FINANCIAL SOLUTIONS FOR WOMEN IN RURAL AND AGRICULTURAL LIVELIHOODS: Evidence and Strategy

November 2021  |  Jamie Anderson, Gerhard Coetzee, Max Mattern
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EXECUTIVE SUMMARY

Why focus on women in rural and agricultural livelihoods?

• Women are highly engaged in agriculture and rural economies, as laborers, consumers, and producers, both for markets and their households. In most low-income countries, the face of agriculture is female, where agriculture is the primary activity of 79% of economically active women (IFPRI 2014).

• Despite the important role of women in rural economies, few services and solutions respond specifically to their needs and ambitions. Only around 7% of extension resources target women and 14% of donor resources target smallholder women farmers (MCA 2018) — provision far less than their proportion of the market.

• Women are highly vulnerable to climate change, further underlining the importance of improving the resilience of their livelihoods. Due to gendered social norms, and compared to men, women have less mobility, rights, and access to resources, as well as lower access to social capital, productive resources, and technology, affording them less capacity to adapt and diversify their livelihoods (MCA 2020).

Rural women have unique needs and challenges.

• Rural women are not a monolith. The vast population of rural women in low-income countries is diverse, varying according to life stage, livelihood, and cultural context. There is no mass market, generic solution to effectively serve all rural women. Successful service providers recognize this diversity, prioritize among specific profiles, and deliver responsive, tailored solutions.

• Social norms have a significant influence on rural women’s lives and livelihoods, and service providers must understand and address the social norms that constrain rural women's opportunities and reliance (CGAP 2021). Women’s time and mobility constraints, linked to their gendered roles as caregivers and household managers, limit their ability to engage in economic and educational opportunities. Cultural norms can also restrict interactions between men and women, limiting women’s access to information and networks.
EXECUTIVE SUMMARY

CGAP prioritizes increasing rural women’s access and returns to labor and markets.

Equitable food and financial systems require rethinking the role of women as producers and consumers, reframing the question from ‘What are women’s contributions in agriculture?’ to ‘How might food and financial systems transform in ways that are equitable and that empower women?’ (Njuki 2020).

This deck synthesizes CGAP research and insights on the constraints faced by women in rural and agricultural livelihoods (WIRAL) and the opportunities for service providers and funders to add value to their lives and livelihoods.

CGAP prioritizes increasing access to labor and markets for WIRAL to increase the resilience of their livelihoods, based on an extensive review of literature, experience, and an explicit priority gap in the sector. Improving rural women’s access to labor – including the labor they provide outside their homes, their own labor saved through use of time-saving tools, and the outside labor they hire on their farms and businesses – can increase their productivity and income, and therefore contribute to building more resilient livelihoods. WIRAL’s access to markets is also critical: Increased productivity only generates increased income when outputs reach markets.

But access alone is not enough; rural women must also get equitable returns from labor and markets. Research shows that how female farmers benefit from productive resources often has a larger effect than their equal access to those resources (WBG 2014). For WIRAL, tools and technology are worthless if women are not trained to use them; hired labor does not increase productivity when women are perceived as ineffective supervisors; and wage labor is not dignified when women sacrifice their safety in the workplace.
EXECUTIVE SUMMARY

Service providers and funders can help rural women build more resilient livelihoods.

Service providers have opportunities to add value to rural women’s lives and livelihoods

Understanding rural women’s lives and livelihoods is the first step to developing sustainable and scalable models that help improve women’s access and returns to labor and markets. Taking a customer-centric approach allows service providers to tailor services to the unique needs of rural women and the contexts in which they live and work.

This deck helps guide financial and non-financial service providers developing affordable and convenient services to meet the needs of WIRAL and that make business sense. It draws on emerging examples of innovative service providers working to increase rural women’s access and returns to labor and markets. While most are early stage, competitors and counterparts in other markets can learn from these experiences to develop new solutions that center and serve rural women.

Funders also play a critical role

Funders can accelerate solutions and business models focused on WIRAL by supporting insight generation around the needs of rural women, the business case for serving them, and the drivers behind sustainable and impactful gender transformative business models. The early-stage examples of providers working to address the needs of rural women, like those highlighted in this deck, offer donors and investors opportunities to scale sustainable solutions, while distilling the insights and innovations driving their success to inform innovation in other markets and segments of rural women.

Funders also play a particularly important role in emerging innovations and can collaborate with service providers to answer key market questions, overcome policy barriers, and mitigate constraining social norms to drive improved financial and agricultural solutions for WIRAL. Funders can use their patient capital, advocacy role to inform and influence policy change, and investments in the fundamental infrastructure underpinning rural economies, particularly as they transition to a digital future.
I. WOMEN IN RURAL AND AGRICULTURAL LIVELIHOODS (WIRAL)
WHY FOCUS ON RURAL WOMEN?

There is disproportionate need and strategic opportunity to improve the lives and livelihoods of rural women.

Rural women are highly engaged in agriculture and rural economies, as laborers, producers for the market and their households, and key consumers. Agriculture is the primary activity of 79% of economically active women in low-income countries (IFPRI 2014), and their labor is a critical driver of the agricultural sector. In sub-Saharan Africa, for example, women provide approximately 40% of agricultural labor, on top of their disproportionate responsibilities for household chores and caring for children and the elderly (WBG 2020).

Rural women are highly vulnerable to climate change, and more so than men due to social norms. Rural women and men experience the impacts of climate change differently. Women’s rights, mobility, and access to resources are weaker than men’s, which means that rural women have less capacity to adapt and diversify their livelihoods and less access to social capital, productive resources, and technology (MCA 2020).

Rural women represent a majority of the financially underserved. Women represent 56% of unbanked adults, about one billion people. They live mostly in rural areas, and often in poverty (Fiorillo and Kellison 2019).

Meeting the needs of rural women is a largely untapped opportunity for funders and financial service providers. Women power rural economies, but few solutions respond specifically to their needs and ambitions. Only approximately 7% of extension resources target women and 14% of donor resources target smallholder women farmers (MCA 2018), far less than their proportion of the market. Service providers that discard outdated business models and mass market approaches to innovate and learn from emerging innovations are poised to capture the enormous unmet market opportunities to serve rural women.
WHO ARE WIRAL?

