



LEARNING BRIEF

Pathways to Income Generation: Evidence from a Global Investment in Gender Equality and Women's Empowerment

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KEY FINDINGS

1. To maximize the benefits of financial inclusion, implementers must include parallel investments that address and account for constraints on women's financial and social behavior, mobility and educational attainment.
2. Successful programs provide both access to the formal labor market and leadership, financial and networking training.
3. Investments in skills, knowledge and capacity-building can improve household well-being.

Supporting women's economic empowerment is essential both to realize women's rights and to achieve broader development goals, such as economic growth, poverty reduction, health, education and wellbeing. To be economically empowered, women must have the means to achieve economic security for themselves and their families and to influence the markets and governance structures, norms and expectations that

affect their livelihoods (Kabeer 1999, 2001). This brief offers evidence from several projects funded by the Women and Girls at the Center of Development (WGCD) initiative of the Bill and Melinda Gates Foundation.

This learning cluster brief explores the relationship between women's and girls' agency and their access to resources and ability to earn, save and spend income

between women's and girls' agency and their access to resources and ability to earn, save and spend income for themselves and their families. Research in this cluster queries how women and girls can be brought into sustainable paid employment and earnings opportunities, how financial systems and structures serve women (or fail to do so) and the household-level impacts of women's increased access to financial resources.

Looking across the projects in this cluster, we asked a crucial question: How does enhancing women's agency and access to resources influence women's pathways to income generation?

Enhancing women's ability to make choices over their economic and social lives is not simple. Their lives are inevitably tied up with their households, their communities, and the gender norms that frame their movements and opportunities. Women's and

girls' access to resources is critical, but can only truly be leveraged when sensitive to their economic vulnerability. Intra-household power dynamics and decision-making, as well as assets such as education and mobile technology, are often out of their control, yet consequential to their economic choices.

The findings from the WGCD projects are complex but encouraging. Emerging evidence from these projects highlights the importance of building skills and self-efficacy, digital financial technologies, and parallel investments in more conventional aspects of financial inclusion. For example, financial inclusion programs focus on how to use bank accounts and other financial services and how to develop relevant business plans and manage savings.

There are several themes linking the projects in this learning cluster. These include addressing social norms about women's use of money, bank accounts and

FIGURE 1. WGCD Projects Referenced in this Brief

PARTNER	COUNTRY	BRIEF DESCRIPTION
The BOMA Project (REAP)	Kenya	2-year poverty graduation model to improve food security, livelihoods, shock preparedness & human capital
CARE (Digital Sub-wallets)	Uganda	Mobile savings platform that divides savings for specific purposes to help women better manage savings
CARE (LINK Up)	Tanzania, Kenya	Design financial products and business models to link informal savings groups with formal financial service providers
CARE (Win-Win)	Burundi	Gender-transformative intervention including dialogues between women and men compared to "gender-light" incorporation of gender activities into agriculture program
Harvard University and others (Smart Payment Schemes)	India	Providing personal (not household) bank accounts for direct deposit of women's wages to increase female labor force participation
ICRW Asia (Plan-it Girls)	India	Skills, resources and connections for adolescent girls to improve access to employment opportunities
Panzi Foundation	Democratic Republic of Congo	Agricultural training, nutritional education, access to crops and equipment, male engagement and social norm transformation to support current and former sex workers in urban areas reintegrate into rural societies
REPOA		Distribution of mobile phones to promote financial inclusion and understand what types of phones, packages and distribution models are most effective
WaterSHED	Cambodia	Developing women's mentorship network within the water, sanitation and hygiene sector and marketing program to improve women's productivity and decision-making power

More information on each of these projects can be found at www.icrw.org/wgcdpartners.

access to technology; engaging men in women's economic empowerment; and facilitating household discussions about financial control and decision-making.

ACCESSING INCOME GENERATING OPPORTUNITIES

Women's economic lives start well before they enter the workforce. In adolescence, girls are influenced by the adults in their households. A foundational step toward economic independence is education, which should allow girls to build skills that lead to employment opportunities. Unfortunately, for a vast majority of girls worldwide, the school to work transition is rife with gender norms that limit girls' ability to complete their education and develop these critical skills.

Employability skills and employment readiness is challenging and highly context dependent.

