



Building Resilience in Burkina Faso: Longitudinal Assessment Results

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"Since the creation of savings groups, women have emerged that were once in the background because of poverty. An empowered woman is seen by other women as a model. Other women envy and respect her."

– BRB participant

Abstract: The *Building the Resilience of Vulnerable Communities in Burkina Faso* (BRB) project leveraged women's savings groups as a platform to provide complementary services in nutrition and agricultural education, access to agricultural extension support, linkages to formal agricultural and micro-business financing, and gender dialogues with the aim of improving household resilience. A mixed-methods, longitudinal quasi-experimental research design implemented between 2016 and 2018 found that BRB participants experienced improved food security, dietary diversity, self-perceived resilience and sustained savings accumulation despite an economic downturn experienced in 2017 due to a drought and subsequent poor harvests. Women reported increases in the implementation of new income-generating activities, earned income, the adoption of climate-smart agricultural techniques and improvements in harvest production as a result of the project interventions. There were mixed outcomes in social norms related to decision-making power, fear of spouse, and confidence in speaking out in mixed-gender forums. Despite the inherent difficulty in measuring changes in resilience, the research supporting the BRB project suggests a sense of "bouncing back" among the treatment group after the 2017 drought in Burkina Faso compared to the comparison group.

Grameen Foundation

Grameen Foundation is a global nonprofit organization that helps the world's poorest people achieve their full potential by providing access to essential financial and agricultural information and services that can transform their lives. In 2016, Grameen Foundation and the global non-profit Freedom from Hunger joined forces under the banner of Grameen Foundation. The integration of the two organizations brings together Grameen Foundation's expertise in digital innovation to end poverty and Freedom from Hunger's rich experience providing the world's poorest women with self-help tools to reduce hunger and poverty. Grameen Foundation is headquartered in Washington, D.C., with offices in the U.S., Asia, Africa, and Latin America. For more information, please visit www.grameenfoundation.org or follow us on Twitter: @GrameenFdn.

Partners

Grameen Foundation's collaborative approach with local partners in Burkina Faso allows for deeper outreach into poor communities to address the needs of vulnerable women and their households. For the Building Resilience in Burkina Faso (BRB) project, Grameen partnered with two local non-governmental organizations (NGOs), Office de Développement des Eglises Evangéliques (ODE) and Solidarite et Entraide Mutuelle au Sahel (SEMUS). ODE and SEMUS have a history of savings-led programming to deliver targeted value-added services related to food security and improving health and nutrition. In addition, Grameen Foundation orchestrated partnerships between ODE and SEMUS and Réseau des Caisses Populaires du Burkina (RCPB), one of Grameen's long-term partners in Burkina Faso. RCPB is a credit union that provides a portfolio of financial services across Burkina Faso. The introduction of RCPB to the project facilitated access to formal financial services by savings groups and their members through group-based loan products offered by RCPB.

Grameen Foundation also partnered with local researchers from Lessokon Sarl in Burkina Faso and Brigham Young University based in the United States.



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Executive Summary

Resilience is a complicated concept and difficult to measure, but at its core, it is the ability of people to bounce back from the shocks and stresses they face. In collaboration with the Office de Développement des Eglises Evangéliques (ODE), the Association Solidarité et Entraide Mutuelle au

BRB At-a-Glance

- 3,699 groups consisting of 83,241 women reached with a savings group methodology
- Approximately 18,000 savings group members used formal group-based micro-business loans
- Approximately 6,000 savings group members used formal group-based agricultural loans
- 80% of savings groups received agricultural education; 1,500 savings groups supported directly by Ministry of Agriculture extension agents
- 50% of savings groups received nutrition education
- 36% of BRB villages participated in gender dialogues that included 3,585 men and 12,595 women participants.

Sahel (SEMUS), and the Réseau des Caisses Populaires du Burkina (RCPB) in Burkina Faso, Grameen Foundation launched the *Building the Resilience of Vulnerable Communities in Burkina Faso* (BRB—Building Resilience in Burkina Faso, in short) project to improve household resilience among women participating in savings groups. BRB is a multi-sectoral integrated program, also known as a “Savings Group-Plus” approach, that used savings groups as a sustainable platform for improving household resilience. BRB supported savings groups with integrated nutrition and agriculture-as-a-business education, access to agricultural extension support, linkages to formal agricultural and micro-business financing, and gender dialogues.

To assess whether the BRB project achieved its goal of improving household resilience, a longitudinal, quasi-experimental multi-methods assessment was completed among ODE’s women’s savings groups in Central-Western and the Boucle de Mouhoun Regions in Burkina Faso. The quantitative survey and qualitative interviews were completed between treatment and comparison groups in 2016, 2017, and

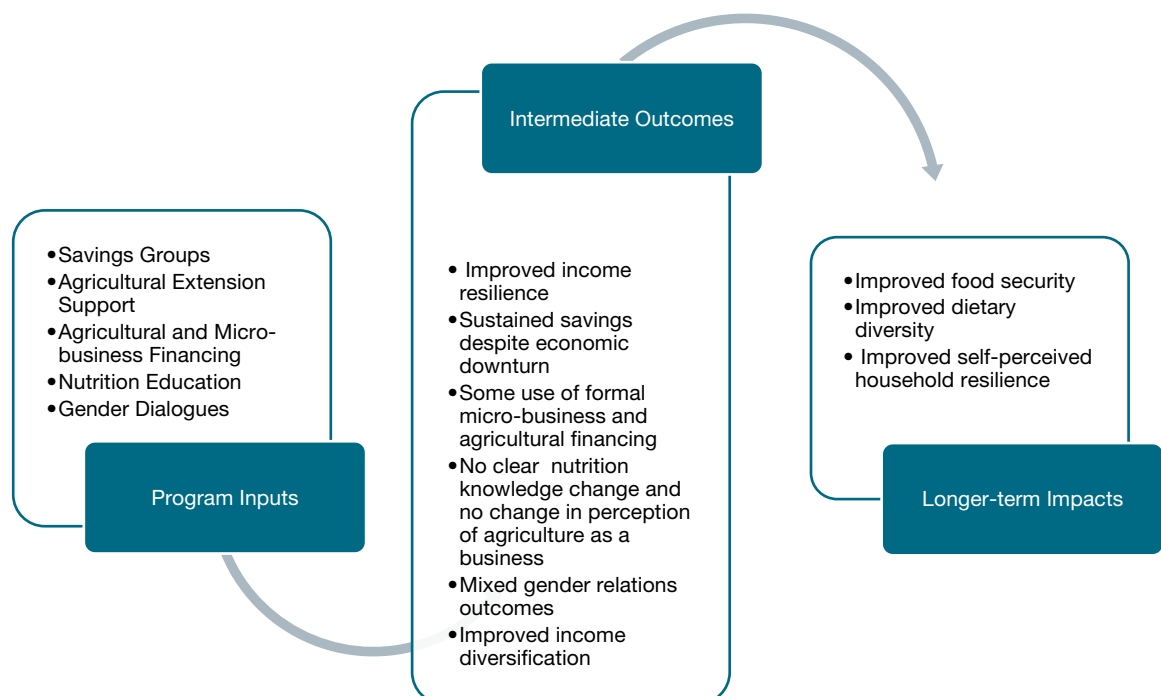
2018. While the treatment group received interventions from ODE designed to build resilience, the comparison group was intended to be free of any of the additional BRB interventions from ODE or other NGOs operating in the area. However, while this was the intent when selecting the comparison group, it was later reported that the comparison group received agricultural and micro-business financing support as well as training on agricultural techniques from ODE as well as from other organizations under different projects. Thus, intervention contamination potentially limits detectable differences between groups for some of the evaluation results. In addition, during this time period, Burkina Faso faced a pronounced drought resulting in relatively poor harvests in 2017. These limitations should be kept in mind.

By the end of the BRB project, 3,699 women’s savings groups, supporting 83,241 members and their households had been reached by ODE and SEMUS with all or some of the program components. Approximately 18,000 saving group members used micro-business loans and 6,000 savings group members used agricultural loans extended by RCPB, or FINACOM (ODE’s microfinance arm). Over

80 percent of the savings groups received agriculture-as-a-business education and 50 percent received nutrition education delivered by ODE and SEMUS community agents. Eighty-seven (87) villages, making up 36 percent of all villages where BRB was implemented, participated in community-level gender dialogues where approximately 12,600 women and 3,600 men were engaged in topics such as women's land access and men's participation in the nutritional needs of the family. Twenty-one (21) Ministry of Agriculture (MOA) extension agents were trained by BRB staff on gender power dynamics and linked to 1,500 savings groups to provide women farmers with direct agricultural extension support to improve farming and livestock-raising techniques.

When each of the individual components of the BRB project are assessed, the BRB intervention resulted in clear improvements in some areas, mixed results in others, and a few where benefit was not clearly detected. In short, BRB participants experienced improved food security, dietary diversity, self-perceived resilience and sustained savings accumulation despite an economic downturn experienced in 2017 due to a drought and subsequent poor harvests. Women also reported increases in the implementation of new income-generating activities, income earned, the adoption of climate-smart agricultural techniques and improvements in harvest production as a result of the project interventions. There were mixed outcomes in social norms related to decision-making power, fear of spouse, and confidence in speaking out in mixed-gender forums. Despite the inherent difficulty in measuring changes in resilience, the research supporting the BRB project suggests a sense of "bouncing back" among the treatment group after the 2017 drought in Burkina Faso compared to the comparison group.

The figure below attempts to summarize the key findings and more in-depth descriptions follow.