Women in rural and agricultural livelihoods (WIRAL) are diverse and have various roles and identities.

- **Women’s roles are dynamic** and change over a lifetime. Women tend to experience five distinct life stages — finishing school, getting married, becoming a mother, entering work, and as a matriarch — each with its own unique set of needs, constraints, and ambitions (IDEO.org 2020).
- **Rural women engage in a variety of work**, both paid and unpaid. They often work in agriculture but also other sectors of the rural economy, earning income as wage laborers, managing micro and small enterprises (MSEs), and as agricultural producers, growing food both to sell and to feed their family. Rural women also spend a significant amount of time on unpaid work in their family homes, farms, and businesses, caring for children and elders, preparing food, and maintaining their homes.
- **Service providers can identify distinct profiles of rural women** through customer research (The Human Account 2018, AgriFin 2021). Identifying distinct groups of women in rural and agricultural livelihoods (WIRAL) within the great diversity of this population helps providers better design and offer value-adding services.
- **CGAP recognizes the diversity of WIRAL lives and livelihoods** and takes a holistic approach in our work.
HOW DID CGAP DEFINE ITS WIRAL STRATEGY?

CGAP explored rural women’s constraints and opportunities and focused our strategy on those most salient.

- Just as WIRAL are diverse, so are their challenges, their needs, and the opportunities to better serve them. Considering the numerous enablers, or positive leverage points, in rural women’s lives and livelihoods that might help them increase their productivity, income, and therefore resilience, CGAP started by exploring this array of themes and related evidence.
- CGAP then conducted an extensive review of literature and experience related to various themes in rural women’s lives and livelihoods. We analyzed how numerous enablers impact WIRAL and relate to financial services, framed by the 3 pillars of the WBG Gender Strategy on economic opportunities, endowments, and agency. We then prioritized these potential areas of intervention according to 1) organizational gaps in how they were being understood and addressed by service providers and funders; 2) the potential for financial services to play a more catalytic role in increasing income and resilience; and 3) where CGAP might add value.
- This deck summarizes the CGAP analysis, which led to a focus on rural women’s access to and returns from labor and markets, and related financial solutions.

LABOR: Women earn less than men for the labor they provide and hire, and lack the tools and information needed to use their limited time more efficiently.

MARKETS: Women have less information about and fewer links to markets than men and tend to receive lower prices for their agricultural outputs.

- CGAP then further explored and tested this analysis in close collaboration with Mercy Corps AgriFin, IDH - The Sustainable Trade Initiative, the Rural and Agricultural Finance Learning Lab, and UNCDF, our partners and the global leaders in financial services for WIRAL. CGAP engaged Dalberg to synthesize our five organizations’ experience with WIRAL, elevate the larger narrative from our combined experience, highlight gaps for further promising research and experimentation, and further explore the literature on rural women, labor, and markets (Dalberg 2021).
- This analysis and testing with partners validated CGAP’s focus on WIRAL and their access and returns to labor and markets as high-potential areas of intervention and experimentation with service providers and funders.
CGAP’S WIRAL STRATEGY: LABOR AND MARKETS

CGAP focuses on how financial services can play a positive role in increasing WIRAL’s access and returns to labor and markets in order to improve their opportunities and resilience.

<table>
<thead>
<tr>
<th>LABOR</th>
<th>MARKETS</th>
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<tbody>
<tr>
<td>Wage labor: Decent, dignified, safe work generating income</td>
<td>Local markets: Local and regional markets, offering in-person opportunities to sell outputs, access information, and cultivate social networks</td>
</tr>
<tr>
<td>Saved labor: Efficient labor practices, such as through mechanization, which save time, conserve energy, and increase productivity</td>
<td>Digital markets: Digital marketplaces, creating opportunities to sell outputs and access a range of information and services</td>
</tr>
<tr>
<td>Hired labor: Timely, quality, affordable labor, creating further opportunities for laborers and female managers</td>
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**Key factors impacting WIRAL lives and livelihoods**
- Social norms: The cultural, gender and other social norms shaped by society that underpin attitudes and practices of and towards women across personal, household, community and institutional contexts
- Climate change: Women are more vulnerable to the impacts of climate change and yet have less access to technology, social capital, and productive resources, and less capacity to adapt and diversify their livelihoods

**Key elements of WIRAL-focused solutions**
- Bundled services: The bundling of service offerings (e.g., financial and non-financial) to drive adoption by rural women and promote the sustainable use of a wider range of services
- Digital tools and data: The application of digital tools and data to provide services to rural women to lower costs, increase outreach, and drive scale
II. KEY CONSTRAINTS
II. KEY CONSTRAINTS

KEY CONSTRAINTS: AT A GLANCE

Rural women have unequal access and returns to labor and markets, which prevents their economic empowerment.

**LABOR:** Women earn less than men for the labor they provide and hire, and lack the tools and information needed to use their limited time more efficiently.

- **Wage labor:** Agriculture is an important source of employment for rural women, though they earn less than men and face gender-based violence (GBV) on rural farms and enterprises.
- **Saved labor:** Lack of information about and access to new technologies as well as limited time prevent women from investing more in their livelihoods and limit their ability to mitigate the risk of climate shocks like drought.
- **Hired labor:** Compared to men, WIRAL have less time for shared labor networks; less access to household labor; less cash, credit, and savings to hire labor; and lower returns from labor they do hire. With climate change putting increasing stress on the growing season, access to timely and quality labor will be even more critical to maximizing productivity and minimizing losses.

**MARKETS:** Women have less information about and fewer links to markets than men and tend to receive lower prices for their agricultural outputs.

- **Local markets:** Local markets provide an important opportunity for women to earn a return on their agricultural activities, but poor access to information on prices and lack of relationships with brokers and traders means they tend to receive lower prices for their outputs.
- **Digital markets:** Limited access to technology, such as mobile phones, and low levels of literacy prevent women from leveraging opportunities to earn higher prices through emerging digital market platforms.
**KEY CONSTRAINTS: WAGE LABOR**

Rural women have less access to decent wage labor and educational opportunities.

