding DFS agent networks in rural areas**

Unviable business models

- High set up and operating costs for DFS providers and agents
- Limited supply of traditional agent profiles
- Low revenue for providers due to inadequate rural customer value proposition
- Challenges in liquidity management for agents

Low demand for DFS

- Low population size and density
- Lower customer budgets and different DFS use cases than urban areas
- Gendered social norms constraining access and usage of DFS
- Low digital and financial literacy, and awareness about DFS

Restrictive regulations

- Restrictions on types of providers who can use third-party agents
- Narrow range of services agents are allowed to provide
- Narrow ID requirements that don't consider rural constraints
- Inflexible approaches to pricing of CICO services and agent interoperability

Weak rural infrastructure

- Sparse financial infrastructure to meet agent liquidity needs
- Lack of interoperable payment systems
- Unreliable ICT infrastructure, e.g., poor mobile and internet connectivity
- High costs of obtaining IDs (for customers) and accessing, using IDs (for providers)
- Limited data and analytics capabilities

Solutions exist, but they require innovations across the market system

CGAP's research[3] finds that viable DFS agent network expansion to rural areas requires innovations across the market system as described in Figure 3. To boost demand, DFS providers should tailor use cases and communication for rural customers rather than simply replicate their urban range of services. Governments can further fuel demand for DFS by delivering government-to-person (G2P) payments through CICO networks. In addition, gender-intentional DFS design and agent recruitment models can result in more women customers. To develop viable business models, alternative agent profiles and management processes can help reduce costs while aggregating financial and non-financial services at the agent level can boost revenues. Agent viability is also enhanced when regulators allow a broader set of non-bank DFS providers, agent network managers and agent profiles to participate in financial markets, as this can result in partnerships that leverage the unique strengths of each partner.

FIGURE 3. **Solutions to expand CICO agent networks in rural areas**

Solutions to increase supply of CICO agents

- Diversify agent revenue through financial and non-financial service aggregation at agent level, with a service offer mix that responds better to customer needs. This might include support to inclusive technologies, like e-commerce platforms, embedded finance products, etc.
- Develop alternative agent profiles, more relevant and available in rural context
- Outsource agent management processes to existing network managers
- Create additional incentives (beyond profits) to serve as CICO agents
- Leverage technology to decrease costs of agent management

Solutions to boost demand for CICO agents

- Tailor DFS and agent use cases for rural customers
- Digitize G2P and P2G payments
- Mitigate gendered norms related barriers to DFS use
- Raise awareness about DFS and agents among rural customers

Solutions to support enabling policy and regulation

- Foster enabling regulatory environment for CICO agent business models
- Create safeguards to protect customers
- Develop mechanisms to incentivize DFS providers to expand into rural markets

Solutions to build supporting rural infrastructure

- Improve financial infrastructure like bank and postal branches
- Expand access to ICT infrastructure like mobile phones, high speed internet
- Expand coverage of identity management systems like biometric- enabled national IDs
- Design for agent interoperability and non-exclusivity
- Embrace data-based decision making

3 CGAP partnered with the Financial Services for the Poor (FSP) team at the Bill & Melinda Gates Foundation to identify and understand recent innovations that have been shown to make important progress in viably expanding DFS agent networks in rural areas in five leading markets—India, Kenya, Colombia, China, and Indonesia. For more details, see Hernandez 2019 and Hernandez et al. 2020.

Market actors often lack the capacity and/or incentives to implement these solutions.

Local market actors who are best suited to design and implement these solutions (i.e., policy makers, regulators, DFS providers, agents) often lack the incentives or the capacity to do so.

- **DFS providers may lack the incentives and capacity to learn about the rural demand and test innovative business models.** Rural customers, many of whom have limited credit histories are unfamiliar to DFS providers. They are hesitant to invest in market research, develop tailored products, recruit alternative agent profiles, and launch communication campaigns, due to the uncertainty of financial returns and the possibility that competitors might take a free ride on their innovations. Aggregating services, one of the key solutions to developing viable business models in rural areas, requires DFS providers to invest time and effort in order to understand unfamiliar peer providers like agribusinesses, fast-moving consumer goods (FMCG) distributors, telcos, and warehouse managers, and negotiate costs and revenue sharing schemes.
- **Agents may lack incentives to promote DFS services over other services they offer** when income from DFS transactions is only a small share of their revenue.
- **Policymakers and regulators may fail to see why DFS agent networks are critical** to digitizing financial services or appreciate all the supporting measures needed to create an enabling ecosystem. They may have other priorities or lack the capacity and resources to revisit the regulation or improve the identity management systems, connectivity, or data infrastructure.
- **Customers themselves may be limited in their ability to adopt the DFS solutions** due to low digital literacy, social barriers, and the status quo bias toward using cash.

Funders can help align incentives and build capacity, rather than directly design solutions

Development funders are uniquely positioned to align incentives of these various market actors and build their capacity, so that they design and implement solutions. Funders have a range of interventions and instruments of support at their disposal. Figure 5 and sections below provide more information on the solutions market actors can test and some high impact interventions funders can implement to support them.

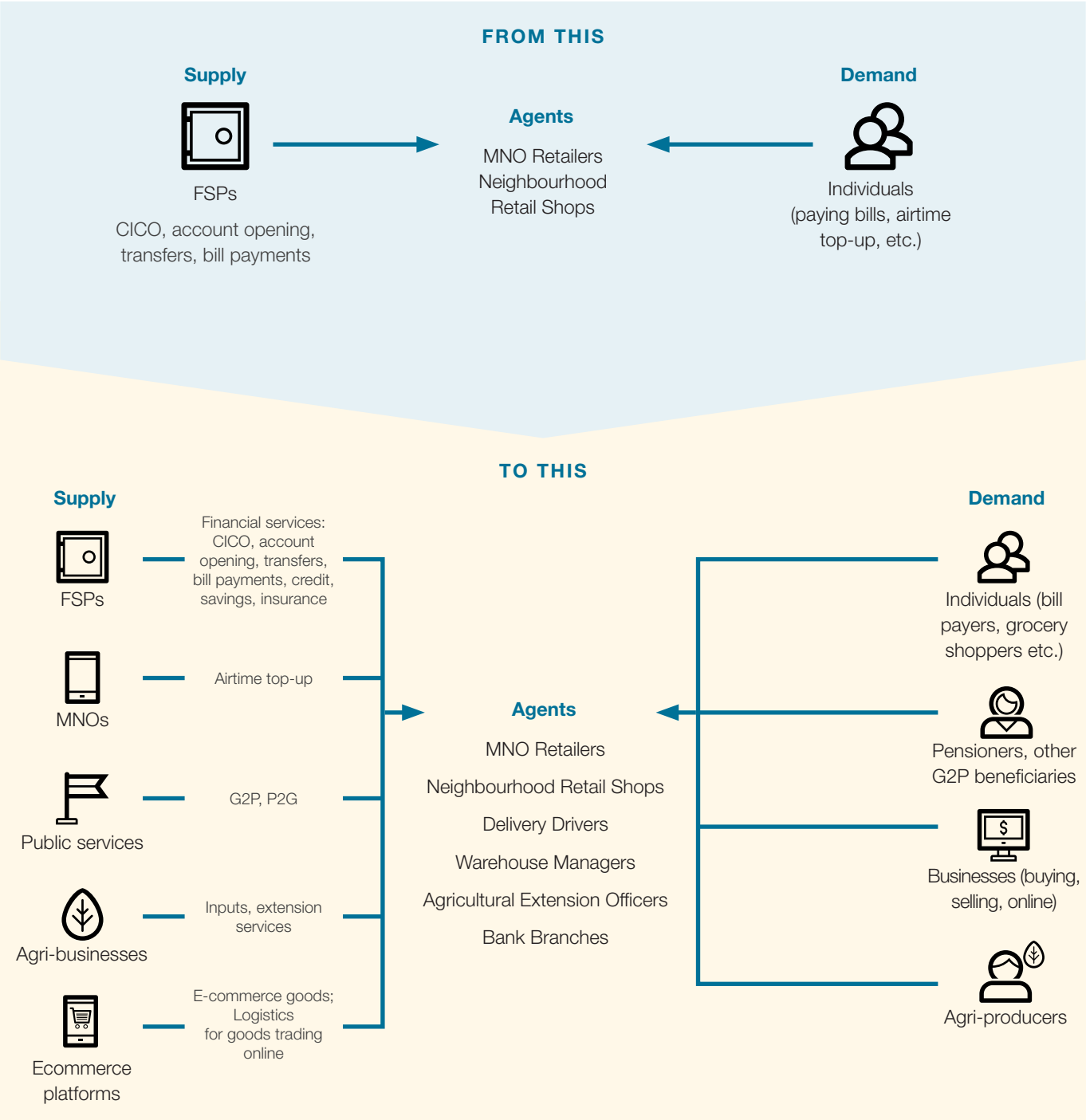
A. SOLUTIONS TO INCREASE THE SUPPLY OF CICO AGENTS