There is a demand for programming that links women to employment opportunities through skills-based training. Such training for adolescents and adults should offer networking and mentorship opportunities. This helps women to retain their jobs, to advance in their careers, and garner resources for self-employment (Buvinic and O'Donnell 2016,2019). Programming must address social norms that shape women's access to resources, constrain their agency or limit their ability to respond to shocks (Cislaghi and Heise. 2018; Marcus 2018; Hillenbrand et al 2015 Quisumbing et al 2018). It must also address intra-household decision-making

dynamics (Gammage et al 2020; Aggarwal 1997).

Several WGCD projects sought to increase access to paid employment for both adult women and adolescent girls. Plan-it Girls, implemented by the International Center for Research on Women Asia, is a school-based program in Delhi and Jharkhand. The program consisted of a two-year gender curriculum with girls starting in either Class 9 or Class 11. The curriculum focused on gender perspectives, life skills and employability skills, while also engaging male peers and other stakeholders.

Girls were surveyed at baseline and endline to capture changes in both empowerment and employability domains, including self-esteem, gender attitudes, career decision-making efficacy, economic self-efficacy and preparation for future work.

Results differed by age and site. Girls in both groups in Delhi saw improvements in self-esteem, but only girls in Class 9 improved in Jharkhand. Both groups of girls increased their self-efficacy in Jharkhand, while no change was observed for either group in Delhi, where reported self-efficacy was already high at baseline. Among employability indicators, Class 9 girls in Delhi saw the greatest improvements, in both economic self-efficacy and preparation for future work. Class 11 girls in Delhi observed no change in those indicators, nor did either group in Jharkhand. Class 11 girls in Jharkhand reported improvements in career decision-making efficacy, though they were the only group that saw a change there.

FIGURE 2. Plan-it Girls Evaluation Results

		Delhi		Jharkhand	
		Class-9	Class-11	Class-9	Class-11
Empowerment	Self-esteem	1.552***	1.311**	1.118*	0.156
	Self-efficacy	0.413	-0.113	1.727**	1.499*
	Gender attitudes	4.588**	2.735*	0.187	1.81
Employability	Career decision-making efficacy	-0.593	-0.891	2.345	2.812*
	Economic self-efficacy	1.289**	0.252	0.3	-0.366
	Preparation for work in future	1.366***	0.547	-0.053	-0.287

*** p<0.01, ** p<0.05, * p<0.1



These nuanced results indicate that employability skills and employment readiness is challenging and highly context dependent.

Even when empowerment indicators shift improved outcomes in the labor market may not be observed. Employability requires careful tailoring by age and context. An ongoing qualitative study will dive deeper into these distinctions. The findings will help us understand how to successfully build these skills and support improved employment outcomes.

Two other projects focused on providing women with opportunities to build and grow a business, build skills, as well as important soft skills, such as mentorship and leadership training. In Cambodia, WaterSHED engaged female entrepreneurs in the sanitation sector and focused on women in the market for water and sanitation (WASH) products and services. Members of the WEwork collective, a capacity-building and mentorship network for entrepreneurs, received support and training on personal, professional and

community leadership, as well as business planning and financial literacy. WaterSHED also reshaped WASH marketing tools and strategies in order to better reach rural women consumers and promote the success of businesswomen in the supply chain.

Survey outcomes include women's business skills, WASH knowledge, financial inclusion and household decision-making. Participants showed an increase in income from wage employment, improvements in household expenses recordkeeping and some increased political participation, such as nominations for public posts. The number of businesses owned by women fell from 155 to 91 over the course of the project. Those that closed were less productive, however, and women who closed their businesses moved from entrepreneurship to paid employment, and participants overall saw a significant increase in annual income from any type of work.

Participants in WaterSHED's program experienced increased income and increased job specialization. At

endline, participants worked in a smaller number of jobs and engaged in fewer types of income-generation activities than at baseline, but worked overall more days of the year: 151 days compared to 87 days at baseline. Respondents also reported improved social networks as a result of the project. Between baseline and endline, including increases in density and frequency of interactions as measured by the number of people contacted and the frequency of contacts. This change was significant for both treatment and comparison groups.