Rural women’s wage labor is usually low-skill, labor-intensive, and informal, and often in agriculture. Rural women generally earn much less than men – about half as much in the casual agricultural labor market in Africa – and are more likely to be paid at piece rate (FAO undated and 2011), making them vulnerable to harassment and GBV on rural farms and enterprises.

<table>
<thead>
<tr>
<th>WAGE LABOR CONSTRAINTS</th>
<th>Access to decent wage labor jobs</th>
<th>Educational attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women often have lower access to decent jobs that provide equal pay for equal work, adequate health and safety, and sufficient worker representation.</td>
<td>WIRAL have lower levels of educational attainment and skills than men and women in urban areas, limiting their employment prospects.</td>
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<tr>
<td></td>
<td>Women are also more likely to have part time, seasonal and informal work.</td>
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<table>
<thead>
<tr>
<th>DRIVERS</th>
<th>Data</th>
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<tbody>
<tr>
<td>Women have less free time for labor beyond domestic duties.</td>
<td>Globally, women in rural areas are paid on average 25% less than their male counterparts...and rural women’s presence in workers’ and employers’ organizations remains low (11-35% of total membership), leading to [women’s] lack of voice and representation in policy and program design... (ILO 2012).</td>
</tr>
<tr>
<td>Women can be deterred from wage labor work due to workplace GBV and a lack of representation.</td>
<td>Using data from 42 countries, rural girls are twice as likely as urban girls to be out of school... whilst every additional year of primary school increases a girls' eventual wages by 10-20% (ISF RAFLL 2019).</td>
</tr>
<tr>
<td>Gendered roles (i.e., women as caregivers) reduce the likelihood of families investing in women’s education.</td>
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</table>
KEY CONSTRAINTS: SAVED LABOR

Rural women have limited access to and inadequate training on time- and labor-saving tools.

Rural women spend a disproportionate amount of their time on unpaid household labor, limiting their availability for paid work. With limited income and decision-making power, WIRAL lack access to time-saving tools and assets, as well as the training they need to use them. Extension services do not often consider the places WIRAL can easily reach, their other responsibilities and time commitments, and their preference for female extension agents.

<table>
<thead>
<tr>
<th>SAVED LABOR CONSTRAINTS</th>
<th>Access to time-saving tools</th>
<th>Ability to use time-saving tools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women have lower access to time-saving tools that could save time, increase productivity and mitigate the impact of climate change (e.g., irrigation services, soil cultivators).</td>
<td>Women are less likely to access training required to use time-saving tools. Extension services rarely align with women’s mobility and time restrictions and preference for female trainers.</td>
</tr>
<tr>
<td>DRIVERS</td>
<td>Limited financial decision-making power constrains women's ability to determine their use of time-saving tools. Women are less likely to have disposable income needed for such tools.</td>
<td><em>Female time and mobility constraints</em>, linked to defined roles as caregivers, limit their ability to participate in training. Cultural norms can restrict interaction between men and women, but extension agents and trainers are often men.</td>
</tr>
<tr>
<td>DATA</td>
<td>In Ethiopia, Ghana and Tanzania, mechanized irrigation technologies were largely applied on men’s plots where men controlled most rights. Women held only use rights as ‘helpers’ to their husbands (IFPRI 2017).</td>
<td>In Kenya and Tanzania, <em>women were more likely to obtain information about irrigation pumps from third-party sources</em> like spouses and neighbors; men were more likely to receive information from the origin (e.g., radio programs, agricultural shows, demonstrations, leaflets) (CGIAR 2014).</td>
</tr>
</tbody>
</table>
KEY CONSTRAINTS: HIRED LABOR

Rural women have less access to and earn lower returns from hired labor.

Women are highly engaged in agriculture, but less productive than men, largely due to their labor constraints. Compared to men, WIRAL have less time for shared labor networks; less access to household labor; less cash, credit, and savings to hire labor; and lower returns from the labor they do hire. WIRAL labor constraints reduce yield, quality, prices, and therefore income, leading to negative economic impacts. As climate change puts greater stress on the growing season, a lack of timely access to quality labor also places women at greater risk of lost productivity.

<table>
<thead>
<tr>
<th>SAVED LABOR CONSTRAINTS</th>
<th>Access to hired labor</th>
<th>Returns from hired labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women managers face more difficulties when hiring external labor for their businesses than male managers, limiting their total potential output and income. As climate change places greater stress on the growing season, timely access to labor will become increasingly important.</td>
<td>Women have lower access to financial liquidity and services to pay for hired labor. Gendered norms afford men priority access to available labor, limiting women to lower-quality or no labor.</td>
<td>Women managers generate lower returns from male hired laborers than male managers, reducing the output and income for female managers. As the growing season shifts due to climate change, the efficiency of labor will be increasingly important to maximize yield and minimize loss.</td>
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</table>

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<thead>
<tr>
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<th>DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women have lower access to financial liquidity and services to pay for hired labor. Gendered norms afford men priority access to available labor, limiting women to lower-quality or no labor.</td>
<td>In Côte d’Ivoire, women growing cotton cannot harvest in the peak period due to limited access to labor and then earn less for their output (10% less per kilogram), due to the lower quality of late harvests (WBG 2017).</td>
</tr>
<tr>
<td>Gendered norms and attitudes toward women restrict the authority of female managers. Women’s time constraints limit their ability to effectively supervise labor.</td>
<td>Among tomato growers in Ghana, female farmers had significantly higher levels of post-harvest loss than male farmers because women harvested tomatoes over a longer period, due to their time constraints and lower access to hired labor (FAO 2020).</td>
</tr>
</tbody>
</table>
KEY CONSTRAINTS: LOCAL MARKETS

Rural women have less access to market information, buyers, and competitive prices.

Due to their time and mobility constraints and lower access to digital tools, WIRAL tend to have less access to market information and buyers than men. Without these networks and links to local markets, women are more likely to sell to other farmers and traders at the farm gate, which often means lower prices and less income.