1. Tailoring agent profiles and agent management processes

To reach rural areas, DFS providers have to recruit new agents who may not fit the traditional urban agent profile. These alternative agents may not belong to structured, formal networks, and instead be informal, small merchants, prominent local community members or even mobile delivery persons. Enabling these alternative profiles might require changes to the regulation and will require providers to adopt a test-and-learn approach to progressively identify the right kind of agents whom their rural customers trust and seek out and who can be enrolled and managed in a viable way.

Solutions include working with new types of partners, who can build on their existing rural operations to help recruit, train, and manage agents at a marginal cost. Examples include rural merchants distributing Fast Moving Consumer Goods (FMCG), agrodealers working with agribusinesses, rural entrepreneurs involved in transport or warehousing, home appliance distributors in rural areas, or e-commerce or ride-hailing agents etc. These partners could function as float runners who help agents manage their liquidity or agent recruiters/agent network managers who already manage rural networks and could add CICO to their range of services.

FIGURE 4. **Aggregation and agent diversity are key to increase average revenue per client, drive volume of transactions, and profitability. What do they look like?**



2. Aggregating financial and non-financial services at the agent level

Rural CICO agents have only a few customers in their service area, therefore they tend to make few transactions. Revenues from CICO services alone are not lucrative for most rural agents. Consequently, they do not prioritize these services and remain inactive agents.

New models that aggregate different types of transactions, including financial and non-financial services at the agent level, create more revenue streams per customer and provide a stronger incentive for people in rural areas to become CICO agents. CGAP's research in Indonesia and China finds a recent wave of innovations in service aggregation between financial and non-financial service providers enabled by inclusive technologies like e-commerce platforms, embedded finance products, digital credit scoring etc. These help providers gain knowledge of rural customers and agents, address gender norm barriers, decrease costs, and increase revenues.

Aggregation requires novel partnerships whereby different types of providers—including DFS providers, utilities, Mobile Network Operators (MNOs), public entities, agri-businesses, e-commerce firms etc.—partner with each other, either directly or through third party aggregators, to consolidate a full range of services to be offered through shared agent networks. For example, Indonesian e-commerce providers like Go-Jek, Grab, and Bukalapak partnered with digital payments providers like Dana, OVO and GoPay, enabling their network of agents—which includes taxi drivers, neighborhood retail stores, agri-dealers, warehouse owners etc.—to provide cash-in and over-the-counter transaction services (Hernandez 2019). Similarly, Chinese agricultural e-commerce platforms such as PinDuoDuo and Shihuituan allow their agents to provide a variety of services including logistics, marketing and CICO which enable demand aggregation and income generation opportunities for agents (Hernandez 2019).

3. Incentivizing agents beyond revenues

To incentivize agents, providers should make it easy for them to operate. This means easy onboarding, support for liquidity and e-float management, support for relationships with customers, and transport for roving agents. They can also provide them with value added services, including for example: supporting shopkeepers who act as agents with inventory management; enabling access to bulk buying contracts; facilitating access to finance for their assets, inventory, and liquidity needs; supplying access to markets and information services. Providers tend to focus on improving the experience of end customers to increase sales, but they should also consider improving the agent experience, with the same objective (Venkatesan 2017).

Since rural agents face higher variable costs due to liquidity management and other constraints described earlier, providers could also consider cross-subsidizing rural agents by offering them higher fees compared to their urban counterparts. Even governments and funders could step in temporarily, providing general subsidy support to rural agents in the form of higher fees, or for targeted transactions like G2P payments.

4. Leveraging technology to reduce costs

Providers can harness technology to build scale and decrease the costs of providing agent services in rural markets. This can include the use of technologies like low bandwidth mobile apps, QR codes, and biometric readers beyond simple point-of-sale devices in order to increase the pool of rural agents and accommodate a range of customer literacy. Providers can also leverage technology to onboard and train agents virtually, reducing the costs of agent management and monitoring agent performance.

FUNDER INTERVENTIONS TO BOOST VIABLE SUPPLY

Market actors often lack the incentives or capacity to design and implement the solutions described above. Funders can intervene to align incentives and build their capacity. They can:

- **Raise awareness** among private actors (DFS providers, current and potential aggregators/agent network managers) about innovative agent models and partnerships, through research, knowledge sharing, training, and advocacy.
- **Create networking opportunities.** Aggregating services, one of the key approaches to developing viable business models in rural areas, requires DFS providers to invest time and effort to understand unfamiliar peer providers like agribusinesses, FMCG distributors, telcos, and warehouse managers, and negotiate costs and revenue-sharing schemes. Funders can convene market actors in neutral spaces to help with networking, trust building and encouraging partnerships between DFS providers, aggregators, agent network managers and providers of other financial and non-financial services.
- **De-risk business model innovations.** Piloting and entering into new types of partnership require a high upfront investment. This can disincentivize DFS providers from building out rural agent networks, especially when their competitors can then take a free ride on these investments. To help address these concerns, funders can share costs of pilots to test new agent profiles, agent management processes, deployment of new technologies, and new partnerships. Funders can also provide patient capital to encourage innovations, especially in technology providers to support their expansion into rural markets.[a]

a For more information on how funders can help address gender norms to advance financial inclusion see Koning et al. 2021.