Overall, WaterSHED's findings suggest that the professional skills training, peer mentorship, and networks, offered by the program, facilitated women's access to more stable and gainful employment.

The Panzi Foundation worked with vulnerable women in the Democratic Republic of Congo, namely sex workers who are at high risk for HIV and other STIs, violence and stigmatization. Many of these women turn to sex work because they have no other income generation opportunities. The Panzi Foundation implemented a multi-sectoral project that provided women with material support for agricultural work. The support included cash or other productive inputs and land and training in food cultivation and processing. The project also included nutrition education, vocational or formal schooling for girls and women's groups where gender issues were discussed.

Sex work as a main source of income dropped rapidly among participants from 65 percent to 21 percent. Nearly 70 percent of participants had saved some

money by the end of the program. These findings suggest that when alternative opportunities for work are available, women take advantage of them. This confirms that lack of opportunity was a major driver of sex work.

INCREASING EXPENDITURE

Increases in income and savings made possible by employment-ready skills and access to financial services frequently engender similar increases in expenditure. The greatest impacts are on expenditures in education, healthcare and food.

The BOMA Project implemented its flagship REAP project in pastoralist communities in northern Kenya, where climate change threatens women and families who have limited means of responding to droughts, floods and other shocks. REAP employed a two-year poverty graduation model to diversify household income and support food security and shock preparedness. There was a special focus on the "last mile" of financial inclusion. The project offered seed capital, business and life skills training, mentorship and enrolled women in business and savings groups. Mentors and groups encouraged savings behavior. REAP aimed to arm vulnerable women with the tools, training and resources they need to successfully start and maintain businesses. Participants received feature phones and SIM cards with mobile money accounts. They were trained on and encouraged to use a new platform that allows members of savings groups to contribute to and withdraw from both personal as well as group accounts.

FIGURE 3. The BOMA Project: Changes Observed

	2016	2018
Food security		
No child went to bed without an evening meal in the past week.	42.8%	98.5%
Household members ate at least two meals a day in the past week.	80%	99%
Sustainable Livelihoods		
Value of business is 25% larger than total value of the initial cash transfer.	n/a	95.9%
Participant can access more than one source of income.	64.9%	96.4%
Shock Preparedness		
Participant is a member of a savings group, has access to credit and has a minimum of KES 8,000 in savings.	2%	99%
Human Capital Investment		
All eligible primary-school aged girls are enrolled in primary school.	56.7%	68.5%

Researchers observed meaningful shifts in food security and spending on food, education and medical care. A major finding was a drop in the number of children missing an evening meal from 57 percent to 1.5 percent. Further, the percentage of household members who ate at least two meals per day increased from 80 percent to 99 percent. Annual school expenditure also increased by 154 percent and the percent of female children enrolled in primary school increased from 56 percent to 68 percent. Finally, annual medical expenditures increased by 85 percent over the course of the program. These findings indicate that more available income leads to higher spending on these essential items.

In two provinces in Burundi, CARE tested the value of incorporating gender-transformative activities into an existing livelihoods intervention. This included improving agriculture skills, extension services, entrepreneurship training, financial education, market and microfinance linkages and Village Savings and Loan Association Networks. In the intervention group, fewer participants reported food insecurity at the end of the project (2.1 months at baseline and 1.4 months at endline). This suggests that just as parallel investments in skills, knowledge and capacity-building can support women to maximize the benefits of

financial inclusion, they can also improve collective wellbeing in a household.

FINANCIAL SKILLS, DIGITAL SOLUTIONS, AND PARALLEL INVESTMENTS

Women's economic choices are inextricably linked to their ability to manage their income and make the final decisions over what it is used for. Women's financial capabilities, financial inclusion, asset ownership and control and economic vulnerability determine their level of economic empowerment. More digital financial solutions are being used to empower women financially and overcome physical and information access challenges. However, these solutions do not always overcome gender and social norms that prevent women from accessing mobile technology. Digital financial inclusion programs should build women's financial management skills, help them navigate technological products, and include male partners or others who influence their economic lives (Arnold & Gammage, 2019, Gammage et al., 2017; Holloway et al 2017, Kumar et al., 2010).