While not all savings group members received all components of BRB, the BRB package of interventions resulted in:

- ***improved self-perceived household resilience:*** The treatment group seemed to have bounced back from their low self-perceived resilience status noted at the midline point (37%), their perception of their resilience to shocks recovering by endline (50%), coming close to original baseline measures (58%). The treatment group was slightly more likely than the comparison group to perceive themselves as resilient to shocks and almost two times (50% versus 26%) as likely to feel more resilient in terms of their income.
- ***improved food security and dietary diversity despite no clear improvements in nutrition knowledge:*** 19 percent of the treatment group were food secure at baseline, this dropped to 8 percent at midline, and rebounded, even slightly exceeding baseline measures, to 22 percent by endline. The treatment group was more food secure than the comparison group at endline. Similarly, while starting out with similar dietary diversity scores at baseline (both the treatment and comparison groups consumed on average 3.6 foods in the day prior to the survey), the treatment group had a more diversified diet by the endline (4.0 foods compared to 2.5 foods among those in the comparison group). Improvements in food security and dietary diversity seemed most influenced by improvements in food accessibility and availability. There were no clearly observed improvements in nutrition or health knowledge; this may be due to the fact fewer than half of the groups received nutrition education and due to measurement challenges.
- ***sustained savings accumulation:*** despite an economic downturn in 2017, average savings accumulations were maintained by both the treatment and comparison groups which is reflective of the programmed savings, social capital built among group members in addition to improved financial capabilities. In 2017, the average amount saved in the last week was approximately 3 USD. In 2018, when harvests rebounded, the average amount saved was almost 5 USD. While the comparison group reported more savings at baseline, the treatment group reported more savings at midline and endline.
- ***use of formal agricultural and micro-business financing:*** approximately a quarter of the treatment group reported accessing agricultural loans and half reported accessing micro-business loans. While the comparison group reported more use of agricultural loans, the treatment group reported more use of micro-business loans. There was no more than about a 10 percentage-point change in reported loan use between midline and endline among treatment and comparison groups. Generally, there was low awareness of the loans (awareness levels are similar to those actually using the loans). While it was not anticipated the comparison group would report access and usage of agriculture and business loans, they appeared to have similar access and usage as the treatment group.
- ***improved adoption of new agricultural techniques and income-generating activities and improved harvest productivity but no change in perception of agriculture as a business:*** The treatment group experienced an 85 percentage-point increase in harvest productivity between the baseline and endline (9% to 93%, respectively), whereas the comparison group experienced a 60 percentage-point increase (9% to 69%, respectively). The difference between the treatment and comparison groups was statistically significant at endline. The treatment group attributed the improved productivity to application

of new knowledge or new planting techniques, fertilizer and better or more seeds. The comparison primarily attributed an improvement in harvest due to rain. At baseline, the treatment group was two times less likely than the comparison (24%) to report adopting a new economic activity. This dipped for both the treatment and comparison at midline, but rebounded at endline for both. However, the treatment group was more likely to report starting a new economic activity at endline (42% compared to 32% for the comparison group). The comparison group was more likely than the treatment group to report agriculture and raising livestock were both for household consumption and for income generation.

- ***mixed results in social norm change:*** Generally, the treatment and comparison groups were gaining confidence in speaking out, even in groups where men and women were present, they were also increasingly reporting that women must tolerate violence to keep the peace at home. Women in the treatment group were more likely to feel fairly comfortable speaking about issues in a meeting with men and women, with 75 percent feeling very or fairly comfortable, compared to only 35 percent of the comparison group feeling very or fairly comfortable at endline. Over time, fewer in the BRB group reported fearing their spouse most of the time (from 9% to 3% by endline); however, the percent that were sometimes afraid increased over time with almost half reporting that they were sometimes afraid (38% at baseline, 66% at midline, 51% at endline). The comparison group had more women reporting they were afraid most of the time at endline (13%).

There is some difficulty in interpreting the data from the BRB project due to the complicated and integrated nature of the interventions designed to improve household resilience. Resilience alone is difficult to measure, requiring multiple metrics, of which have no standardization to-date. However, the research supporting the BRB project suggests a sense of “bouncing back” among the treatment group, and among the comparison group to a lesser degree, after the drought and resulting poor harvests that occurred during 2017. The treatment group perceived themselves to be more resilient and they primarily attribute this change to their income diversification and improved intra-household relationships.

The lessons learned from BRB can be leveraged for future replications of this program approach. Three key areas deserve extra attention and research:

1. **Determine how to involve men thoughtfully and purposefully for all program components:** One of the most important findings from this research suggests the need to involve men more in the overall approach as well as individual components. For example, financial services and literacy strategies that involve men would recognize their strong role in financial decision-making. Financial services for men or for couples could be designed to mitigate the risks that arise for women who obtain—and are responsible for—services that are then used by men. More deliberately engaging men could also reduce the risk of alienating men because they feel excluded. Research suggests there are trade-offs and benefits to involving men: while male participation and gaining their buy-in can result in improved behaviors, women-only participation builds social capital and confidence.
2. **Consider re-design of loan products and other financial services to account for intra-household decision-making and use of loans:** For savings groups that primarily

target women and for formal loan products designed primarily for women, it is often a well-known “secret” that husbands and other household members are the actual recipients of loans or the ones who benefit monetarily. Financial service providers should consider whether or if loan products should incorporate this information into loan design features and may want to consider providing incentives to couples to encourage them to engage in financial matters together, where appropriate and beneficial.

3. **Explore the role of mobile money.** Prior to BRB, Grameen worked with local actors to build a mobile money infrastructure for linking savings groups to formal savings accounts. The original intent of BRB was to integrate a mobile money component into the project but this was not feasible during the project period. There are, however, opportunities to consider how digital financial services can better serve savings groups living in remote areas who have continued limited access to formal financial services. Particular attention could be paid to designing products, such as health financing, that directly respond to the shocks most frequently faced and reported by women. These are areas to explore further.

Low income households, and women in particular, are both the most vulnerable to shocks and the most unprepared when they occur. Well-designed products and services can help households anticipate, mitigate the effects of, cope with, and bounce back from shocks as they are experienced, whether they are climate-related, health-related, or due to the loss of an income earner. This study contributes to the resilience literature in four ways: first, it reflects a growing body of evidence regarding the influence that savings groups-plus interventions can have on household resilience; second, it demonstrates how community-based dialogues with savings group members and their spouses can influence social norms; third, it explores how the provision of financing (both for agricultural and non-agricultural businesses) can influence investment at the household level; and fourth, it uncovers how women can be reached with government agricultural extension support that is typically geared toward men.

Acknowledgements

We would like to thank our local partners in Burkina Faso, Office de Développement des Eglises Evangéliques (ODE), Solidarité et entraide mutuelle au Sahel (SEMUS), and Réseau des Caisses Populaires du Burkina (RCPB) for allowing us to engage their staff and their savings group members in this research. We would also like to thank our Freedom from Hunger and Grameen Foundation staff members for their leadership and support of the research for this project: Richard Simbiri, Manere Ouedraogo, Claude Dimitri Konsiembo, Alice Lompo, Mona McCord, Christian Loupeda, Erica Haworth, Bee Wuethrich, Lauren Hendricks, Sybil Chidiac, Cassie Chandler, Nadege Gbaguidi, and Jessie Tientcheu. Also, we greatly appreciate our colleagues at Lessokon Sarl, particularly Moussa Tassembedo and Adama Tinto, who assisted in the data collection and helped facilitate so much of this ongoing research. Much gratitude goes to the women savings group members and their households for their participation in the quantitative surveys, focus group discussions and key informant interviews. Finally, we would like to thank Margaret A. Cargill Philanthropies for funding the Building Resilience in Burkina Faso project.



Photo credit: Grameen Foundation

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Acronyms

BRB	Building Resilience in Burkina Faso Project
FCFA	Franc Communauté Financière Africaine (currency used in Burkina Faso)
FGD	Focus Group Discussion
FI	Financial Institution
FINACOM	Finance Communautaire
HH	Household
IGA	Income-Generating Activity
MFI	Microfinance Institution
ODE	Office de Développement des Eglises Evangéliques
RCPB	Réseau des Caisses Populaires du Burkina

Introduction

What is resilience? How do you build it? How would you know you improved resilience if you saw it? All of these questions have been posed for the past several years as development paradigms have shifted from post-disaster relief and recovery to reducing vulnerabilities to disasters¹; “resilience” has become a *mot du jour*. Resilience is a complicated concept², but at its core, it is the ability of people to bounce back from the shocks and stresses they face. USAID defines resilience as “the ability of people, households, communities, countries and systems (social, economic, ecological) to mitigate, adapt to, recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.”³

Burkina Faso, a land-locked country in West Africa, is a country that faces constant threats to growth: cycles of short- and long-term droughts, a deteriorating security situation in the regions bordering Mali and Niger, high rates of poverty, chronic food insecurity, and a large percentage of the population that relies on subsistence agriculture for their livelihood, among others.⁴

Women are disproportionately affected by these threats⁵ but also seen as a key change agent in building resilience⁶. In Burkina Faso, discriminatory practices towards women are prevalent, despite government commitment and effort to develop policies and frameworks that reduce discrimination.⁷ There is no law in Burkina Faso that addresses domestic violence and high percentages of the population believe there are justifications for spousal abuse.⁸ These negative gender social norms play out not only in government support structures but also in intra-household social and economic dynamics. Women often face restricted mobility, low decision-making power, and fear of their husbands.⁹ These dynamics put women at a particular disadvantage with anticipating, responding to, and recovering from stresses and shocks as their voice, mobility, and capacities are limited.