B. SOLUTIONS TO BOOST DEMAND FOR CICO AGENTS

1. Tailor DFS and agent use cases to rural customers

People in rural areas generally have different needs and uses for financial services than people in urban areas. Customer use cases that have been digitized in urban markets, like bill payment and airtime top-up may not be as relevant or valued in cash-based rural markets. Rural customers may benefit more from the digitization of other transactions, such as peer-to-peer transfers, G2P payments, remittances, micro-savings, and transactions related to agricultural and rural commerce. Despite these differences, providers often promote their urban range of services in rural markets, without any differentiation, setting them up for failure. Understanding use cases that are most attractive to rural customers can help providers adapt their marketing and communications strategies, increasing demand for DFS.

Providers should embrace human-centered design approaches to better understand rural customer journeys and develop use cases relevant to them. When trying to tailor services, providers will have to invest in market research to compensate for the lack of data on rural customers who often have little to no digital footprint and identify the main financial flows that could be digitized to quickly generate volume (e.g., agricultural value chain payments, G2P transfers, rural/urban P2P, e-commerce). They could also partner with peer providers like Mobile Network Operators, FMCG distributors, Rural and Agricultural Cooperatives, agricultural value chain companies etc. to gather more data about rural customers.

2. Boost demand by digitizing G2P, P2G and agricultural value chain payments

Digitizing government to people (G2P) payments such as pensions, scholarships, social transfers, including civil servant salaries can lead to efficiency gains for the government. Enabling direct deposit of transfers into recipients' accounts decreases operational expenses and leakages and creates incentives for recipients to embrace DFS (Pazarbasioglu et. al. 2020). Moreover, once G2P payments are digitized, it creates an additional service line

the agents can offer in addition to existing services they provide, potentially increasing the transaction volume, revenue and agent profitability.

Colombia's COVID-19 response illustrates this, as unconditional cash transfer payments to poor households increased the uptake of DFS. For customers who had a mobile money account, the transfers were disbursed through Daviplata, a mobile money service, while the rest were paid in cash, disbursed through local banks. In April 2020, only a third of households received their G2P transfers in a mobile money account. But this increased to 60 percent in May 2020, and eventually 75 percent in November 2020 (Londoño-Vélez and Querubin 2022). Likewise, another Colombian social protection program, *Ingreso Solidario*, made monthly cash transfers to non-poor households vulnerable to the economic impacts of Covid-19, making the payments directly into their savings accounts (for banked customers) and mobile wallets and money orders (for unbanked customers). Ingreso Solidario prompted an increase in bank account openings of 14 percentage points and increased the beneficiaries' likelihood of using digital financial services by 7.7 percentage points (Gallego et al. 2021)

Similarly, **digitizing P2G payments** such as taxes, fees and fines, and registry consultations, creates opportunities for people to adopt and appreciate the benefits of using DFS.

Digitizing agricultural value chain payments, such as those between agribusinesses and farmers can provide a range of benefits, including timely and safe payments, increased savings, greater agricultural productivity, greater control over incomes to improved efficiency, transparency, and traceability of payments across the value chain (Nair and Varghese 2020). Moreover, by increasing the use cases for DFS and transaction volumes, digitization of agricultural value chain payments increases the demand for CICO agents in rural areas and advances financial inclusion at the last mile (Tricarico 2018). Research finds that the revenue opportunity for agents is estimated to be $3.2 billion by 2025 (Raithatha 2020). The wide variety of actors involved in agricultural value chains, from wholesalers, processors and warehousers to transporters, input suppliers, and e-commerce buyers, provides alternative agent profiles that are context-sensitive to rural areas and create organic financial access points for the distribution of DFS.

3. Mitigate gender norm barriers

Gendered social norms around handling money and financial resources, ownership of assets, and participation in economic activity can create barriers to rural women customers accessing finance or taking up entrepreneurial opportunities, including working as an agent. Norms that govern women's social interaction might make them less likely to seek out and transact with male agents.

Providers and agents should adapt their operating models to accommodate and work around these norms. This could involve identifying new agent profiles by working with local community leaders; recruiting and training more female agents; having operating hours that are aligned with the nature of rural jobs; designing an inclusive physical space and customer experience so that agents can make women more comfortable.

Providers could also mitigate barriers for women related to social norms by tailoring services to meet their specific needs, such as allowing them to make microdeposits, ensuring tangible confirmation of transactions through verbal and visual cues, and getting CICO agents to teach and improve customers' financial and digital literacy (Schiff and Hernandez 2021).

Furthermore, providers and policymakers could address restrictive social norms through countervailing local community engagement, awareness campaigns and advocacy.

4. Raise awareness about DFS and agents among rural customers

Lack of information also prevents rural customers from accessing or using DFS. They often don't know what kind of services agents offer, how to use their services or where to find them. Providers can address this through effective marketing of their services and communications campaigns targeted at rural customers. Policymakers, public sector agencies or civil society organizations are best placed to undertake broader awareness campaigns.

FUNDER INTERVENTIONS TO BOOST DEMAND

Market actors often lack the incentives or capacity to design and implement the solutions described above. Funders can intervene to align incentives and build their capacity. They can:

- **Co-fund market research,** to map customer journeys, segment the population according to needs and identify the main financial flows that need to be digitized. More information on rural customers' needs may both incentivize providers, by highlighting the market potential, and help them identify use cases that could drive DFS adoption and determine the best profile of agents.
- **Support customer-centric approaches.** Businesses that adopt a customer-centric approach deliver financial services of value to low-income people, increasing usage and improving business revenues. Funders can provide training and/or technical assistance to providers and their consulting firms to design and deliver effective financial services that meet the needs of rural customers rather than replicate their urban range of services. They can learn from customers and map customer journeys to identify pain-points and use cases. For more information, please see the CGAP Customer Centric Guide.
- **Advocate for digitizing payments, like G2P and P2G transfers or agricultural value chain payments** to stimulate demand for DFS and agents. Advocate for and then support programs that digitize these transfers.
- **Support communications campaigns** to promote awareness of, trust in, and positive attitudes toward DFS and CICO agents, in partnership with both the private and public sectors. This could include helping providers develop marketing materials for customers with low literacy and numeracy, supporting government campaigns or working with civil society to increase trust in the digital economy and services.
- **Help understand and address social norms** through long-term engagement and advocacy. Social norms are complex and enduring, but opportunities exist to take countervailing measures. Funders can start by supporting a diagnostic to acknowledge the social norms and understand how they limit the ability of different segments of the population to use and benefit from agents and DFS. Funders can advocate for and support efforts by providers to adapt their operating models and services to accommodate and work around these norms. They can advocate for gender sensitive regulations such as not requiring providers to ask about marital status of women when setting up an account or service. They can support consumer education programs that work to shift these norms.

C. SOLUTIONS TO SUPPORT ENABLING REGULATION

Regulatory approaches and consumer protection policies should balance encouraging innovation in scalable and viable agent network models with the need to protect rural customers and mitigate risks from DFS.

1. Creating a regulatory environment adapted to a rural context

Innovations in rural agent models had their origins in regulatory moves that allowed new players into financial markets, even if they were not from the banking sector. Either as DFS providers or agent network managers, these new players were allowed to test and scale their models, which resulted in important gains in rural agent network reach and quality, for example Mobile Network Operators (MNO) like Safaricom in Kenya and e-commerce players like Alibaba in China (Hernandez 2019).