<table>
<thead>
<tr>
<th>LOCAL MARKET CONSTRAINTS</th>
<th>Access to market information</th>
<th>Access to market linkages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women farmers have <strong>lower access to the timely market information</strong> crucial to competitively participate in and benefit from markets, depriving them of first-hand opportunities to generate income.</td>
<td>Women are <strong>less likely to access brokers and traders</strong>, who are typically men, giving women fewer gateways to markets and income-generating opportunities.</td>
</tr>
<tr>
<td></td>
<td><strong>Mobility constraints</strong> (e.g., lower access to transport) limit women’s ability to gather timely market information.</td>
<td><strong>Socio-cultural norms linked to the gender of traders and brokers</strong> (most often men) restrict female access to networks and market linkages.</td>
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<tr>
<td></td>
<td><strong>Lower participation in farmer groups</strong> where market information is shared.</td>
<td>Time and mobility constraints can limit women’s ability to physically meet brokers and traders.</td>
</tr>
<tr>
<td></td>
<td><strong>Lower access to digital tools</strong> like mobile phones used to exchange market information.</td>
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</tr>
<tr>
<td>DATA</td>
<td>In Mozambique, men were exposed to multiple sources of formal and informal information; women’s key source of information was farmer-to-farmer interaction (often of poorer quality). <strong>Farmers with information sold a kilogram of maize at an average price 12% higher than farmers without information</strong> (ILRI 2013).</td>
<td>In Kenya, 82% of women and 61% of men sold their milk at the farm gate to other farmers and traders. Women rarely sold their milk to channels that involved delivery outside their homes (e.g., collection centers, traders, village markets) with less than 15% of the milk they sold going to these channels (compared to 39% of men) (ILRI 2013).</td>
</tr>
</tbody>
</table>
## KEY CONSTRAINTS: DIGITAL MARKETS

Rural women have lower access to and limited capability with digital tools.

Compared to men, WIRAL have lower literacy, digital capability, and access to digital tools. This constrains their ability to access and participate in innovative, digitally-enabled opportunities to learn, engage, and transact.

<table>
<thead>
<tr>
<th>DIGITAL MARKET CONSTRAINTS</th>
<th>Access to digital technology</th>
<th>Ability to use digital technology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women have <strong>lower access to digital technologies</strong> that could enable adoption and use of digitally-enabled marketplaces and other platform services (e.g., access to information, inputs, financial services) and increase income-generating opportunities.</td>
<td>Women in rural areas have <strong>lower literacy and digital literacy and skills</strong> than men, limiting their uptake and adoption of available digitally-enabled marketplaces.</td>
</tr>
</tbody>
</table>

| DRIVERS                    | Socio-cultural norms dictate that men have prioritized access to digital technology over women. Women on average have lower incomes and therefore find mobile phones, airtime, data, and other **digital technology less affordable** than men. | Women have lower **overall education access and attainment**, often driven by women’s gendered roles as caregivers. This reduces the likelihood of families investing in girls’ education. |

| DATA                       | In Nigeria, the smallholder farmer mobile ownership gender gap is 13 percentage points, and more women than men have never used their phone for agricultural activities such as accessing market information (CGAP 2017). | In Senegal, 36% of sampled women cited their lack of reading and writing as their main barrier to mobile internet access compared to only 12% of men (GSMA 2021). |
**KEY CONSTRAINTS: TAKEAWAYS AND WAY FORWARD**

Translating access into returns for rural women entails increasing their ability to fully engage with and benefit from tools, technology, and information.

**Rural women face important barriers to accessing labor and markets, leaving them at a disadvantage.** Supporting rural women to build more resilient livelihoods requires approaches that increase their access to decent wage work, time-saving tools, hired labor, local and digital markets, climate-smart tools and technologies, and training.

**But even when women have access to labor and markets, they tend to earn lower returns than men.** Closing the gender gap in rural incomes is about more than ensuring that women have equal access to labor and markets. Access is the start, but tools and technology are only useful when women are trained to properly deploy them; hired labor only increases productivity when women can effectively manage workers; and wage labor only provides dignified, meaningful income generating opportunities when workplaces are safe for women and pay women equally. Likewise, access to local and digital markets only matters when prices are fair and opportunities increase for women.

**Gendered social norms underlie many of the constraints rural women face to accessing and earning equitable returns from labor and markets.** Social norms often emphasize rural women’s caregiving roles, which increases their domestic responsibilities and limits their time and mobility. Attitudes towards women’s position in communities can constrain their authority as managers, reduce their bargaining power when dealing with buyers, and limit their ability to pursue income generating opportunities outside the home. In order to overcome constraints to rural women’s livelihoods, service providers and funders must understand and address the normative barriers that perpetuate unequal access and returns to labor and markets.
III. INSIGHTS AND OPPORTUNITIES
INSIGHTS AND OPPORTUNITIES: AT A GLANCE

CGAP identified opportunities for service providers and funders to meet the needs of WIRAL related to labor and markets.

The opportunities most relevant in a specific market and for a particular segment will vary. As outlined here, the opportunities highlighted in these slides are meant to provide general awareness, recognizing that specific solutions should be tailored to their context and segment.

**Labor:** Diagnose and target social norms constraining WIRAL and connect women hiring labor to women seeking employment.

- **Wage labor:** Connect women with local wage labor opportunities, recruit and support more women agents and trainings, and address social norms that constrain economic participation and income generation.
- **Saved labor:** Open WIRAL access to time- and labor-saving assets and technology and related training, while addressing the social norms that consume women’s time.
- **Hired labor:** Connect women managing farms and MSEs with women seeking employment and deploy the working capital, wage payments, and transfers they need.

**Markets:** Improve women’s access and returns to local markets and the tools and technology they need to engage in new digital platforms and markets.