In 2014, after having worked with local financial service providers on financial inclusion as well as integrated approaches such as *Credit with Education* and *Saving for Change* in Burkina Faso for almost thirty years, Freedom from Hunger^a developed a multi-sectoral approach to improve household resilience and food security with the three-year initiative called *Building the Resilience of Vulnerable Communities in Burkina Faso* (BRB—Building Resilience in Burkina Faso, in short), funded by the Margaret A. Cargill Philanthropies. Working through two local partners, Office de Développement des Eglises Evangéliques (ODE) and the Association Solidarité et Entraide Mutuelle au Sahel (SEMUS), the approach featured the innovative use of community-based women’s savings

^a Please note that as of October 2016, Freedom from Hunger combined forces with the Grameen Foundation (GFUSA), and became a supporting organization of GFUSA.

groups (SGs) as a platform for providing an integrated package of agricultural, nutrition, financial services, and women’s empowerment programming to help thousands of savings group members overcome many of the geographic, cultural, social, and economic constraints that hamper their resiliency in the face of shocks and disasters. This is known as a “Savings Groups-Plus” approach. The BRB project aimed to reach 80,000 women through women’s savings groups in the rural areas of Central-Western Burkina Faso (in the provinces of Passoré, Zondoma, Boulkiemdé, and Sanguié) with the following support activities:

- **Agriculture extension agent training:** the BRB team worked directly with local agricultural extension agents to directly support women farmers in: 1) growing, conserving, and marketing crops such as cowpeas and sesame; and 2) livestock raising, feeding, and care.
- **Education:** community agents trained by ODE and SEMUS facilitated pictorial learning conversations on:
 - **“Agriculture-as-a-business” education**, which includes topics such as farm planning, marketing, cost/revenue calculations, and risk management;
 - **Nutrition education**, which includes topics such as healthy diets, strategies for feeding the household during lean seasons, integrating key crops into the diet, and saving for health expenses.
- **Agriculture and micro-business finance:** includes agriculture loans and income-generating activity/livestock loans in addition to group savings and loans accessed through savings groups. Originally, these loans were going to be developed in partnership with Réseau des Caisses Populaires du Burkina (RCPB) given their country-wide presence and outreach to rural communities with financial services however, by the end of the project, ODE’s microfinance arm—Finance Communautaire (FINACOM)—also launched similar loan products to fill gaps where RCPB was unable to meet demand. The actual product descriptions are provided in greater detail in the annex.
- **Gender dialogues:** women’s empowerment discussions encouraged savings group members, their spouses, and their communities to develop their own visions for change in gender relations with particular emphasis on 1) securing women’s access to agricultural land and equipment in pertinent time periods of the year and 2)



Savings group members learning planting techniques.
Photo credit: Grameen Foundation

identifying strategies the household could use for lean seasons of the year to ensure adequate and quality dietary consumption.

- **Formation of new savings groups:** the practice of savings groups is embedded in long-held local traditions of solidarity and is known to strengthen the capacity of women to positively impact family income by increasing savings, smoothing cash flow and enhancing and/or diversifying livelihood activities¹⁰ and to positively impact women's economic, social, and political empowerment.¹¹ Working together toward the same financial goal as part of a group that meets regularly creates strong bonds and social capital among members in addition to financial capabilities that contribute to women's empowerment. The BRB project therefore continued to support existing savings groups as well as growing the network of new savings groups.

This paper focuses on the quasi-experimental evaluation that was conducted to assess the influence of the BRB project on household resilience. The following sections will provide greater detail on the program components itself, will outline the theory of change underpinning this project and the evaluation methodologies, and provide the results for the assessment and the implications for further work in this area.

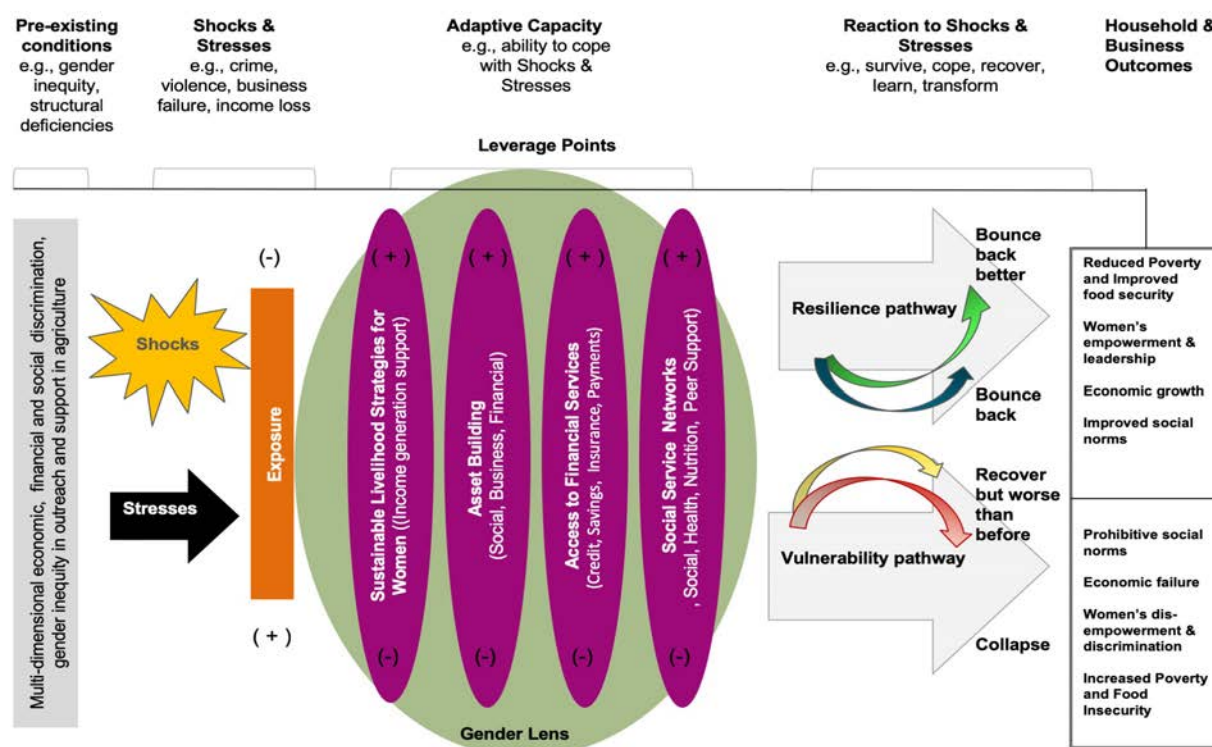
Methods

Building Resilience in Burkina Faso Theory of Change and Measures

The BRB project utilizes several theories of change to articulate high level alignment with similar projects as well as those to inform specific project objectives and outcomes. In 2014, Freedom from Hunger adapted a resilience framework that TANGO International (www.tangointernational.com) had created, which itself was built on previous disaster and livelihood frameworks (see bottom notation in Figure 1 for reference).

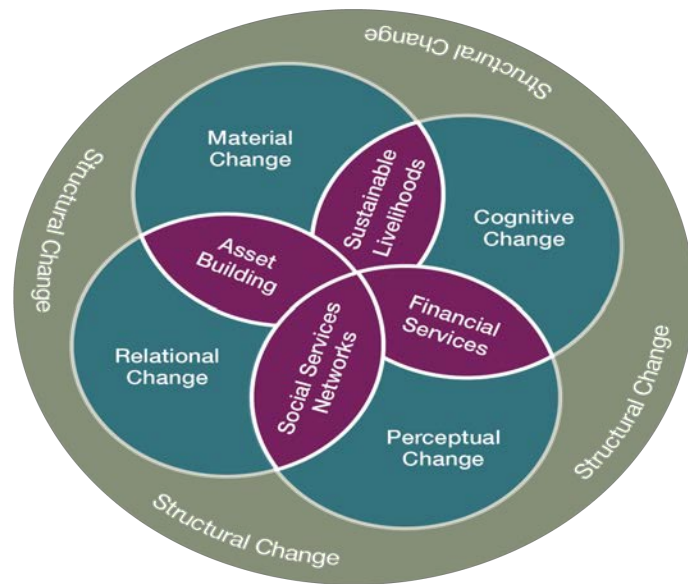
In much of the resilience literature, the concept of resilience is examined *as a capacity* with which to respond to shocks. There are three types of resilience capacities to consider: absorptive, adaptive, and transformative.¹² Adaptive capacity is “the ability to learn from experience and adjust responses to changing external conditions, yet continue operating”¹³ and is where the services provided in the BRB project fall best—in that access to financial services through women’s savings groups is a leverage point to benefiting from a group’s social capital and for accessing livelihood, nutrition, and other support services and building assets. Access to and use of these services become the mechanism through which an individual or household can make incremental changes in the response to a current shock or in anticipation of a future shock and could help lead a household down a path of resiliency instead of one of vulnerability. Ultimately, a resilient path can lead to better food security, adequate nutrition, improved health status, and disaster risk-reduction for a household. This framework served as the basis for the design of the BRB project. Freedom from Hunger added the “gender lens” (described below) to the adaptive capacities to ensure the opportunities and barriers faced by women specifically were included in the design and analysis of resilience.

Figure 1. Resilience Framework



Grameen, 2019. Adapted from Grameen (2014), Tango International (2012), DFID Disaster Resilience Framework (2011), TANGO Livelihoods Framework (2007), DFID Sustainable Livelihoods Framework (1999) and CARE Household Livelihood Security Framework (2002)

The addition of the gender lens recognizes that households and individuals within households do not necessarily have equal access to services nor do they utilize or benefit from them equally due to social norms. Women are known to have less access to credit for agricultural investment and information, face restrictions on mobility, lack confidence and self-esteem, in addition to other barriers. For this reason, Freedom from Hunger adapted a gender framework articulated by Women's World Banking¹⁴ by adding the category of structural change, which acknowledges the importance of not only the internal change a person experiences but also the enabling environment that often drives or hampers these changes such as government policies, support organizations, agents, etc. Thus, in Figure 2, the adaptive capacities articulated in Figure 1 are layered with five aspects of empowerment: *material, cognitive, relational, perceptual, and structural*. These are described with associated indicators below.