An enabling policy and regulatory environment should be predictable and transparent, and comprise the following elements:

- **The four basic regulatory enablers of DFS:** (a) nonbank e-money issuance, (b) use of third-party agents, with a risk-based tiered system of agent due diligence to accommodate a wide variety of agent profiles, (c) risk-based consumer due diligence, to serve customers with a wide variety of IDs and revenue profiles, and (d) consumer protection (Staschen and Meagher 2018)

- **CICO agent specific enablers:**
  - Taking a pragmatic approach to setting agent tiers and due diligence to enable agent profiles that are more common in rural areas
  - Enabling the delegation of agent onboarding and management to third parties with comparative advantages
  - Embracing a nuanced approach to agent interoperability, non-dedication, and non-exclusivity[4] to balance the need to preserve agent incentives and profitability with the need to deepen competition and expand choice for customers
  - Reasonable regulation of transaction fees so that providers can recover their costs while keeping the services affordable for rural customers.

Enabling regulations often require that regulators adopt a test and learn approach, based on open dialogue with the private sector, and tools to monitor the market. This can include using regulatory sandboxes, to determine the kinds of organizations and individuals that can be agents, identifying optimal agent and account tiers, or mystery shopping to understand rural population experience and constraints.

2. Creating safeguards to protect customers

Agent-assisted transactions can expose customers to several risks if agents have insufficient capacity, training, and support or are dishonest. These risks become especially salient in rural markets where customers are less experienced with DFS and tend to have lower digital and financial literacy. Regulators must ensure that there are laws and regulations, industry standards, and provider codes that define principles to protect consumers of DFS during their transactions with agents. They should also ensure that mandatory consumer protection protocols are in place for providers to monitor service quality, prevent abuse, protect customer data, and periodically sample customer experience to test for fraud. Providers must be required to report compliance with such protocols, set up agent monitoring and reporting systems to identify agent abuse and fraud.

3. Creating incentives for providers to expand coverage

Policymakers can encourage DFS providers to develop agent networks in rural markets in several ways. They can provide **incentives** in the form of time-bound subsidized financing or income guarantees to enable DFS providers to cover part of the research, development, and setup costs of new agents in underserved areas, or to subsidize the costs of training and skills development for agents. Other incentive options include tax breaks or discounts for providers that operate in priority rural areas. For example, in Colombia banks were given temporary subsidies to establish new agents either directly or through ANMs in priority rural areas. This not only encouraged the development of several CICO agent models across the country but also led to banks establishing dedicated units focused on rural markets, by diversifying product offerings, increased rural marketing, tailored rural customer onboarding and improved customer protection (Hernandez 2020).

Regulators can also consider **mandates** by setting inclusion guidelines, including service obligations and service-level targets for providers to cover rural markets and serve last mile customers. In India, rural CICO networks are mostly owned by public sector banks who are bound by government mandates to advance financial inclusion. Under India's National Strategy for Financial Inclusion (NFSI) 2019-24, India's central bank, the Reserve Bank of India, mandates that every village should have a formal financial access point within a five kilometer radius, which has led to public sector banks and ANMs creating a wide network of rural banking agents (Hernandez 2020).

However, both these short-term incentives and mandates should be designed to build providers' long-term incentives and capacity, so that CICO networks keep running beyond the subsidy program timeframe. Regulators should also refrain from setting pricing caps that would not enable providers to recoup their costs, and rather focus on pricing transparency and other customer

4 Interoperability allows customers to transact with agents outside the network created by their own financial service providers. Non-dedication allows agents to facilitate both financial and non-financial services, for example a CICO agent who also owns a retail shop. Non-exclusivity allows agents to distribute financial services of more than one financial institution.

protection guidelines, and invest in the infrastructure needed to reduce operating costs in rural areas.

Finally, policymakers can indirectly incentivize providers and agents by digitizing G2P and P2G transfers. Beyond making it more convenient for beneficiaries, channeling G2P payments through agent networks can also incentivize providers and rural agents by boosting their transaction volumes and revenues.

FUNDER INTERVENTIONS TO SUPPORT ENABLING POLICIES AND REGULATION

Market actors often lack the incentives or capacity to design and implement the solutions described above. Funders can intervene to align incentives and build their capacity. They can:

- **Foster public-private dialogue,** to increase public actors' knowledge about rural markets, including constraints faced by providers on innovating and serving rural communities (CGAP 2020). Funders can help organize and facilitate working groups to enable this dialogue, help build trust between regulators and the private sector and lay the foundation for joint problem analysis and identification of solutions including policy reforms.
- **Help improve regulations and policies,** through advocacy, knowledge sharing and technical assistance to policymakers and regulators. Funders can encourage regulators to set basic regulatory enablers in place. Developing e-KYC and e-KYA (electronic customer and agent due diligence) is, for instance, a priority in several countries to ease onboarding of clients and agents but this requires resources to diagnose issues and propose solutions that regulators might be missing. Funders could support this. They could also promote test and learn approaches to regulation, for instance, advocating for and training regulators in the use of tools like sandboxes or mystery shopping to understand rural population experiences and constraints. Funders could also help policymakers design incentives and mandates to expand CICO coverage to rural markets.
- **Advocate for improved consumer protection,** including data protection regulations, and provide technical assistance to policymakers to design protocols and practice codes sensitive to the context of rural markets. Funders can also support moves by industry associations or providers to establish customer recourse channels.

D. SOLUTIONS TO STRENGTHEN SUPPORTING RURAL INFRASTRUCTURE

Improving rural infrastructure decreases costs and improves financial viability for both providers and agents.

1. **Improve the financial infrastructure to help manage agents' liquidity**
   CICO agents constantly need to balance their e-float with their cash float. This is challenging when transactions do not balance out. Providers can help by developing use cases that will attract both cash-in and cash-out customers, but there will always be cases when agents will need to find an external solution, e.g., a cash-handling access point nearby. An extensive network of bank branches with sufficient proximity and adequate opening hours to meet agent liquidity needs can help.

2. **Improve ICT infrastructure**
   CICO agents and clients rely on a robust ICT infrastructure, including affordable and good internet and mobile network coverage, adequate mobile phone ownership and usage, and network quality that can support DFS transactions.

3. **Increase coverage of low-cost identity management systems**
   Low-cost identity management systems are central to supporting DFS and rural CICO network expansion, to ease both client and agent onboarding. ID systems should be designed so that legal, procedural, and social barriers to enrolling in and using IDs are monitored and addressed promptly, with a special focus on groups at the risk of exclusion, such as women, youth, and social minorities.

4. **Design for interoperability**
   Interoperability enables customers to make payments and transact more easily with others, no matter which service providers they use. In some situations, when providers' incentives are aligned, interoperability between DFS accounts can be beneficial for network development, allowing clients to use any agent regardless of the DFS providers. Providers should work together to implement account and agent interoperability in a way that encourages a viable expansion of their networks (Negre and Cook 2021).

5. **Enable data-based decision making**
   Data analytics can help disaggregate agent and customer data by key variables such as gender, location, and type of service, thereby gathering actionable intelligence for providers to diagnose existing gaps in service and network coverage, identify successful and relevant agent profiles, understand the needs of different segments of customers, and improve the services their agents offer. It can also enable regulators to design relevant incentives and mandates to encourage network expansion to the relevant areas.