- **Local markets:** Provide women with timely market information and build the capacity and networks of women’s cooperatives and market access groups, supporting women to work as and network with agents, traders, and brokers and take more leadership and decision-making roles, addressing social norms along the way.
- **Digital markets:** Tailor digital markets to women’s needs, for example by increasing employment of women as local agents, designing outreach and aggregation strategies that align with women’s needs, mobility, and preferences, and integrate financial and non-financial services tailored to specific profiles of WIRAL.
### INSIGHTS AND OPPORTUNITIES: WAGE LABOR

Solutions that connect women with decent work, facilitate wage payments, and address social norms can improve wage labor opportunities.

- Develop solutions that connect women managing farms and MSEs with women wage workers and facilitate wage payments.
- Diagnose and target the social norms that constrain WIRAL’s economic participation.
- Leverage digital tools with tailored training and in-person support over time from trusted women in the community.

<table>
<thead>
<tr>
<th>INSIGHTS</th>
<th>OPPORTUNITIES</th>
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<tbody>
<tr>
<td>When women laborers are excluded from their family’s agricultural income, many women prefer to work as wage laborers on other farms to earn and have greater control over their income.</td>
<td>Develop mechanisms to connect wage workers and farm- and enterprise-owners on employment opportunities, workers’ skills and availability, and workplace safety, as well as facilitate wage payments and ensure women’s control over that income (e.g., digital wallet, account ownership).</td>
</tr>
<tr>
<td>Rural women are less likely to access wage labor opportunities that require urban migration, given their domestic care duties and the social norms that restrict their mobility. They need safe, equitable employment opportunities in rural areas.</td>
<td>Advance MSE models of rural community-based childcare that offer employment and training for caregivers as well as relieve time constraints for female farmers with young children – both especially important for young women.</td>
</tr>
<tr>
<td>Financial literacy and household decision-making programs have significant potential to address GBV and gender issues that restrict wage labor opportunities (e.g., threats of violence that arise from disputes over women earning more money).</td>
<td>Target social norms that entrench women’s responsibilities and engage men through joint educational programs on the mutual economic benefits of women’s wage labor.</td>
</tr>
</tbody>
</table>

- Financial literacy and household decision-making programs have significant potential to address GBV and gender issues that restrict wage labor opportunities (e.g., threats of violence that arise from disputes over women earning more money).
INSIGHTS AND OPPORTUNITIES: SAVED LABOR

Solutions that increase WIRAL access to time- and labor-saving assets, tools, and skills can help make effective use of their limited time and labor.

- Design and deliver time- and labor-saving tools and assets that are tailored to WIRAL ergonomic factors and needs and responsibilities, such as planting, weeding, and minimizing post-harvest loss.
- Employ women to train other women as well as men to use and maintain these tools at times and in places convenient to WIRAL, leveraging technology and digitally-capable youth.

<table>
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<tr>
<th>INSIGHTS</th>
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<tbody>
<tr>
<td>Women farmers appreciate time-saving products, services and trainings tailored to their specific roles (e.g., opening access to mechanization and training on planting, weeding, minimizing post-harvest loss).</td>
<td>Support service providers to design and deliver climate-smart time-saving tools and training formats aligned with WIRAL needs. Develop post-harvest loss solutions tailored to women that complement mechanization, increase nutrition and incomes, and ensure women earn returns to labor.</td>
</tr>
<tr>
<td>Although rural women appreciate the convenience of digital learning, in-person support from demonstrations and advisors can complement digital tools. They enable women to overcome trust barriers and learning difficulties from low digital literacy and more effectively use digital services.</td>
<td>Explore models of in-person support from trusted community members and how they could leverage digital tools, incentivize agents, employ youth, and support the adoption of e-learning and other digital services. Leverage the skills of digitally-capable young women and men to build digital literacy and confidence among their older family members, especially women.</td>
</tr>
<tr>
<td>Trainings that engage both men and women on agricultural practices and roles in production can promote harmony within households and equitable sharing of responsibilities and decision-making.</td>
<td>Support household training programs and structured dialogues on household income generation as a non-confrontational channel to simultaneously upskill women and overcome gendered norms around agricultural and financial decision-making.</td>
</tr>
</tbody>
</table>

III. INSIGHTS AND OPPORTUNITIES

CGAP | FINANCIAL SOLUTIONS FOR WOMEN IN RURAL AND AGRICULTURAL LIVELIHOODS 23
### INSIGHTS AND OPPORTUNITIES: HIRED LABOR

Solutions that connect rural women managers to potential employees, finance wage payments, and elevate their successes can improve hired labor.

- **INSIGHTS**
  - Women tend to hire other women when possible.
  - When facing a financial shock, rural women who manage businesses and hire labor are more likely to lose their management positions and capacity to hire labor, as their earnings are typically less than men’s or they have lower savings to fall back on.
  - Women may perceive themselves to be of low credit worthiness, discouraging their own use of credit and constraining their ability to hire labor, invest in labor-saving technologies, or access markets.

- **OPPORTUNITIES**
  - Engage agents to help women farmers hire non-family labor and normalize women’s roles in supervising and directing laborers, increasing their access to and returns from hired labor and addressing related cultural norms and mobility constraints.
  - Support bundled interventions as a holistic approach to training, climate-smart time-saving tools, and financial services that can help WIRAL sustainably hire labor and maintain income sources after shocks, as well as increase farm productivity, build financial resilience, and shift social norms.
  - Work with banks to deploy short-term “labor loans” for women to hire labor at key points in the season.
  - Design campaigns that profile, share success stories, and celebrate women as capable managers, users of financial services, and decision-makers at home, on farms, and in businesses through radio, television, and social media channels.
### INSIGHTS AND OPPORTUNITIES: LOCAL MARKETS

Solutions that leverage and build women’s networks, support women in leadership, and address social norms can improve WIRAL access and return to local markets.