Figure 2: Gender and Adaptive Capacities

The BRB project seeks to influence:

- **Material change:** improved agricultural practices and production; improved access to agricultural business training and extension support; initiation of new economic activities; improved access to and use of credit, savings offered through financial service providers; and improved food security and income.
- **Relational change:** improved decision making and bargaining power in the household regarding use of agricultural services, financial services, and health and nutrition services; improved mobility with respect to agricultural activities; increased support from group members in agricultural production and business; improved social capital and leadership roles within communities; improved gender equity in household use of financial services and shared workload.
- **Cognitive change:** improved agricultural, and nutrition knowledge and skills; improved awareness of agricultural services and available resources.
- **Perceptual change:** women have a clearer vision and goals for the direction of their businesses/livelihoods; improved self-perception of household and community resilience; improved self-confidence overall.
- **Structural change:** agricultural extension agents and their supporting organizations are knowledgeable of their own biases and are sensitive to the needs of both male and female farmers; financial institutions design financial services that target the needs of women and men farmers; supporting organizations understand social norm dynamics and how these can influence people's use of their services and seek to draw communities' attention to and change negative norms that impede progress.

The impact study that this report covers was designed to assess whether the project achieved its overall purpose of increasing the resilience of vulnerable communities in disaster-affected-areas of Burkina Faso. The key question driving this impact study, as well as the overall evaluation plan, was:

To what degree does the combination of agricultural services, financial services, nutrition education, and gender dialogues strengthen the resilience of the beneficiary individuals and households, and influence the short- and long-term outcomes in the BRB Benefits Process and Resilience Framework?

The framework in Table 1 outlines the characteristics of the delivery mechanism, project inputs, expected intermediate outcomes and longer-term impacts. This framework will be used to organize the findings from the evaluation.

Table 1. *Building Resilience in Burkina Faso* Benefits Process for Target Beneficiaries

Overall Project Goal: The purpose of this project was to increase the resilience of vulnerable communities in disaster-affected areas of Burkina Faso through a multi-sectoral integrated program using community-based women's savings groups as a sustainable platform for improving livelihoods and nutrition knowledge, linkages to services and access to finance.			
Characteristics of the delivery mechanism	Program inputs	Intermediate Outcomes	Longer-term Impacts
NGOs working in disaster-prone areas have delivered integrated services to savings groups through partnerships, and incorporated service models into their approach	Savings Groups	<ul style="list-style-type: none"> Improved household resilience to shocks Increased savings 	<ul style="list-style-type: none"> Increased resilience of vulnerable communities Improved food security Increased economic and civic engagement
	Agricultural Extension Support: Agricultural Training Services + Agriculture as a Business Education	<ul style="list-style-type: none"> Increased capacity to engage in agricultural livelihoods Improved awareness of agricultural services and resources Better business development skills for agriculture as a business 	<ul style="list-style-type: none"> Systematic inclusion of women in private and public agricultural-related skills training

	Agricultural and Micro-business Financing: Agricultural Production loan + IGA loan	<ul style="list-style-type: none"> • Increased knowledge of and access to agricultural financing • Increased knowledge of and access to income-generating activities • Increased financial capability 	<ul style="list-style-type: none"> • Increased investment in agricultural activities • Increased diversification of income-generating activities
	Nutrition Education	<ul style="list-style-type: none"> • Increased nutrition knowledge and skills • Increased ability to achieve a healthy diet during the lean season 	<ul style="list-style-type: none"> • More strategic planning for improved household nutrition, year-round
	Gender Dialogues	<ul style="list-style-type: none"> • Improved household dialogue and joint decision-making on financial services, nutrition, and agricultural activities • Improved self-confidence overall 	<ul style="list-style-type: none"> • Improved gender equity in household use of financial services, nutrition and agricultural activities

Study Design

This report represents data from a longitudinal, quasi-experimental, mixed-methods assessment that consists of baseline, midline, and endline quantitative and qualitative assessments that occurred in March 2016, November 2017, and November 2018, respectively. Measures used in the survey instrument and qualitative tools reflect the concepts covered in the Benefits Process articulated above in Table 1, such that it includes measures on household demographics, perceptions about experiences when facing household shocks, poverty, food security, nutrition and dietary diversity, financial behaviors and use of financial instruments such as loans, credit and other tools, gender dynamics such as fear of one's spouse and beliefs about gender-based violence, and agricultural behaviors.

Baseline¹⁵ and midline¹⁶ reports can be found elsewhere.

Research Partners

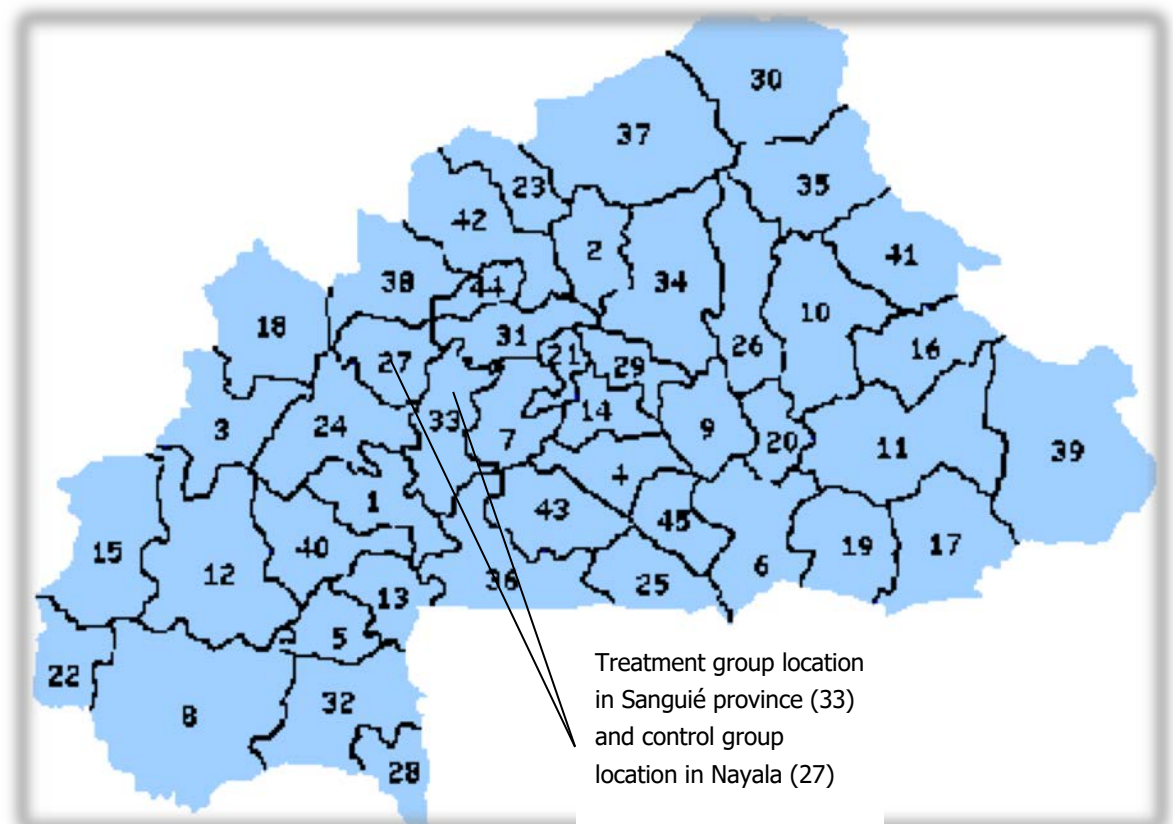
Grameen Foundation partner ODE participated in the quantitative and qualitative research, while SEMUS and RCPB contributed to the qualitative research at the midline and endline. The research firm, Lessokon Sarl, assisted with the quantitative data collection for all three periods and the qualitative data collected at the baseline and midline. Grameen Foundation staff conducted the endline qualitative assessment. Public health faculty from Brigham Young University, Dr. Benjamin

Crookston, Dr. Josh West and Dr. Cougar Hall conducted the quantitative analysis and contributed to data interpretation and report writing.

Quantitative Sample

The quantitative study included members from ODE's savings groups who live in Central-Western and the Boucle de Mouhoun Regions in Burkina Faso. The treatment group was selected from women participating in savings groups in the Godyr and Didyr communes in the Sanguié province in the Central-Western Region, and the control group was selected from women participating in savings groups in the Yé and Gossina communes of the Nayala province in the Boucle de Mouhoun Region. A map of these provinces is provided in Figure 3.

Figure 3. Location of the Impact Study: Sanguié and Nayala Provinces, Burkina Faso¹⁷



Twenty intervention villages were selected within Sanguié province. Twenty comparison villages were selected in Nayala and were selected based on the following criteria: 1) presence of ODE-formed savings groups that were not expected to receive the BRB services; 2) proximity to the intervention villages; and 3) likeness to the intervention villages in terms of livelihoods and economic prosperity.

A total of 429 women were interviewed at baseline across 40 villages; with 218 women in the intervention group and 211 in the comparison group. At midline, 389 women were interviewed (193 women from the intervention group and 196 from the comparison group). At endline, 376 women were interviewed (184 women from the intervention group and 192 from the comparison group). This represents an 88% retention rate of the original respondents from baseline to endline.

The endline outcomes reported in this document are reported side-by-side with baseline and midline findings allowing the reader to make comparisons between groups and over time simultaneously.

Quantitative Analysis

Data were analyzed using SAS, version 9.4 (SAS Institute Inc., Cary, North Carolina, USA). Descriptive statistics were calculated for each variable and statistical significance of differences between groups was evaluated to compare the treatment and comparison groups at endline only.