FUNDER INTERVENTIONS TO SUPPORT RURAL INFRASTRUCTURE

Market actors often lack the incentives or capacity to design and implement the solutions described above. Funders can intervene to align incentives and build their capacity. They can:

- **Co-fund market diagnostics and advocate for building rural infrastructure.** Policymakers and private actors might fail to see the importance of this infrastructure or lack the incentives to strengthen it because their constituents and clients might be in urban areas. Funders can raise awareness by co-funding market diagnostics that identify gaps and opportunities to strengthen rural infrastructure, at a national or regional level. They can share knowledge and advocate for prioritizing these infrastructure works.
- **Co-fund rural infrastructure development,** through financial sector development projects or:
  - Designing and scaling digital public identity management systems
  - Expanding high-speed internet and mobile connectivity
  - Augmenting physical infrastructure—roads, transport, rural development etc.
  - Encouraging discussion and strategy for payment interoperability
- **Enable data-based decision making.** Funders can advocate for evidence-based decision making for policymakers/regulators and providers, by sharing lessons from experience in other countries and fund market diagnostics to precisely identify data gaps. As the potential of data as a driver of change is often overestimated, diagnostics should also clarify the pathway from improved data to better decision-making, rural agent outreach and eventually financial inclusion. When such a pathway exists, funders can fund and/or provide technical assistance to establish data collection processes and build analytical capabilities. For agent networks, geospatially mapped datasets on customers, transactions, and agents/ PoS, can be useful to inform policy and business decisions about which markets to focus on, where to expand agent networks, and the types of mandates and incentives to be set. Depending on the market, this data might be a one-time or an on-going need; it might require to be addressed along with other market constraints or can be a straightforward activity. Check CGAP for recommendations on data initiatives (Lahaye and Nègre 2020).

FIGURE 5. **Funder interventions to support solutions for expanding CICO agent networks in rural areas**

Solutions to be implemented by market actors	Funders' possible interventions
Solutions to increase *supply* of CICO agents • Diversify agent revenue through financial and non-financial service aggregation at agent level, with a service offer mix that responds better to customer needs. This might include support to inclusive technologies, like e-commerce platforms, embedded finance products, etc. • Develop alternative agent profiles, more relevant and available in rural context • Outsource agent management processes to existing network managers • Create additional incentives (beyond profits) to serve as CICO agents • Leverage technology to decrease costs of agent management	Raise providers' knowledge of rural markets and innovative business models (TA, knowledge sharing) Create networking opportunities among DFS providers, and potential partners De-risk pilots to test business model innovations (TA, grants)
Solutions to boost *demand* for CICO agents • Tailor DFS and agent use cases for rural customers, rather than simply replicate the urban experience • Digitize G2P and P2G payments, as well as agricultural value chain transactions, which often represent high volumes of transactions in rural areas and can help kick start the adoption of e-money • Mitigate gendered norms related barriers to DFS use • Raise awareness about DFS and agents among rural customers	Co-fund market research to identify flows to digitize, best agent profile, etc. Support communication campaigns on DFS and CICO agent services (advocacy, TA) Help digitize G2P, P2G and Ag. Value chain payments (advocacy, TA) Encourage providers to adopt customer centric approaches (TA) Help understand and mitigate restrictive gender norms (advocacy, TA)
Solutions to support enabling *policy* and *regulation* • Design regulations to test and enable key innovations, such as alternative agent profiles, agent management outsourcing, agent non-dedication and non-exclusivity. • Create safeguards to protect customers • Develop mechanisms to incentivize or even mandate DFS providers to expand into rural markets	Foster public-private dialogue Foster enabling regulatory environment (TA, advocacy) Advocate for customer protection (TA, advocacy)
Solutions to build supporting *rural infrastructure* • Improve financial infrastructure like bank and postal branches • Expand access to ICT infrastructure like mobile phones, high speed internet • Expand coverage of identity management systems like biometric- enabled national IDs • Design for agent interoperability and non-exclusivity • Develop the data infrastructure and promote data-based decision making for both providers and policy makers	Co-fund infrastructure diagnostics Co-fund rural infrastructure development (ICT, ID, physical, payment interoperability, etc.) Promote evidence-based decision making by providers and public market actors (TA, advocacy, grants)

SECTION 3

IMPLICATIONS FOR FUNDERS

CGAP has identified five funder approaches that can set them up for success in supporting rural DFS agent network expansion.

1. Aim for System-Wide Change

Solutions to develop rural DFS agent networks are centered around the market functions of demand, supply (business models), enabling regulations, and supporting infrastructure. However, CGAP has learned over the years that to make an enduring impact, it is not enough that these functions work well on their own, but they must all work together in a system that adapts and innovates to serve the poor. (Burjorjee et al. 2015).

CICO is not just a distribution mechanism for financial services, but a rich and complex ecosystem consisting of several stakeholders, from agents to providers to regulators to customers. Funders may support interventions that focus on a specific part of this ecosystem, such as increasing supply, or regulation, or increasing financial literacy—but while doing so, they should have a strategy to ensure that other parts of the ecosystem will also react to this innovation. Focusing on only one part of the market system in isolation from others does not result in long-term systemic change; it produces short term solutions that last only as long as there is financial support from funders. It will also reduce the chances of scaling-up the innovation.

For example, supporting enabling regulation alone will not incentivize DFS providers to serve rural areas if these providers do not see a business potential and viable unit economics. Likewise, rural customers will not demand DFS until relevant products with valuable use cases are developed, and providers will not tailor products until they can harness supporting rural infrastructure and enabling regulation to lower the costs of providing service. Only a multipronged market systems approach can help turn this conundrum into a virtuous circle of self-sustaining, durable solutions to develop rural DFS agent networks.

This market systems approach will often require information sharing and coordinated effort to achieve innovation. For instance, it is necessary that regulators learn from agent network managers through business model piloting and that private sector actors are involved in drafting regulations and policies. Funders can facilitate this as they are uniquely placed to bring people together. In addition to bringing people together, funders should also embrace a collaborative approach and forge partnerships among themselves to leverage local, contextual wisdom. This can help pool expertise and develop a local capacity to design and implement solutions, leading to sustainable change. Funders may also consider pooling funding and embracing complementary agendas with peer funders, to leverage synergies.

2. Start With a Market System Diagnostic to Assess Incentives and Capacity

Before designing any solution to expand CICO agent networks, funders must first begin with market system diagnostics to identify existing market actors, their incentives and capacity to embrace funder interventions. Funders can start by mapping the market system (See Box 1 below), identifying key market functions and rules needed to support viable agent networks, assess current performance, and identify the constraints to better performance. In doing so, they must go beyond what is visible and apparent—such as a lack of DFS providers in rural areas or restrictive regulations—and identify root causes that explain these constraints (see Box 2 below). These may include a lack of understanding of rural market potential among DFS providers, gender-based barriers such as prevalent social norms and inadequate capacity in DFS providers to embrace customer-centric approaches.[5]

This approach can help funders tailor their strategy and solutions according to the local market context. CGAP's research finds that developing **rural DFS agent networks requires a different approach in each country as no two markets are the same**. Funders need to be open and flexible in their support. Innovation can be driven by e-commerce firms in one country, DFS providers or third-party agent network managers in another. Similarly, the anchor use case driving up demand might be G2P or P2P, ecommerce or agriculture related payments. There is more than one model overall and several models can cohabit within the same country.