<table>
<thead>
<tr>
<th>INSIGHTS</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some women still sell to middlemen at less favorable prices. Though they value guaranteed markets and transparent, higher prices from dedicated offtake points, WIRAL still have time and mobility constraints to overcome.</td>
<td>Leverage and support women’s cooperatives to expand offtake points, reach more markets, embed climate smart approaches, and get services closer to women facing time and mobility constraints.</td>
</tr>
<tr>
<td>In-person agents can increase WIRAL awareness of local markets, cultivate trust, and support their registration and participation in these markets, overcoming challenges related to low literacy, time poverty, and restricted mobility.</td>
<td>Support expanded use of in-person, trusted agents (e.g., DigiFarm Village Advisors, Farm to Market Alliance Farmer Service Centres) to promote WIRAL adoption of market access, training, and financial and non-financial services.</td>
</tr>
<tr>
<td>Female leaders of market access groups are more likely to engage female farmers and increase their access to local markets than male counterparts (e.g., DigiFarm Village Advisors, Farm to Market Alliance Farmer Service Centres).</td>
<td>Recruit and support female leaders in market access groups and adapt group leader selection processes to address gender biases and increase WIRAL engagement. Encourage male leaders to increase outreach to female farmers.</td>
</tr>
<tr>
<td>Local markets are linked to digital markets that require in-person marketplace roles. Male family and community members may continue to dominate the local links to new digital spaces (e.g., making deliveries, purchasing supplies), limiting WIRAL decision-making, income, and financial independence.</td>
<td>Recruit more women to in-person, income-generating sales roles linked to digital markets and provide opportunities for women to bring digital markets local.</td>
</tr>
</tbody>
</table>

- Support WIRAL-centered and -led women’s groups and cooperatives to reach and engage more rural women.
- Recruit, train, and support women as community leaders and in-person agents and trainers and help them advance to decision-making and leadership roles.
- Target the social norms that constrain women’s voice and agency as local economic actors.
# INSIGHTS AND OPPORTUNITIES: DIGITAL MARKETS

Solutions that tailor digital markets to rural women’s needs, mobility, and preferences can improve their access and returns to digital markets.

- Tailor the combined offerings of financial and non-financial services on digital platforms and accompanying in-person support to specific WIRAL personas.
- Build the digital identity, access, literacy, and confidence of WIRAL to use these transformative digital services.

## INSIGHTS

| Insights | Digital marketplaces can create new, more compelling use cases for rural women to adopt financial services. Women may value using mobile money instead of cash-on-delivery networks that don’t reach rural areas. | Digital marketplaces can circumvent social norms that restrict women’s use of physical markets due to time and mobility constraints and domestic duties unaligned with working hours, opening new ways for women to network, upskill, and generate as well as control their own income. | In-person agents linked to digital markets can help WIRAL overcome registration barriers – including their low digital literacy and their husbands and older relatives who may act as gatekeepers – and increase their use of digital markets. |

## OPPORTUNITIES

| Opportunities | Tailor the combined offerings of financial and non-financial services on digital markets to specific groups of WIRAL, thereby increasing rural female financial inclusion and expanding use cases that increase the perceived value of financial services. | Target marketing of digital markets to specific profiles of rural women to increase women’s awareness of and confidence in them. Leverage digital markets to circumvent social norms, drive gender transformative approaches, and prove the value of women’s economic activities in households and communities. | Support deployment of in-person agents to increase registration for digital marketplaces and help gatekeepers see the benefits of these tools and WIRAL economic activity. Support work to build women’s digital identity and data so more rural women can qualify for financial services. |
Designing effective solutions for WIRAL requires a targeted approach and strategic partners.

The first step to developing effective solutions is to recognize the diversity of rural women, understand the target customers, and tailor products and service to their needs, preference, and ambitions. Despite facing some common constraints, WIRAL are highly diverse, and their gendered limitations may vary depending on context and life stage. The opportunities highlighted in this deck offer direction, but additional market research is required to better understand underlying constraints and adapt these opportunities into targeted solutions that add value to the lives and livelihoods of rural women.

Research and experience suggest ways to design and tailor financial and non-financial solutions to overcome rural women’s unique challenges. Solutions that offer access to information, training, technologies, and financing can help women farmers to produce and market their outputs more efficiently and profitably. Matching women seeking work with women hiring labor can help expand income generating opportunities, while helping reach equity in returns to hired labor. Strategies to serve WIRAL can leverage women’s groups and social networks, while also recruiting and mentoring female leaders, economic actors, and community agents.

Providers should seek to design around barriers linked to gendered social norms in the short-term, while engaging both women and men to address and shift them in the medium- to long-term; these approaches might include connecting women producers to women wage laborers, leveraging digital tools like market platforms to overcome mobility constraints, and financing time-saving assets that reduce women’s time on unpaid labor. All system actors have their own important role to play in addressing constraining social norms.
INSIGHTS AND OPPORTUNITIES: TAKEAWAYS AND WAY FORWARD

Designing effective solutions for WIRAL requires a targeted approach and strategic partners.

To help WIRAL benefit from digital tools, they should be paired with human interaction. Technology is important, but not effective in isolation. Technical tools need human ambassadors, agents, and trainers who can help others use them and improve them with user feedback. For digital tools to reach their potential, tailor them to rural women’s needs and complement them with the power of trusted groups and cooperatives. Women’s groups, female agents, and female trainers can communicate effectively with rural women and help build trust in new technologies and practices.

Tackling the complex issues facing rural women requires strategic partnerships with other organizations and stakeholders in their communities. Serving rural women requires expertise in gender, agriculture, financial services, digital technologies, and climate change. No single service provider or stakeholder can effectively tackle these issues and make positive change alone. Working with partners can help amplify each organization’s strengths while ensuring that solutions more holistically address the needs of rural women.
IV. PROVIDER EXAMPLES
FINANCIAL SOLUTIONS FOR WIRAL: EXAMPLES

Service providers are finding innovative ways serve WIRAL with tailored solutions that add value and make business sense.

The following five slides show examples of service providers working to solve challenges for rural women:

- **Wage Labor**: Wi-Agri in Côte d’Ivoire
- **Saved Labor**: Sistema.bio in Mexico
- **Hired Labor**: AgroMall in Nigeria
- **Local Markets**: Women’s Microfinance Bank Limited in Papua New Guinea
- **Digital Markets**: DigiFarm in Kenya

Each brief story shares a challenge and a solution, demonstrating that despite the constraints confronting both WIRAL and service providers, there are emerging examples of effective solutions for this dynamic market.