Qualitative

At the endline, several focus group discussions (FGD) and key informant interviews were completed with ODE and SEMUS savings groups, staff, and leadership. Across SEMUS' and ODE's program areas, there were two FGDs completed with women (20 women in total) to discuss women's empowerment and two FGDs conducted with men (25 men in total).

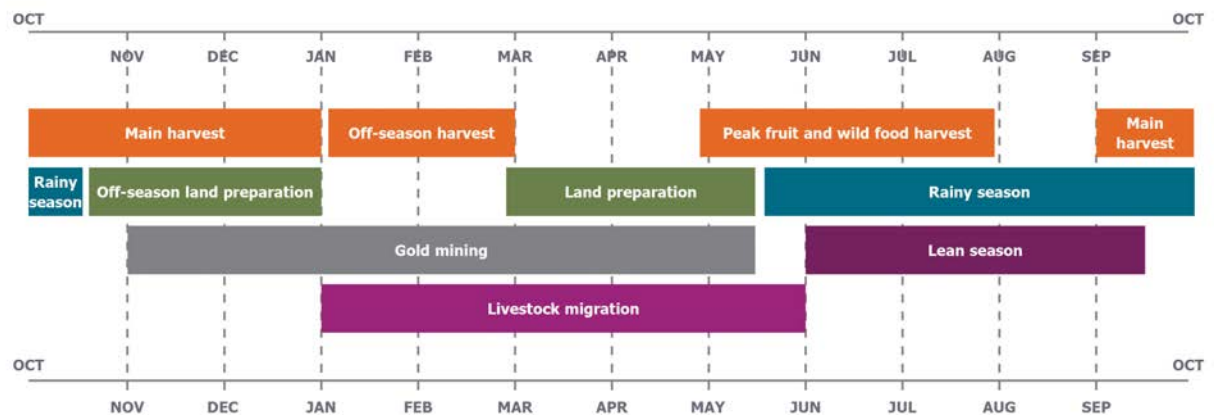
Limitations

It is important to note that at baseline, the treatment and comparison groups were not found to be particularly comparable.¹⁸ The comparison group was found to be more food-secure, better-off financially with higher average incomes and savings and they used formal financial services more than the treatment group; however, they were found to be more "asset poor" as measured by the Poverty Probability Index (PPI).

Also, baseline data was collected in March of 2016 while midline and endline data were collected in November of 2017 and 2018, respectively. This seasonal difference between baseline and the other two data collection periods could influence the results, particularly those focused on agriculture, food security, and resilience.¹⁹ Figure 4 below highlights the typical variability in seasons, harvest periods, lean seasons, etc. provided by the Famine Early Warning Systems Network (FEWS NET) on Burkina Faso. In a typical year, March comes towards the end of the off-season harvest period when household members tend to also migrate and the weather is dry. November corresponds with the main harvest period and follows the rainy season.

Additionally, many study participants experienced drought conditions during the program period that appeared to have a substantial impact on harvests and other indicators measured at midline and then conditions improved by the endline one year later, also likely influencing the results. It is also important to note that while the team aimed to collect midline data after harvest had been completed, the harvest was delayed for many households in 2017. For this reason, attitudes and perceptions were quite negative. Due to the large reliance on agriculture in assessed areas, drought likely impacted harvest yields, income, and other key outcomes of interest. Hence, a decline in positive behaviors at midline and an improvement in positive behaviors at endline may be highly influenced by the local weather conditions.

Figure 4: Typical Seasonal Calendar for Burkina Faso.



Source: Burkina Faso. The Famine Early Warning Systems Network (FEWS NET). <http://fews.net/west-africa/burkina-faso>

Results

Demographics

Table 2 outlines demographic indicators at baseline, midline and endline to provide context on the women surveyed. Some questions were not repeated at endline given the likelihood that this would not change significantly unless the retention rate of survey participants changed drastically enough to influence an adjustment in the demographics. Most women were illiterate; few had ever attended school and were on average 40 years of age. Less than 5 percent of the savings group members in the sample were under the age of 25. Ethnic group and religion varied for both the intervention and comparison groups. These ethnic and religious differences may explain some of the differences in other variables that will be presented in this report.

Using the Poverty Probability Index (PPI),^b in both the treatment and comparison groups, the majority lived below the \$2.50 international poverty line (between 80-85%, estimated at CFA 576 in 2003 measures), about half lived below the \$1.25 poverty line (estimated at CFA 288 in 2003 measures), a third live under the national poverty line (estimated at CFA 226 per person per day—based on year 2003 measures) and a little over 10 percent lived below the extreme poverty line (which represents the median expenditure of people—not households below the national poverty line). The comparison group was slightly poorer than the treatment group at baseline and endline according to those below the national poverty line and the \$1.25 international poverty line; at endline, this difference between the treatment and comparison group was statistically significant.

While the poverty rate for the treatment group declined over time, even with the downturn in the economy at the midline point, poverty appeared to increase for the comparison group at the midline point and returned to baseline levels at the endline. This suggests that the downturn in the economy at the midline likely influenced the poverty of the comparison group more than the treatment group.

^b This survey was developed using a national poverty survey conducted in 2003. Therefore, the benchmarks provided here are provided by Mark Schreiner in the documentation for the Burkina Faso PPI survey and may not relate to latest poverty measurements found by the World Bank or others. Please see the PPI documentation at <http://progressoutofpoverty.org/country/burkina-faso>.

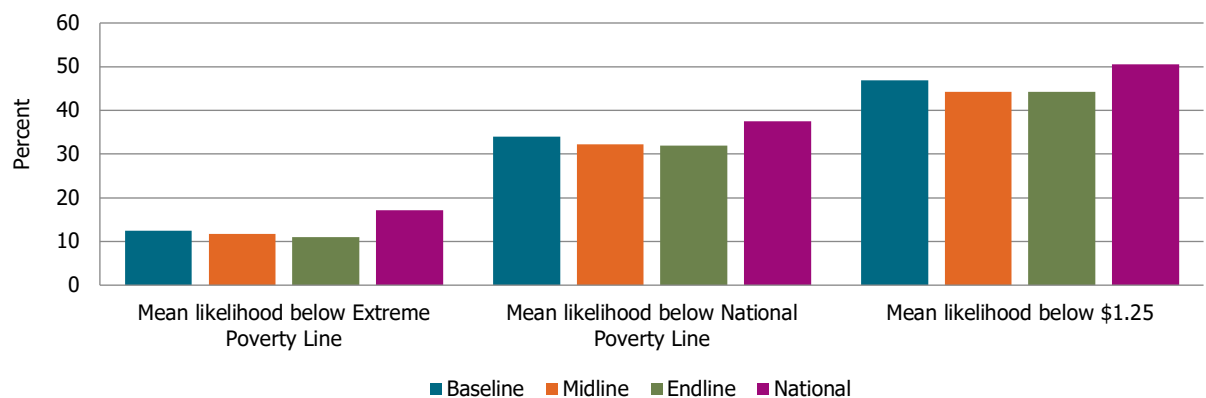
Table 2. Key Demographics

Treatment				Comparison			p-value
Indicator	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Average Age	40.9	42.6	44.0	39.7	42.1	43.1	
Civil status							
Monogamous	20.6	22.3	21.2	35.1	33.2	30.7	0.0788
Polygamous, 1st wife	30.3	32.2	29.9	31.8	33.7	32.8	
Polygamous, 2nd or 3rd wife	37.2	37.3	38.6	25.6	25.5	26.6	
Widowed	9.6	8.3	9.8	7.6	7.7	9.9	
Education							
Illiterate	76.6	79.3	—	83.9	81.1	—	
Had attended school ever	16.5	15.5	—	14.7	14.3	—	
Ethnic group							
Gourounsi	85.8	87.6	—	15.6	16.3	—	
Mossi	12.4	10.9	—	55.9	56.1	—	
Samo	0.0	0.0	—	0.0	37.3	—	
Religious affiliation							
Muslim	22.9	22.3	—	60.7	63.8	—	
Christian	73.4	76.2	—	36.0	32.7	—	
Poverty Probability							
Mean likelihood below Extreme Poverty Line	12.5	11.7	11.0	14.0	15.9	13.4	
Mean likelihood below National Poverty Line	34.0	32.3	31.9	37.1	38.9	35.0	0.0386
Mean likelihood below \$1.25	46.9	44.3	44.3	49.0	51.7	47.8	0.0631
Mean likelihood below \$2.50	82.6	80.1	81.5	83.7	85.2	82.7	

“—” data was not collected at endline

As Figure 5 demonstrates, the poverty rates for all surveys for the treatment group were slightly lower than the national averages. The comparison group was also less poor than the national average, except as noted for the midline period where they had similar rates of poverty as the national average. This suggests that on average, ODE clients are slightly less poor than the national averages as established by 2003 data.

Figure 5. Poverty Status and Relevant National Benchmarks – Treatment Group



Shocks and Shock-Coping Behaviors

Between 2016, 2017, and 2018, which align with the baseline, midline, and endline for the BRB project, there were drastic weather and agricultural patterns from year to year. In 2016, Burkina received substantial amounts of rain, which resulted in a good harvest that year for many households but catastrophe for others when there was too much rain.²⁰ In 2017, the weather pattern flipped to the other extreme: a prolonged drought resulted in poor harvests and outcomes for many households.²¹ By the harvest period of 2018, the weather was favorable, rains were sufficient, and households experienced above-average harvests and outcomes across Burkina Faso.²²

Figures 6 and 7, corresponding to the shocks households experienced in the treatment and comparison groups show the effect of the poor harvests at midline and the change in the types of shocks experienced. For the treatment group (Figure 6), sick children and sickness among other household members, deaths in the family, and loss of livestock were key shocks experienced across all three time periods, with the poor harvest being the most dominant shock experienced at midline. The comparison group similarly noted the poor harvests at the midline, but at endline, they were less likely to mention loss of livestock, sick family members and children, and deaths in the family compared to the treatment group, and these differences were statistically significant at $p < 0.05$. The drastic drop in reported health shocks is most likely due to the prominence that the poor harvest as an income shock played at that time than an actual drop in health events and costs.