For example, in Kenya, adoption of DFS was driven by the demand for P2P remittances from urban to rural areas. Mobile network operators like Safaricom led the development of DFS agent networks and managed the entire agent value chain, sometimes outsourcing agent recruitment and agent management to Agent Network Managers (ANMs). However, in China, DFS networks were spearheaded by e-commerce players like Alibaba, and they were driven by consumer demand in rural and urban areas to buy and sell goods and services online through a single platform. Alternatively, in Colombia and India, expanding G2P transfers to rural beneficiaries boosted demand for DFS and, given their dominant presence, banks took the lead in creating DFS networks. However, they also relied heavily on agent network managers to recruit and manage agents and aggregate services (Hernandez 2019).

Diagnostics of markets should be an ongoing endeavor as markets also evolve over time. DFS agent networks follow the market development lifecycle (see Figure 6). At each stage, they have different needs and different market actors have a role to play. This has two implications for funders. The first is that they must understand which stage each market is in before supporting new solutions. The second is that the role of funders evolves over time, and they must invest in understanding their markets not just once but continuously and adapt their support accordingly.

- **At the inception stage,** when there are no agent networks in rural areas, funders can focus on aligning incentives of various market actors by prioritizing research and market sizing to demonstrate the size of unmet needs and economic opportunities to policymakers and DFS providers. They can also concentrate on stimulating demand for DFS and improving supporting rural infrastructure to decrease costs for providers.
- **At the incipient stage,** funders can focus on building the foundations of DFS agent networks and influence policymakers to put in place basic regulatory enablers of DFS, support pilots of innovative partnerships and business models, and continue supporting infrastructure development.
- **As the nascent market for DFS emerges**, funders have an important role in scaling and replicating successful pilots, promoting trust in DFS through communications campaigns encouraging enabling regulations and consumer protection policies, and continuing to invest in rural infrastructure.
- **Finally, as the market for DFS grows and matures,** funders should focus on improving agent networks by supporting the development of new consumer use cases, encouraging providers to improve the customer experience and business model viability, developing tools to monitor agent performance and identifying gaps in coverage and

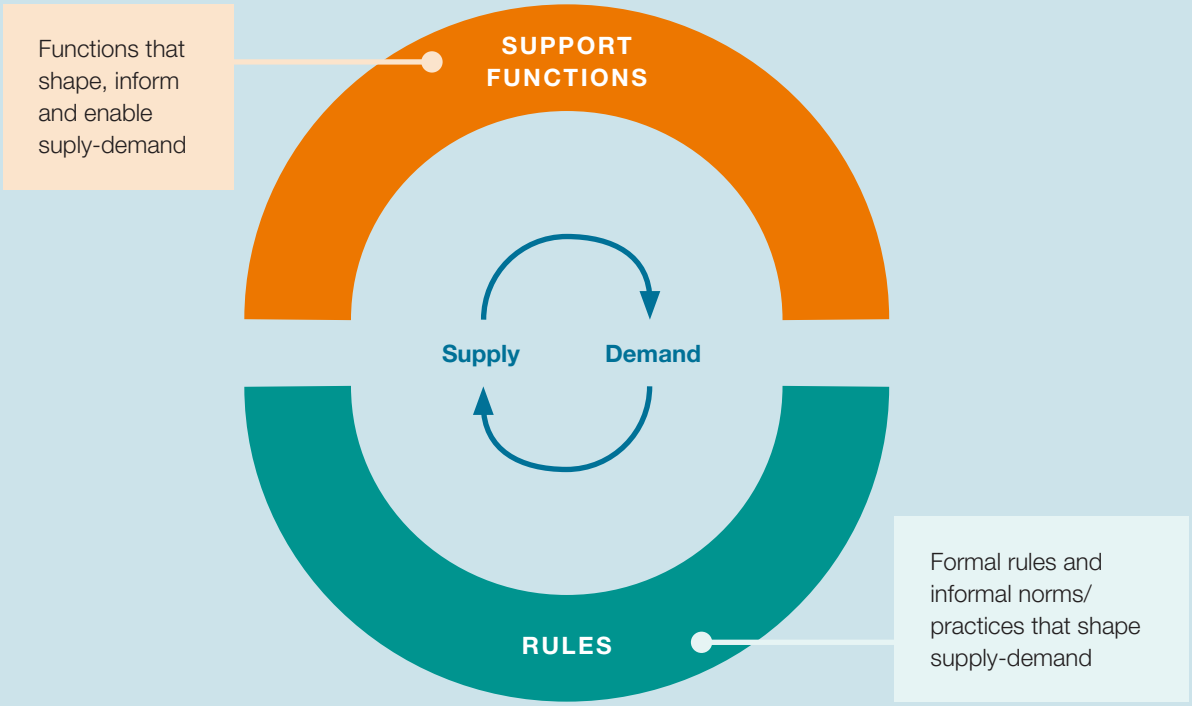
5 For more guidance on adopting a market systems approach and the diagnostic process, see Burjorjee and Scola 2015.

Box 1. Mapping players and functions in a market system

When funders seek to address a market failure—in this case, when the supply of rural CICO agents does not meet the demand—CGAP recommends that they start by mapping the key rules and functions needed for supply to meet demand. The performance of any market system is driven by the formal and informal rules and norms that govern how transactions happen, and the support functions that shape, support, inform and enable the transaction.

In the case of a CICO transaction in rural areas, key support functions could include agent recruitment and management, agent liquidity management, data analytics, service aggregation, prevalence of ID systems and payment interoperability. Likewise, key rules might include national policies and strategies (such as rural development policy, financial inclusion strategies), regulations and industry codes of conducts (like DFS regulations and consumer protection protocols), and social norms including gendered norms impacting how women can use DFS and CICO agents.

These rules and support functions can be represented in the following manner:



Once functions have been mapped and prioritised, funders can then start assessing their performance by asking the following four questions:

1. Does a given support function or rule enable or inhibit access for target group?

2. Who are the different actors in the market system?

3. Who does? i.e. Which of these market actors performs the supporting function or rule?

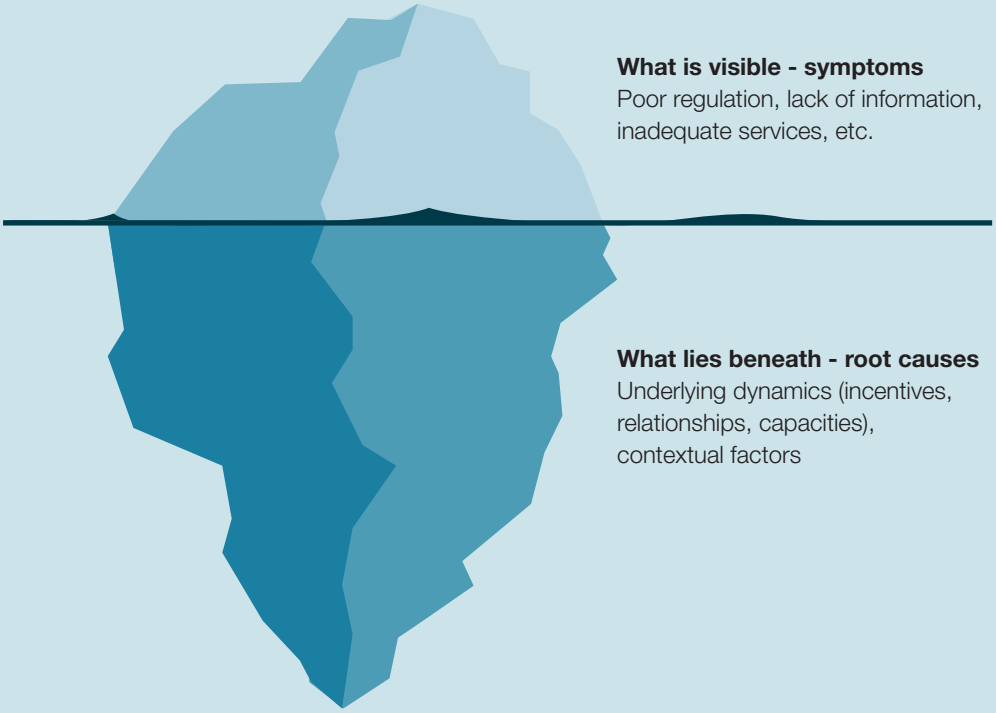
4. Who pays? i.e. Which of these market actors pay for the supporting function or rule?