FINANCIAL SKILLS

Projects that aim to build women's financial capability and control can look like a traditional financial inclusion poverty graduation models, as with the case of BOMA's REAP intervention, or like a modified government payment scheme that tests the role of digital payments in increasing women's control over payments. Over BOMA's two-year project, average household income rose by 78 percent and diversified - women's access to more than one source of income increased from 65 percent to 96 percent. Of the businesses founded under the project, 96 percent grew to a value at least 25 percent larger than the original cash transfer.

Women also used the opportunity to save. By the end of the program, nearly all participants had generated and sustained savings. This translated directly into risk resilience. By the end of the program, 99 percent of participants reported they were prepared to respond to income shocks, climate events or other emergencies because of their access to credit and savings networks. These findings highlight the success of savings-focused programming. When coupled with income-generation and capacity-building, these programs build the resilience of vulnerable women.



Through the Smart Payment Schemes project, researchers from Harvard University, Yale University, Duke University and the University of Southern California, in collaboration with Evidence for Policy Design India at the Institute for Financial Management and Research, investigated whether modifications to the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the world's largest workfare program, could improve program efficiency, reduce corruption, and increase rural women's employment, financial inclusion, and empowerment. The research involved two pilot projects. The first provided women with mobile phone voice alerts about their bank account balances and receipt of government transfers. The second project gives administrators access to MGNREGA payment delays and program dysfunction via real-time, interactive web-based dashboards. This project is with the Government of Madhya Pradesh (MP), the federal Ministry of Rural Development (MoRD), and two major state-owned banks. The findings will be used to inform policies that affect rural women in India. The researchers took advantage of a large-scale randomized control trial, conducted in partnership with the Indian state of Madhya Pradesh, to explore variation in women's control over household resources

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received through MGNREGS and test the role of digital payments in increasing women's control and agency over their income and household resources. At the time of the experiment, payments for the MGNREGS were deposited into a single household bank account, almost exclusively owned by men. As the authors note, under this model, "a woman's MGNREGS earnings were transferred directly to her husband" (2017:2). The authors tested several modalities of potential financial inclusion, including opening bank accounts linked to their MGNREGS payments for women and adding a two-hour "financial information intervention" called "linked plus". The design was intended to look at increasing a woman's control over her wages separately from the effect of increasing her access to a bank account (Field et al. 2019).

The results from this study demonstrate the importance of parallel investments. After one year, those who received the most intensive intervention—digitally-linked payments into their own bank accounts, along with financial education—were more likely to participate in both public and private sector work. Impacts were particularly strong for those women who were more constrained by social and gender norms – those who were least attached to the labor market prior to the intervention and whose husbands believed they would face greater stigma if their wives pursued employment. Longer-term results, determined at a follow-up three years after the intervention, point to a liberalization of social norms: both women and men became more accepting of female labor force participation. These findings, including the fact that work increased both in the MGNREGS program and in the private sector, suggest that women's direct access to financial resources and training increased their ability to make decisions about their own employment.

DIGITAL SOLUTIONS

Providing women with digital technology, as BOMA did, or linking their bank accounts and government payments to their own devices, as Yale did, are critical steps toward digital financial inclusion. One of the objectives of the Smart Payment Schemes was to generate new knowledge about how digital payment schemes can enable low-income women's financial inclusion. A second objective was to understand digital payment schemes' impact on women's socioeconomic well-being. Yet the WGCD findings make it clear that women need training and skill building to navigate digital technology and systems and products designed with their needs, knowledge and constraints in mind.

The design and implementation of digital tools must consider women's literacy, numeracy and familiarity with technology, and account for how women will use them.

The BOMA Project provided 676 REAP participants with phones and access to the digital platform M-Chama, a savings platform. Participants' understanding and use of the platform was low, particularly for business purposes. Only 9.5 percent of participants saved

money through M-Chama, and only 5.7 percent used the platform for transactions with customers. These participants continued to save money in traditional ways (cash or livestock). The reliance on traditional savings methods instead of digital products suggests a lack of trust in digital savings systems and, indeed, evaluation of the platform revealed significant misconceptions about mobile banking in general.