Importantly, these examples are early-stage and it remains to be seen whether they will be able to sustainably drive impact at scale. Still, they demonstrate the ways in which providers around the globe are finding innovative ways to improve the lives and livelihoods of rural women. Moving forward, both providers and funders should take inspiration from these examples and consider how they might be able to learn from, iterate upon, and scale emerging approaches to serving WIRAL.
**WAGE LABOR: WI-AGRI, CÔTE D’IVOIRE**

Wi-Agri improves wage labor for women in the cashew value chain by market linkages and access to credit and digital payments.

**Challenge**
For the estimated 1.5 to 2 million women who pick and process cashew in Côte d’Ivoire, access to markets and the timing of payments pose challenges. Some cashew producers opt to pay “pickers” in-kind with a portion of the cashew crop, meaning that timely access to buyers offering fair prices can determine when they are paid and how much they ultimately earn. For pickers who are paid in cash, producers sometimes wait to pay workers until they have sold their harvest, leaving these women without access to funds to cover urgent family expenses. And because local processors face competition for raw cashew from exporters, this leaves them unable to employ women when cashew supplies are unavailable.

**Solution**
Wi-Agri is an agritech platform in Côte d’Ivoire that links producers and laborers with buyers, small-to-medium scale processors, exporters, information hubs, and financial service providers. At the core of Wi-Agri’s offerings lies its market linkage service, which connects cashew producers with formal buyers offering fair prices. This not only helps women producers to get a better price for their harvests, but also provides opportunities for women wage laborers paid in-kind to improve the amount and timeliness of their earnings. And by connecting producers and buyers, the platform strengthens local value chains, ensuring that processors have access to cashew and can offer wage labor opportunities for women.

Wi-Agri also helps producers to access short-term credit and digital payments needed to hire laborers and make on-time payments. Laborers can also access credit to cover immediate expenses as they wait for their wages, savings that allow them to set aside money for their own farms and business, and digital payments that for many offer their first opportunity to engage with formal financial services.
SAVED LABOR: SISTEMA.BIO, MEXICO

Sistema.bio turns waste into time savings for rural women.

Challenge
According to the World Bank and the International Energy Agency, 2.8 billion people or 66% of the world population still burn solid fuels such as wood and animal dung for cooking and heating (IEA et al 2020). Women in these households spend 18 hours a week, on average, gathering wood for cooking and heating purposes (UN WOMEN 2021). More time collecting firewood means less time spent tending to their farms or pursuing wage labor opportunities, leaving rural women at a disadvantage when it comes to investing in their livelihoods.

Solution
Sistema.bio designs, manufactures and installs biodigesters and biogas appliances for smallholder farmers around the world. Sistema.bio also offers financing for customers who are unable to purchase the systems upfront, with approaches that vary depending on regional context. Biodigester technology produces clean energy for their households, most of which still rely on firewood and charcoal for cooking.

For Maria Eufemia, a biodigester user in Yucatán, Mexico, cooking with firewood meant going up a nearby hill with her daughter to chop, collect and carry the wood back home, which usually took around four hours. She then had to start the fuelwood stove, cook for her family and clean the kitchen from charcoal and ashes. Since getting a biodigester, the time allocated for cooking has reduced significantly. “Now it is much easier for me because when I get up in the morning, I simply light a match to start the fire,” she says. Maria now uses her extra time to tend to her farm and help her husband deliver piglets.
HIRED LABOR: AGROMALL, NIGERIA

AgroMall leverages data and navigates social norms to help women hire labor.

Challenge
For rural women in Nigeria, hiring labor during key points in the growing season is critical to a successful harvest. But finding the funds to pay laborers is a persistent challenge. Whereas male producers are able to apply for credit from local lenders to cover their working capital needs, these lenders require a form of collateral that many women lack – their land. Social norms in Nigeria leave many women without rights to land, putting financing out of reach when lenders require it as collateral. As further complication, women face resistance from men in their own communities concerned that women’s access to financing and subsequent increase in earnings will shift household dynamics out of their favor. So even when lenders find alternative ways to offer credit, men may constrain these innovations from reaching women.

Solution
AgroMall’s proprietary mobile and web application – the AgroMall Digital Agriculture Platform (ADAP) – is used by over 1.3 million smallholders in Nigeria to access loans for farm inputs, agronomic information, and produce aggregation services, and connect with produce buyers. In 2021, AgroMall launched a pilot service to make it easier for women using ADAP to access credit.

Recognizing that a lack of land rights was a key barrier to women accessing financing on ADAP, AgroMall developed “Transform Score,” a credit scoring algorithm that uses alternative data like adoption of agronomic practices, production outcomes, and transaction histories to offer loans without the need for land as collateral.

While Transform Score promises to expand women’s access to financing, changing men’s attitudes turned out to be an even bigger challenge: when speaking with women about the credit pilot, agents met resistance from village elders and other men in pilot communities. One common concern they heard from men is that if women earn more money, the power dynamic in the relationship may shift out of their favor, even to the point that their wives may leave them. Addressing the social norms that constrain women’s access to credit needs more than a technical solution, and the work for AgroMall continues.
LOCAL MARKETS: WBML, PAPUA NEW GUINEA

WBML agents and biometrics expand access to financial services for women in local markets.

Challenge
In Papua New Guinea (PNG), women and men play different economic roles: women tend to produce lower value crops for consumption and sale on local markets, while men tend to produce cash crops for sale to off-takers and exporters.

For women selling produce at local markets, lack of access to formal financial services is a challenge. The security situation in PNG means that holding large sums of cash is risky. And with bank and MFI branches located in urban centers far from markets, women are reluctant to leave their wares and travel with cash given the risk of theft. These women are also often illiterate and lack formal identification, further complicating their ability to open financial accounts and transact.

Solution
Women’s Micro Bank Limited (WMBL) is the only licensed financial institution in PNG that focuses on women and works to increase rural women’s banking access points. In partnership with UNCDF, WMBL developed Mama Bank Access-Points (MAPs), a low-cost, biometric-enabled solution that allows market vendors to conduct banking transactions using their fingerprints at the market. The biometric solution is safe and secure, and women found it simple and user-friendly, which increased customer confidence.