This will help funders identify key constraints driving the market failure and prioritize areas of support their program should focus on.

Box 2: Identifying root causes of underperformance

Once funders have identified key constraints driving market failure, further analysis is needed to get to the **root causes** of these constraints, by asking why different market actors such as providers, or regulators, infrastructure providers, or consumer advocacy groups aren't providing solutions to overcome these constraints.

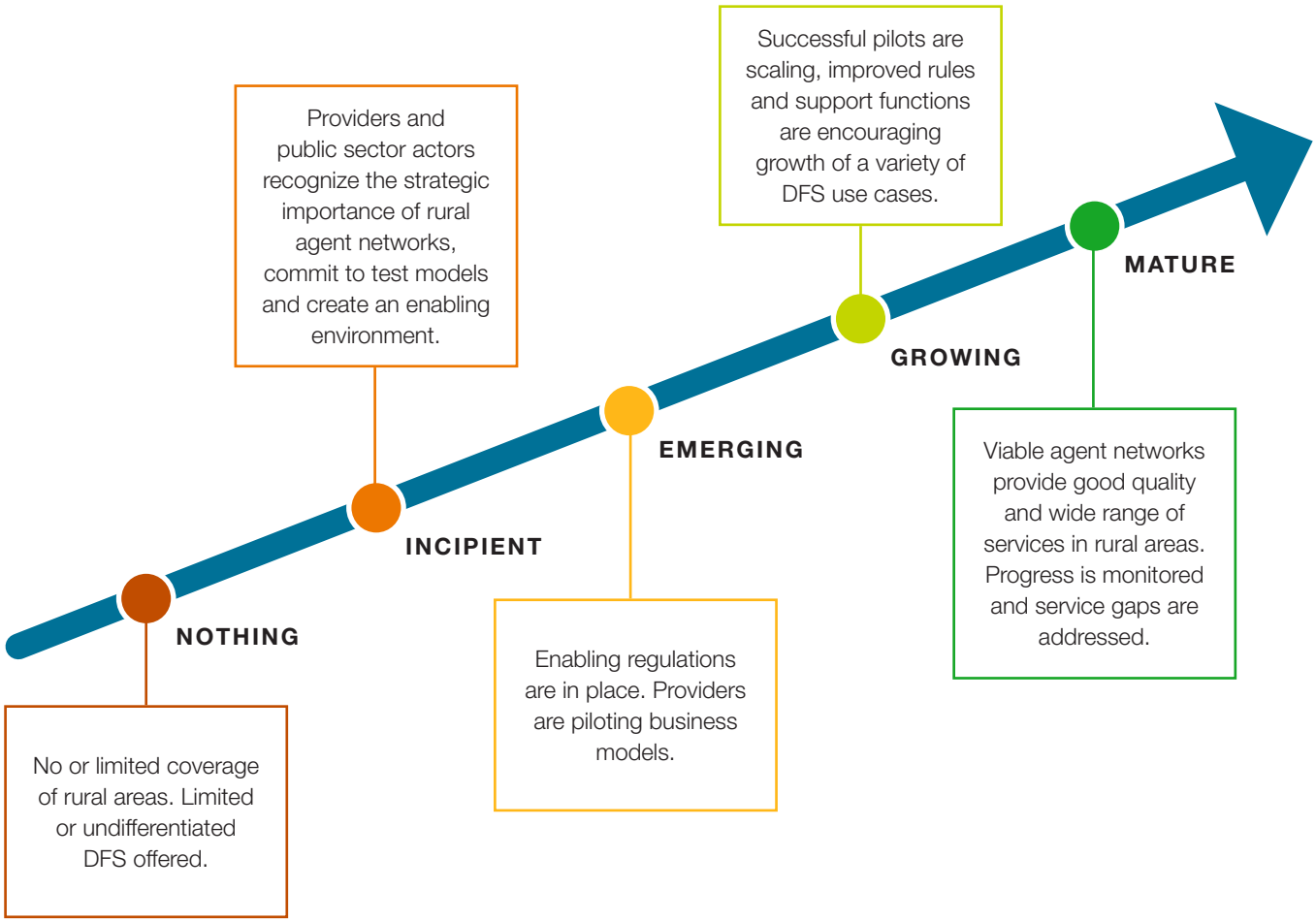
Weak regulation, lack of information, inadequate support services and so on, might prevent a system from working for all. But those are just symptoms which are relatively easy to identify, or the tip of the iceberg. But to achieve long term, sustainable change, funders need to get to what lies beneath, i.e., the root causes of underperformance and exclusion.



Root causes are often linked to the dynamics that drive market actors' decision-making and behaviors—**incentives, capacities, and relationships**. They might also be contextual and difficult to influence (e.g., population density, socio-cultural norms etc.). Funding, or the lack thereof, is very seldom a root cause of underperformance.

To uncover the root causes, the key is to **keep asking "Why?"**. This shifts funders' objectives from seeking to provide solutions for market failure to supporting efforts by market actors to provide their own solutions, thus increasing the likelihood of long term, sustainable change. When asking "Why?", funders should ensure that they challenge pre-existing ideas and consider different perspectives. Using a **political economy matrix** can also be useful in seeking answers to these questions, by positioning key stakeholders based on their interest and influence or power to make a given change happen.

FIGURE 6. **Solutions to develop rural DFS agent networks must be tailored for each stage of market development**



service quality. Funders should concentrate on customer segments that are vulnerable to exclusion, like women, youth, and smallholder farmers. Funders must also not lose sight of the need to support rural infrastructure, as its development will be a continuous, ongoing priority to ensure that DFS agent networks expand.

3. Develop a Vision That Doesn't Lose Sight of the Poor

Funders should have a clear vision of how the ecosystem will react to the innovations they support. This may be expressed in the form of a Theory of Change, outlining a plausible narrative about why a desired change is expected to happen in a particular context, as a result of the proposed intervention. Theories of Change are an exercise in clarity of vision, as they can often surface underlying assumptions and blind spots in hypotheses between levels of desired change (*see Box 3)*. Funders can also use the AAER framework (Adopt, Adapt, Expand and Respond, *see Box 4*) to help them think clearly about all the changes needed to reach their outcomes, within and beyond their direct partners.