Figure 6: Shocks Experienced in the Past Month - Treatment Group

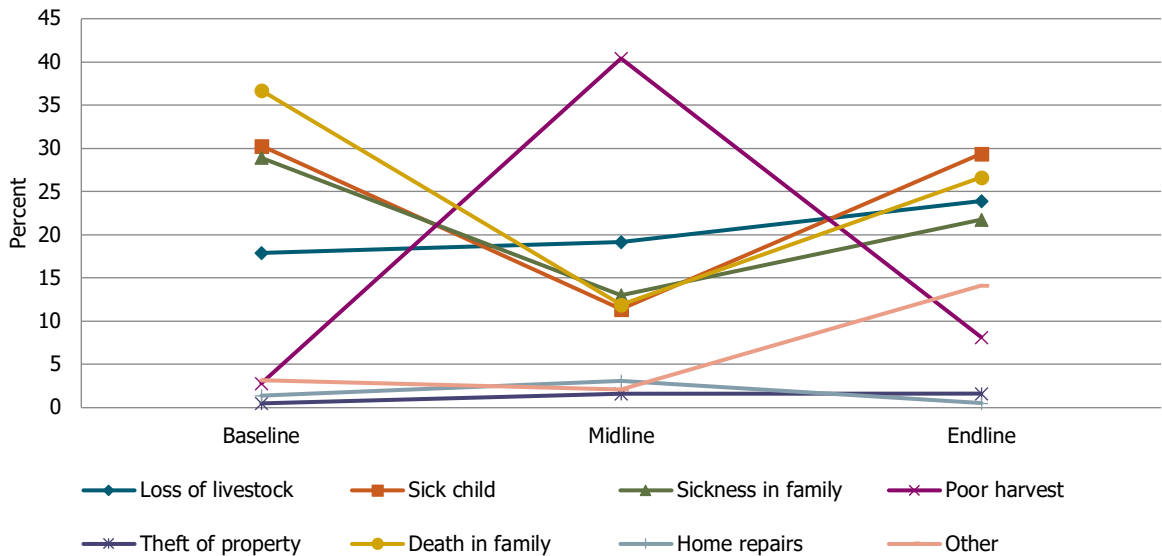
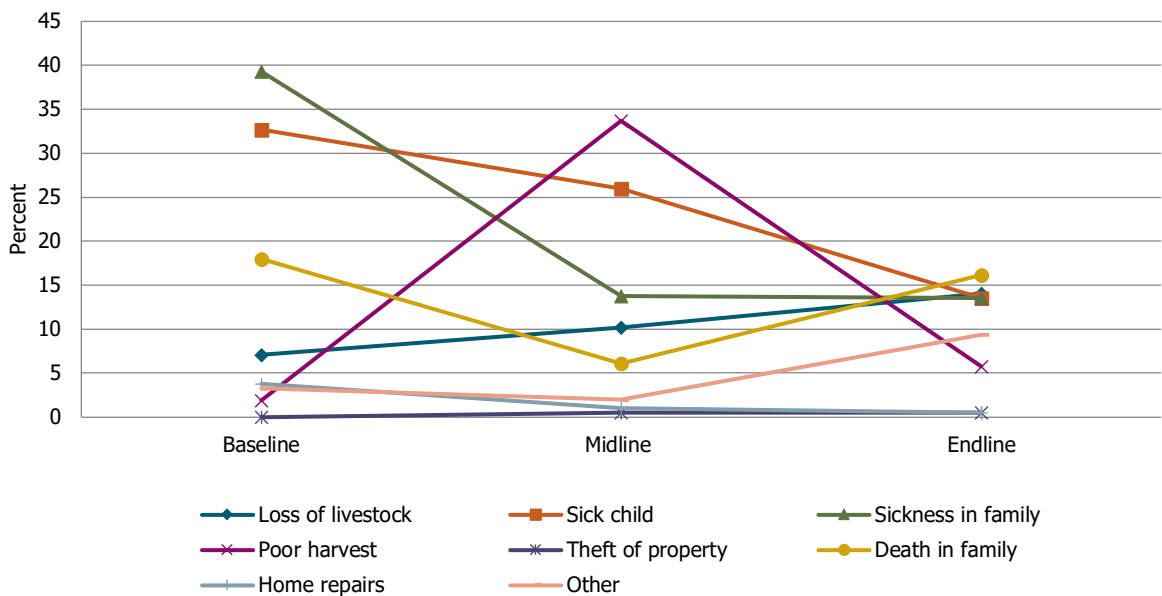


Figure 7: Shocks Experienced in the Past Month - Comparison Group



Figures 8 and 9 highlight how households coped with the shocks. At all three points of time, the treatment and comparison groups most often mentioned use of personal savings, sale of small livestock and working harder as strategies to cope with the financial shocks mentioned above. The sale of livestock was the primary strategy used at the midline when other financial resources would have been constrained, such as use of savings, borrowing from savings groups and financial

institutions (FI). While one might expect higher use of borrowing, the anxiety of repaying a loan at this time might have resulted in avoiding formal or semi-formal borrowing and a preference for borrowing from family and friends. By the endline, while the treatment group still experienced a lot of different types of shocks, borrowing from savings groups was much more common, which might reflect the greater liquidity of the savings groups at this time given there were fewer covariate shocks impacting many households at the same time, and the shocks experienced were more idiosyncratic in nature. They also noted more use of the sale of cereals which reflects the greater availability of their harvests to cover the cost of the shocks.

At endline, the treatment group was statistically significantly more likely to mention coping with shocks by using the sale of cereal, reduced food consumption, borrowing from their savings group, borrowing from friends and family, and purchasing items on credit than the comparison group. The comparison group was more likely than the treatment group to mention the sale of livestock and delaying payment obligations. These differences are statistically significant at $p < 0.05$ or $p < 0.01$.

Figure 8: Shock-coping strategies used by the treatment group

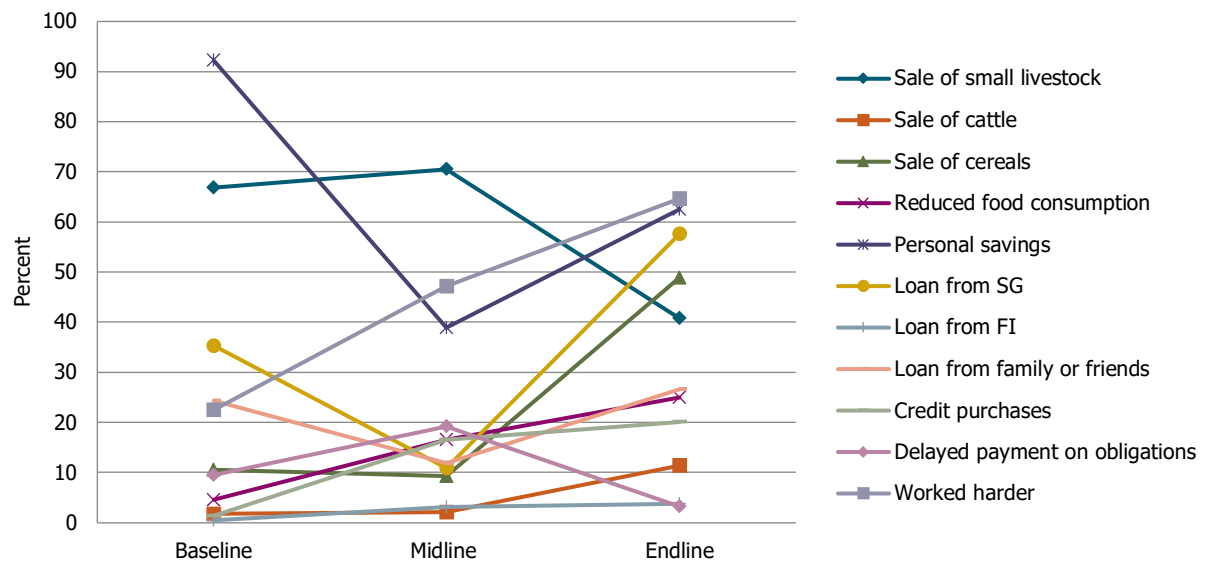
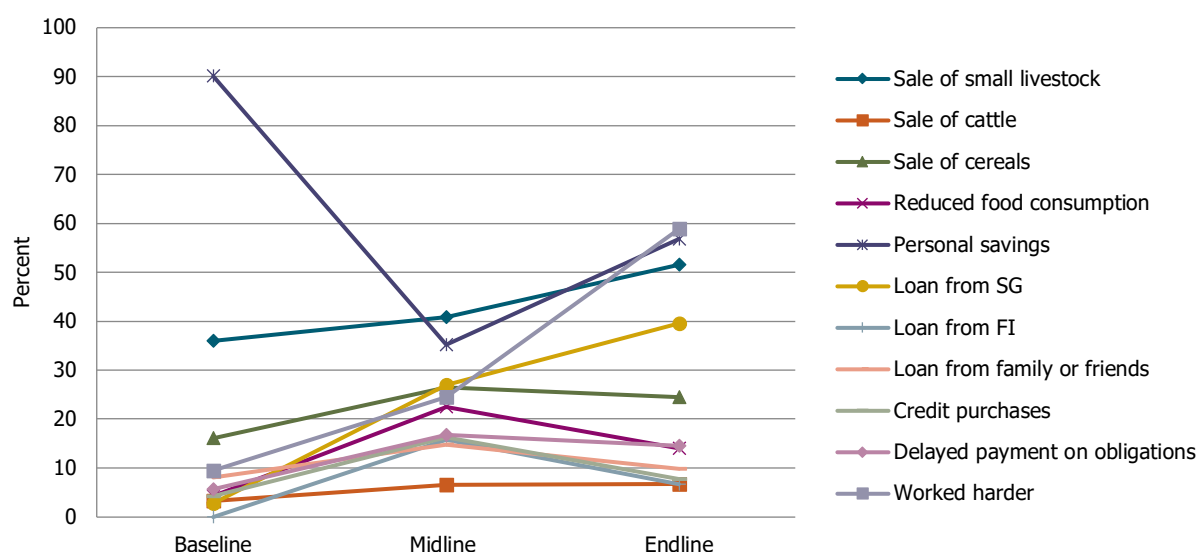