The MAPs are small structures managed by two WMBL staff and equipped with tablet-based biometric technology. This easy to replicate, low-cost solution works in online and offline modes, making it usable in areas with limited internet connectivity.

With the introduction of MAPs, WMBL’s active customer base increased from 8,000 in July 2018 to over 20,000 in December 2019 and then 35,000 customers in June 2021. This work exemplifies UNCDF’s larger Making Women Builders of Digital Economies approach.
**DIGITAL MARKETS: DIGIFARM, KENYA**

DigiFarm leverages technology and agents to open digital markets to women farmers.

**Challenge**

In Kenya, mobility constraints and a lack of information on market prices leave rural women reliant on local traders to sell their harvests. These middlemen often offer women low prices, making it difficult for them to earn fair returns. Increasingly, digital solutions are emerging to link smallholders with buyers beyond their local communities. These solutions provide more insight into prevailing market prices and allow farmers to aggregate their production with neighbors, thus improving their bargaining power and allowing them to earn a higher price for their produce.

However, rural women face unique challenges in benefiting from the emergence of these digital marketplaces. Limited mobility due to household responsibilities means that they are less likely to be exposed to new ways of selling, while low levels of literacy and higher risk aversion dissuade them from adopting digital solutions even when aware of them. Social norms are also a challenge, with many rural women required to seek permission from their husbands or parents before registering for new products or services.

**Solution**

DigiFarm is an end-to-end digital platform in Kenya that connects smallholder farmers with inputs, financing, training, insurance and buyers through a market linkage service and digital marketplace. But despite reaching more than 1.5 million farmers since its launch in 2017, DigiFarm found that few women were using the platform. So DigiFarm worked with Mercy Corps AgriFin Accelerate to understand and address the barriers women face in accessing the platform.

Research showed that local agents, known as DigiFarm Village Advisors (DVAs), were critical to raising awareness, improving trust and overcoming mobility constraints among rural women. So DigiFarm expanded the roles of DVAs to include visiting women farmers in their households, helping those with limited literacy to register, providing in-person support, and even collecting sold produce from women’s homes and farms to overcome mobility constraints. Thanks to the expanded role of DVAs, women now represent 36% of DigiFarm customers, a figure the platform hopes to soon increase to 50%.
WHAT THIS MEANS FOR PROVIDERS AND FUNDERS

Providers and funders play critical roles in developing and scaling effective solutions for rural women.

While the solutions featured in this section have the potential to improve the livelihoods of rural women, they are early-stage and it remains to be seen whether they will be able to reach the scale and sustainability necessary to address the challenges facing rural women.

In the coming years, CGAP will work closely with provider partners to conduct research and experimentation designed to identify most promising approaches and address barriers to scale and sustainability. In the meantime, financial service providers and funders can help to develop and scale innovative approaches to serving rural women:

• Financial service providers can help build the business case for serving rural women: Innovation is critical to expanding our understanding of how providers can successfully improve the livelihoods of rural women at scale and sustainably. Successful examples of products and services targeting rural women can inspire others to replicate, iterate upon and adapt these services to their own markets. This can help drive competition, improve business models and crowd in investments.

• Funders can help early-stage solutions gain momentum and scale. With few providers currently focused on serving rural women and most solutions at an early stage, funders play a critical role in providing the patient capital and technical assistance necessary for providers to refine business models, prove the business case for serving rural women, and attract investment. Donors and investors can also learn from these and other promising examples and direct funding and support to providers exploring similar approaches in markets around the globe.
V. BACKGROUND AND RESOURCES
CGAP METHODOLOGY WITH WIRAL STRATEGY

CGAP conducted an extensive global review of literature and experience and prioritization exercise to define our strategy with WIRAL.

CGAP defined our WIRAL strategy by exploring three questions:

1. What key enablers (or positive leverage points) might help WIRAL increase their productivity, income, and therefore resilience?

2. How might financial services better facilitate these enablers?

3. How might CGAP add value? Particularly leveraging:
   - **Strong, engaged partners** including CGAP members for collaboration and application of insights
   - **Existing evidence base** positioning CGAP and partners to test hypotheses in applied work
   - **Opportunities relevant to CGAP members and stakeholders**, distilled from practical hypothesis-testing with service providers
   - **Holistic approaches** encompassing the range of personal and household needs, endowments, and aspirations among WIRAL
KEY WIRAL COLLABORATORS

CGAP exchanges knowledge and collaborates closely with Mercy Corps AgriFin (MCA), IDH, the former Rural and Agricultural Finance Learning Lab (RAFLL), and UNCDF in our work with WIRAL.

To inform and accelerate this WIRAL partnership, CGAP asked Dalberg to:

• Build on our foundational research which defined CGAP’s WIRAL strategy; and,
• Synthesize insights on the key constraints, opportunities, and evidence from CGAP, IDH, MCA, RAFLL, and UNCDF experience with WIRAL.

The resulting deck – “Women in Rural and Agricultural Livelihoods (WIRAL): Review and Synthesis of Literature and Leading Experience” – shares rich insights from this synthesis. It provides a structured evidence baseline to:

• Understand key constraints facing WIRAL on access to and returns from labor and markets;
• Map CGAP, IDH, MCA, RAFLL and UNCDF activities with WIRAL and outline how they address constraints facing WIRAL; and,
• Provide structure and references to the body of WIRAL literature in order to guide future research and action.
**WIRAL REFERENCES**

These key resources inform CGAP strategy with WIRAL.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Year</th>
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<tbody>
<tr>
<td>CGAP</td>
<td>2017</td>
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ABOUT CGAP

CGAP’s vision is a world where poor people, especially women, are empowered to capture opportunities and build resilience through financial services.

We are a **global partnership** of over 30 leading development organizations, housed at the World Bank.

We believe that **financial inclusion is an important enabler of poverty alleviation.**

We advocate for **responsible market development**, helping funders to navigate emerging trends and adapt their practices to be more responsive to market needs.

**Contact CGAP to exchange and collaborate on improving the productivity, income, and resilience of WIRAL.**

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