Moreover, it is important for funders to ground their vision and Theories of Change on poor people. The rural poor make up most of the world's unbanked people. While working on innovative business models, funders should not lose focus on DFS use cases that include the poor, such as G2P, P2G, P2P payments, rural and agricultural finance.

Figure 7 shows an illustrated theory of change that roots CICO agent networks in the context of SDGs and envisions various stages of outcomes and possible funder interventions.

Box 3. Theory of change

CGAP recommends that the Theory of Change for funders' financial inclusion programs, such as a rural CICO agent expansion program, include four levels:

1. **Development outcomes:** Linking funders' financial inclusion programs with higher development outcomes since financial inclusion is seen as a key enabler of several Sustainable Development Goals (SDGs).
2. **Inclusive financial system outcomes:** Outcomes related to financial inclusion, i.e., those related to the quality, access and use of financial services, and outcomes related to the functioning of the financial system, including who performs and pays for support functions and rules (See Box 1).
3. **Systemic change outcomes:** Changes in the underlying dynamics—capacities, incentives, and relationships of the financial system stakeholders whose behaviour needs to change.
4. **Funders' interventions** that should bring about these changes in the system.

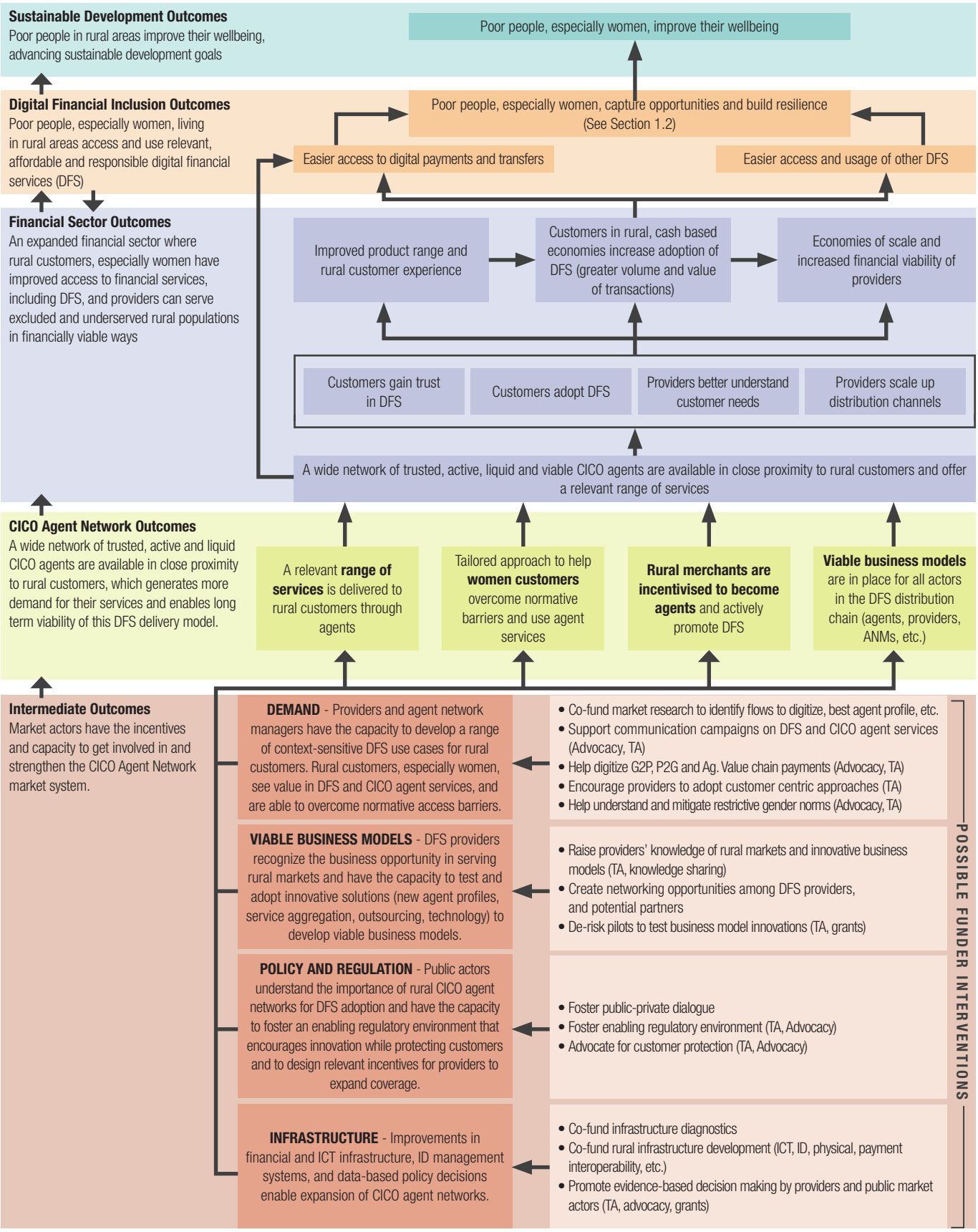
Box 4. AAER Framework

The AAER Framework, developed by the Springfield Centre, is a useful tool to map all the changes needed, within and beyond the funder's direct partners, to achieve system-wide change.

AAER stands for:

- **Adopt** – Funders' direct partners adopt an innovation as a result of funder intervention
- **Adapt** – Direct partners make sustained investments to continue embracing innovation even in the absence of funder support
- **Expand** – Other market actors, beyond funders' direct partners, adopt the same or similar innovations, without funder support
- **Respond** – Other market actors providing supporting functions and rules respond to these innovations by changing their behavior, improving their performance and developing new capacities

FIGURE 7. **Illustrative Theory of Change for funder interventions supporting rural CICO agent network expansion**



4. Embrace Flexibility in Implementation

Some parts of the CICO market system can respond quickly to funder intervention but some others, especially around regulations, infrastructure and even partnerships, can involve long time horizons. Funders must prepare themselves for the long haul and eschew the temptation to seek short term impacts. Moreover, as with any complex, multifaceted problem, some solutions may not lead to expected outcomes. Funders should adopt agile, test-and-learn approaches towards pilots, have tolerance for interventions that don't go as planned, keep processes flexible and have a wide range of financing instruments to accommodate evolving needs.

5. Monitor and Measure

Aiming for system-wide change has implications in terms of how funders monitor their interventions and measure success. Monitoring should not only ensure that interventions stay on track but should also **provide frequent feedback** so that interventions can be adjusted as needed. Working on market actors' incentives and capacity means that measurement needs to be designed not only to track quantitative targets but to assess whether and how change in incentives, capacities and relationships is happening, at the level of the funder partners and beyond these direct partners. More information on measuring market development is available in the CGAP technical guide (Spaven and Nielsen 2017).

CONCLUSION

Rather than directly providing solutions that will most likely be short lived, funders should support the development of a balanced and sustainable ecosystem that enables the expansion of CICO agent networks into rural areas.

There won't be a one-size-fits-all solution though. Funders can play a transformative role aligning incentives of a wide variety of market actors and building their capacity so that these actors test and adapt solutions to their own context.

CGAP is currently working in six markets to test how best to assess market constraints and support efforts by market actors to address these constraints by implementing this emerging CICO agent guidance. Forthcoming publications and tools will help share lessons learned.

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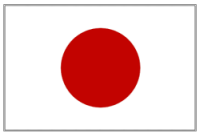

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