These challenges may be due, at least in part, to low literacy and numeracy levels among participants. The complicated platform required nine steps to make a group deposit. Only 8 percent of the cohort was literate, and participants largely relied on family members or mobile agents to navigate the M-Chama menu options. This lack of autonomy reduced their trust in the security of the platform, as participants had to share their PINs with a number of people. Regular mobile platform support from mentors to women and correcting technology-related misunderstandings is critical for the successful uptake of digital financial services.

REPOA supported a project to understand the pathway from women's mobile phone ownership to financial inclusion in developing countries. Through a randomized controlled trial in Tanzania, the researchers investigated which mobile devices, packages and distribution mechanisms led to uptake of digital financial services. REPOA project staff distributed basic mobile phones, smartphones, data plans, and solar electrical chargers to low-income women. REPOA examined the effects of distribution to groups vs. individuals, urban vs. rural residents, especially smallholder farmers; literate vs. illiterate women; and on subjects with more and less openness to new technology.

The research included 1,352 women non-phone owners in Tanzania in 2016-17 and randomly assigned them to one of four study groups: basic handsets, smartphones, a cash placebo (equivalent to the cost of a basic phone) and control (control individuals were placed on a waitlist to receive a phone one year later). Mobile phone-use instructions and training were bundled with the treatment conditions. After fourteen months, the mobile phone intervention had improved participants' uptake and use of digital financial services. Receipt of basic and smart phones, however, resulted

in very different economic effects at the individual and household-level. Whereas basic phones had stronger effects on women's mobile money use and income levels, smartphones induced higher gains in household consumption. There may be several explanations for these findings. Basic handsets were better matched with participants' technical competencies and directly benefitted participants. Smartphones were shared within the household and had effects on the overall household mobile phone capabilities. This led to a higher number of phones in the household by endline. The household welfare effects in the smartphone group were quite substantial: increasing annual consumption by \$215, with a benefit-cost ratio of more than 2:1.

The loss of phones is surfaced intrahousehold and power dynamics and persistent gender inequalities.

BOMA and REPOA both faced mobile phone turnover – phones were either sold, stolen, lost, confiscated or broken. While mobile phone ownership at the end of the BOMA project had risen from 40.6 percent to 92.9 percent, only 73.9 percent of those were the devices originally provided by BOMA. REPOA reported a handset loss of 26 percent among the phone groups. Of those who failed to retain their handsets at midline, more than 75 percent were still without a phone eight months later at endline.

The loss of phones is surfaced intrahousehold and power dynamics and persistent gender inequalities. In the event of need phones were sold. But phones were not lost or sold REPOA participants at the same rates. Young women lost phones at a higher rate than older women. Women in those households that did not have a phone previously were also significantly more likely to lose a phone – suggesting that it had been confiscated or coopted by another family member.

Receipt of smartphones boosted consumption by 20 percent. These consumption gains were driven primarily by the participant's increased use of mobile money and greater income-generation. The use of the phone by other members also affected these consumption gains. Consumption rose more if the daughter or the husband also used the phone – suggesting cooperative use of the phone. But

consumption fell if the son also used the phone. This suggests that the phone was less available to the primary user when a son had access to it.

One way to address the misunderstandings of mobile technology, as well as the intra-household decision-making power dynamics, is to design mobile-enabled products around women's savings habits. This is what CARE did in the LINK Up project in Kenya and Tanzania. Implementers tested financial products and business models designed to link informal savings groups with formal financial service providers. CARE's evaluation found that LINK Up participants that opened formal savings accounts realized higher returns but that women still faced gender norm barriers to economic opportunity.

Building on these findings and recognizing the importance of gender-sensitive technology, CARE implemented the Digital Sub-wallets project in Uganda,

where they tailored a digital financial platform to meet women's unique financial needs and facilitated intra-household dialogue sessions to address gender norms. The project used a two-pronged design in support of female entrepreneurs: a digital financial product tailored to meet the needs of un- and under-banked women, and a household dialogue intervention to transform inequitable gender norms and relations within households.

Evaluation of the Digital Sub-wallets project is ongoing, but preliminary results show that women are less likely than men to use digital accounts. In the six-month pilot, which included 586 women and men in Uganda, 31.8 percent of women opened a bank account (compared to 5 percent who previously had an account), yet only 16.1 percent activated mobile access. This is in contrast with 44.6 percent of men who opened a bank account and 35.7 percent who activated mobile access. The final report on Digital Sub-Wallets will reflect 12+ months



of product promotion and should illustrate whether this trend held or not. Like the BOMA Project, CARE observed limited familiarity with digital technology, suggesting a need to target training and one-on-one support to encourage women to actively and successfully access and use the platform.