Figure 9: Shock-coping strategies used by the comparison group

The World Bank Global Findex study assesses a household's capacity to come up with a lump-sum amount of cash as a means to assess a household's ability to respond to a shock. In each country, they adapt the amount needed based on 1/20 of the country's gross national income (GNI) per capita in the local currency.²³ For Burkina Faso, this translates to an amount of 50,000 FCFA (about 85 USD). At endline, households were asked about their confidence level in coming up with these funds and where the funds would come from. Figure 10 shows a statistically significant difference between the treatment and comparison groups (at $p=0.0001$) in terms of their ability to come up with the funds. While the groups are not that different in terms of those who said it was somewhat possible, 31 percent of the comparison group compared to 14 percent of the treatment group felt it would not be very possible to come up with 50,000 FCFA in the next month. Eighty-four percent (84%) of the treatment group and 66 percent of the comparison group felt it would be at least somewhat possible. The national average Findex data estimated in 2017, indicates that the savings group members feel more secure than the general population; only 57 percent of the general population felt it would be possible to come up with this amount.²⁴

Figure 11 indicates that among the treatment group, they would likely use money accessed through their savings group followed by friends and family and then money acquired from their IGA. The comparison group would also lean on their savings group, but they were much more likely to mention money from working and their personal savings and were much less likely to rely on family and friends. These differences were statistically significant at $p=0.0001$. According to the national Findex data averages²⁵, 36 percent were likely to turn to family and friends; 36 percent would use money from working; 22 percent would use personal savings, and 3 percent would use a loan from a financial institution. The Findex does not ask directly about savings groups, but it is obvious the savings groups play an important role for responding to emergencies for the treatment group.

Figure 10: Capable of coming up with 50,000 FCFA in the next month

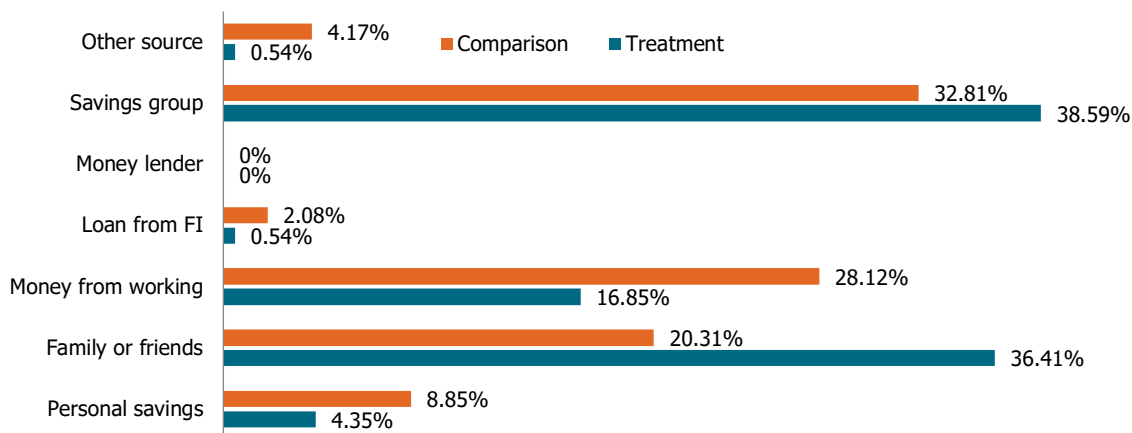
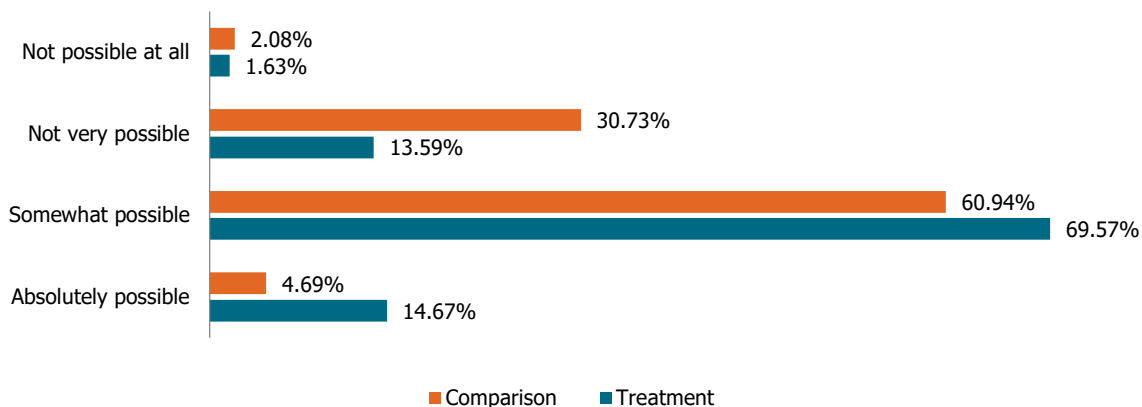


Figure 11: Sources of the 50,000 FCFA sum



Shock-coping Behaviors Key Findings

- The drought experienced by both the treatment and comparison groups was a significant shock to household income during the study period.
- Barring the drought at midline, household illnesses and death in the family were otherwise the most common shocks experienced throughout the study period.
- The treatment and comparison groups most often mentioned use of personal savings, sale of small livestock and working harder as strategies to cope with financial shocks.
- The treatment group felt more confident than the comparison group that they could come up with funds to respond to an emergency. Both groups felt more confident than the national average about their ability to come up with emergency funds.

Defining Resilience

Savings group members were asked to share their definition of resilience at all three points of time. The treatment group was more likely to define resilience as having a profitable and diversified income, having assets, good communication in the household and good health. The comparison group was more likely at endline to define resilience as the use of financial services. These differences were statistically significant at endline. It is important to note, however, that the treatment group was more likely to define resilience as good health, good communication and diversified income streams across all three points of time compared to the comparison group. Also, at midline, several reported definitions of resilience decreased and rebounded by endline, suggesting that these definitions were also likely influenced by their actual availability or success. For example, the treatment and comparison groups were slightly less likely to mention a profitable IGA at midline than at baseline. The treatment group rebounded in their use of this answer and the comparison group continued to decline by endline.

Table 3: Defining resilience

Treatment				Comparison			p-value
Indicator	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Definition of resilience							
Household (HH) members have diversified IGA	34.4	23.8	28.8	9.9	7.1	12.5	0.0001
Profitable IGA	20.6	14.5	38.6	22.8	18.4	9.9	0.0001
Rich or have many assets	38.9	37.8	47.3	54.9	54.6	21.4	0.0001
Use savings	45.9	26.9	29.9	31.8	5.6	24.5	
Use other financial services	11.9	6.2	6.5	15.2	2.6	19.8	0.0002
Good communication within HH	62.8	74.1	70.1	56.9	57.1	58.9	0.0227
Good health in HH	23.9	20.2	37.0	17.5	37.8	13.0	0.0001
Do not waste	7.8	1.6	14.1	9.9	4.1	10.9	

Prior studies conducted with this population found that resilience was defined as a state of mind²⁶ as well as one's ability to diversify income streams, household savings accumulation, access to different financial services (such as savings), credit for IGAs (particularly, those associated with a resilient

household, such as livestock in the case of this population), and specific savings products for health and other emergencies.

The concept of resilience is encapsulated in a popular quote in the Burkinabe Mooré language: “*Week y menga bang guèla*,” which literally translates to “Abandoned lizard eggs, fight, take your responsibilities to hatch.”²⁷ Here, resilience is metaphorically described as lizard eggs, which are abandoned and left to their own fate. There is no parent to help them hatch, they must do so alone, and survive on their own. Resilience, therefore, is primarily explained as an attitude towards life. A resilient household is made up of people who get up early, go to bed late and work hard to get ahead. Those who are not resilient are stuck in poverty and are generally “lazy,” and women believed the non-resilient home “was a parasite on the environment.” Men defined resilience in terms of their means, an accounting of what they have, and thought non-resilient homes resulted from a lack of agreement within the household (on how to manage resources) and living particularly stressful lives.

Defining Resilience Key Findings

- The treatment group was more likely to describe resilience as having a profitable and diversified income, having assets, good communication in the household and good health. The comparison group was more likely at endline to mention the use of financial services.
- Qualitatively, resilience is also seen as a state of mind, one in which a person gets up early, works hard, goes to bed late.

Outcomes related to Savings Groups

In the following sections, the Theory of Change regarding the role of savings groups will be unpacked per the key program inputs. This section will focus on the relationship between savings groups and intermediate and long-term outcomes. Figure 12 outlines the relationships explored for this section.