In CARE's evaluation of various approaches in Burundi, the gender-transformative model included power analysis and gender socialization activities, provided a space for men and women to reflect critically on harmful gender norms and actively engaged local leaders and male relatives of participating women. In an ongoing evaluation, CARE is comparing outcomes for women who participated in this gender-transformative program with those participating in a "gender-light" model.

Preliminary results show that, while improvements over a control group were evident among both intervention groups, women who participated in the gender-transformative program had higher gender empowerment indicator scores compared to the gender-light group. They reported higher levels of women's participation in decision-making, as well as higher satisfaction with their lives and more confidence to speak in public. Likewise, women who participated in the gender-transformative intervention saw more support from their husbands in household tasks. These findings point to the importance of community norms around gender roles and dialogue between spouses

PARALLEL INVESTMENTS

The BOMA and CARE project results show that to effectively target low-income women, institutions must also provide technical inputs and formal linkages to existing financial activities. Further, they must foster and encourage savings activities, improve financial literacy/health, and stimulate social norm change by including male household members. The findings show that investing in gendered social norm change and gender-transformative programming works.

Both BOMA and the CARE projects document a strong desire among female participants for the financial aspects of the program as well as the facilitated household dialogues. BOMA and CARE facilitated conversations between female participants and their spouses, or other male-household decision-makers in the household.

Uptake was high in each program – among the CARE digital sub-wallet participants, 80 percent of beneficiaries completed all household discussion sessions offered. In both programs, the results of the dialogues were positive. Women participants in the BOMA program reported decreased dependence on male decision-makers, involvement in financial conversations and power over small day-to-day purchasing decisions. CARE reported a greater number of conversations between spouses, which have led to better quality decision-making processes, and improved financial health.



CONCLUSIONS

The WGCD investments enabled partners to understand women's agency and access to resources. Through strategic programming and careful analysis, the WGCD partners contributed to the knowledge base around financial inclusion for women's economic empowerment. Evidence from ICRW Asia, WaterSHED and the Panzi Foundation programs demonstrates how to build women's and girl's skills and self-esteem to encourage economic autonomy and reach their aspirations.

The results from Harvard University's Smart Payment Schemes project and REPOA contribute to global evidence about women's use of technology and digital service. These findings will inform design of future digital financial products.

CARE and the BOMA Project provide evidence on the challenges of meeting the financial inclusion needs of key, vulnerable populations. Further research is needed to understand how investments scale-up without losing context specificity.

In each case, the empowerment investments required multiple interventions and capacity-building. Layered programming with a mixture of community and national level entities and organizations enabled greater reach. It also ensured targeted support for local, individual and community focused skills-building. Many of the interventions highlighted here demonstrate that addressing social norms that impede women's agency are critical to women's economic empowerment. This is particularly important where intrahousehold inequalities limit women's ability to benefit from the intervention.

THE WGCD LEARNING AGENDA

Facilitated by the International Center for Research on Women (ICRW) between 2016 and 2020, the WGCD Learning Agenda provided for mutual and peer-to-peer learning among the WGCD partners to inform the global development field of approaches that boost women's empowerment, improve adolescent agency and reduce gender inequalities in the household and in the labor market. The Learning Agenda leveraged partners' research to build the evidence and practice base emerging from this unique and cross-sectoral global investment by the Bill and Melinda Gates Foundation with the goal of understanding how to most effectively and intentionally address gender inequalities and empower women and girls.

The WGCD Learning Agenda consisted of three learning clusters - subsets of partners with complementary programs and research. The three clusters were:

1. Adolescents and Agency
2. Pathways to Income Generation
3. Intrahousehold Bargaining and Decision-making

ICRW brought together cluster members to synthesize their research and program data and jointly disseminate learnings for greater impact. Each cluster had a set of key learning questions crafted to fill gaps in gender data. The interactions supported and collective analysis undertaken improved project outcomes and leveraged greater learning for the field as well as for the participants.