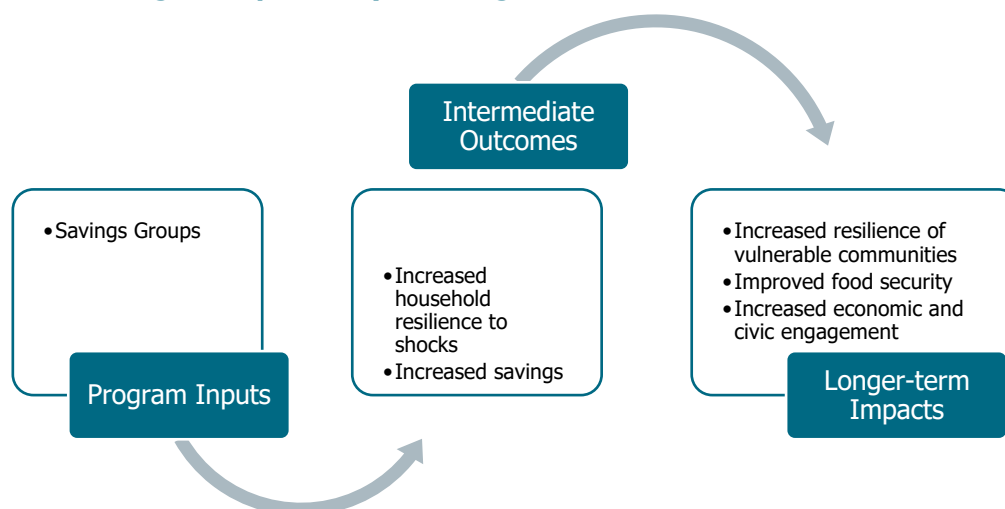
Figure 12: Savings Groups Theory of Change

Table 4 further below outlines the indicators associated with the outcomes articulated above.

Savings group membership, mobile money account ownership, savings account ownership Though rates remained very high throughout the study for savings group membership, there were more women in savings groups in the treatment group (100%) than the comparison group (96%) by endline and this difference was statistically significant. In comparison, per the global Findex data, only 31 percent of women nationally indicated they saved through savings clubs or with other people.²⁸

Prior to the BRB program, Freedom from Hunger worked with RCPB to build their own savings groups and link them to mobile money accounts and formal savings accounts.²⁹ Through this initiative, linkages between RCPB and existing savings groups served by ODE and SEMUS were also explored. It is very likely that the high rate of mobile money account usage in the treatment area (18%), which is more than two times greater than the rate of mobile money account linkages for the comparison group (7%), was influenced by prior work in this area. This difference is statistically significant. In 2017, the Findex estimated that 24 percent of women in Burkina Faso had a mobile money account,³⁰ making the ODE savings group members not far from that benchmark in mobile money account ownership.

Similarly there were almost two times as many individual savings group members who had their own mobile money account in the treatment group (12%) compared to the comparison group (7%). This difference is statistically significant at $p < 0.10$.

Unlike mobile money account usage, interestingly, the comparison group notes more ownership of formal savings accounts (9%) than the treatment group (5%), but this difference is not statistically significant. While at baseline, most of these accounts were held with RCPB, by endline, ODE's microfinance arm—FINACOM—held most of the accounts. The national rate of savings account ownership among women in 2017 was estimated to be 12 percent. At baseline, 10 percent among the

treatment group and 14 percent among the comparison group had accounts, making them not far from the national average. By endline, however, savings account ownership had declined and was half of the national average. The reasons for the reduction in account ownership is not altogether clear unless the economic downturn in 2017 can explain an overall reduction in savings behaviors.

Savings accumulations

When the average amount of money put into savings was assessed, the comparison group reported greater savings averages at baseline but by midline and at endline, the treatment group on average had greater savings amounts. Averages were adjusted for the comparison group to account for extreme outliers; one person reported saving 330,000 FCFA at endline and 150,000 at midline which were far beyond the median savings amounts reported by most in the comparison group. In US Dollar amounts, the endline savings in the last week reflect a difference between approximately \$4.75^c for the treatment group and \$3.20 for the comparison group. The average savings in a bad week was lower for the comparison group at endline and this difference with the treatment group was statistically significant. Given the baseline occurred several months prior to the harvest season and the endline occurred during or after the harvest, the measures of savings in a “good week” at baseline seems consistent with the savings reported in the last week for the endline, suggesting that estimates for savings in a good week are reflective of savings reported during a period of the year when a household would have more disposable income (such as following harvest) to put into savings.

Despite the economic downturn in 2017, average savings accumulations were maintained which is likely reflective of the ongoing commitment that savings groups create for its members in addition to the social capital and improved financial capabilities of the savings group members.

Food security

Food security for both the treatment and comparison groups decreased at midline, which is consistent with the reported poor harvest and lower incomes at the midline (shown later). Food security continued to be on the decline for the comparison group by the endline whereas the treatment group re-bounded by the endline. The treatment group was more than three times as food secure (22%) than the comparison group (6%) by the endline, even though the comparison group was more food secure at baseline (19% among treatment and 33% among comparison group).

c Based on exchange rate of 1 USD = 586 CFA, May 2019,
<https://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=XOF>.

Self-perceived resilience

In prior research conducted in Burkina Faso, self-perceived resilience was found to be related to indicators that women believe defined a resilient household.³¹ These same questions were posed in the BRB survey. Recent research suggests subjective measures of resilience and people's perceptions of their reality are needed alongside other objective measures such as income and assets.³²

The treatment group seemed to have bounced back from the low self-perceived resilience status noted at the midline point (37%), their perception of their resilience to shocks recovering by endline (50%). The comparison group's self-perceived resilience tends to decrease over time. The differences between the treatment (50%) and comparison groups (39%) at endline are not statistically significant at $p < 0.05$ but are at $p < 0.10$. However, it is important to note that about half of the savings group members feel resilient and the other half does not.

Similarly, the treatment group was almost two times (50% versus 26%) as likely to feel more resilient in terms of their income; the difference between the treatment and comparison groups was statistically significant. However, similar to feeling resilient to shocks, half of the treatment group still did not feel resilient.

At endline, both the treatment and comparison groups felt more protected against shocks compared to the prior year; however, the treatment group was much more likely to feel more protected (75%) than the comparison group (61%) at endline.

The treatment group was more likely than the comparison group to mention improved health, a better IGA, community help, and better communication at the household level as reasons for feeling more protected against shocks. The comparison group was more likely to mention that having less savings, less healthy, or "other" as reasons for feeling less protected.

Table 4: Savings Group Measures

Indicator	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Member of savings group (SG)	100	99.5	100	100	98.5	96.4	0.0089
SG is linked to a mobile money account	17.4	21.4	17.5	0.47	4.7	6.5	0.0011
Individual has a mobile money account	1.8	10.4	12.0	0.95	5.1	6.8	0.0836
Have savings account at formal institution	10.1	6.2	5.4	14.2	7.1	9.4	
Where the savings account is held							

Indicator	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
RCPB	95.5	58.3	50.0	3.3	28.6	27.8	
FINACOM	9.1	41.7	50.0	0.0	0.0	38.9	
Average savings							
Average savings in last week	1923.6	1748.6	2798.8	2199.8	1281.0	1941.6	
Average savings in a good week	2804.1	2738.9	2773.9	6177.5	3564.5	4119.8	0.0001
Average savings in a normal week	1388.2	1368.1	1546.6	1802.3	1930.4	1624.7	
Average savings in bad week	577.8	666.2	763	696.2	921.7	568.9	0.0001
Food security							
Food secure	19.3	7.6	21.7	33.2	22.5	6.3	0.0001
Food insecure without hunger	75.2	62.7	70.7	56.9	50	66.7	0.0001
Food insecure with moderate hunger	5.5	9.8	7.07	9.95	24.5	25	0.0001
Food insecure with severe hunger	0	0.5	0.54	0	3.1	2.08	0.0001
Perception of household's resiliency in terms of coping with shocks							
Feels resilient	58.3	37.3	50.0	52.1	40.3	38.5	0.0585
Sometimes, it depends	3.2	7.8	1.1	8.5	17.4	2.6	0.0585
No, does not feel resilient	38.5	54.9	48.9	39.3	42.4	58.9	0.0585
Perception of household's resiliency in terms of income							
Feels resilient	55.1	33.7	50.0	37.9	32.7	25.5	0.0001
Sometimes, it depends	3.7	7.8	0.5	12.8	16.3	7.3	0.0001

Indicator	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
No, does not feel resilient	41.3	58.6	49.5	49.3	51	67.2	0.001
Compared to last year, current perception of protection against shocks							
Feels better protected against shocks	55.9	55.4	75.0	27.0	23.5	60.9	0.0007
Feels the same	13.8	24.9	22.8	9.5	30.6	28.1	0.0007
Feels less protected	30.3	19.7	2.2	63.5	45.9	10.9	0.0007
Why feels more or less protected							
More savings	25.7	19.2	4.4	5.7	3.1	5.7	
Better IGA	25.7	0.0	29.4	10.0	10.7	12.5	0.0001
More community help	10.6	25.4	25.0	7.1	5.6	7.8	0.0001
Healthier	9.2	22.8	41.3	7.6	7.7	22.4	0.0001
Better communication	44.5	39.4	62.0	13.3	10.7	27.6	0.0001
Situation is the same	16.1	25.9	21.2	9.5	44.9	24.0	
Less savings	16.1	9.3	3.3	16.6	29.6	9.4	0.0153
IGA difficulties	17.4	13.0	3.8	12.3	17.9	5.2	
Less help from community	4.1	1.0	2.7	3.3	1.0	0.0	0.0215
Less healthy	1.8	4.2	0.5	10.0	9.2	5.7	0.0042
Poorer communication	2.3	0.5	0.5	0.0	0.0	1.6	
Other	11.0	5.7	2.2	51.7	8.2	19.8	0.0001

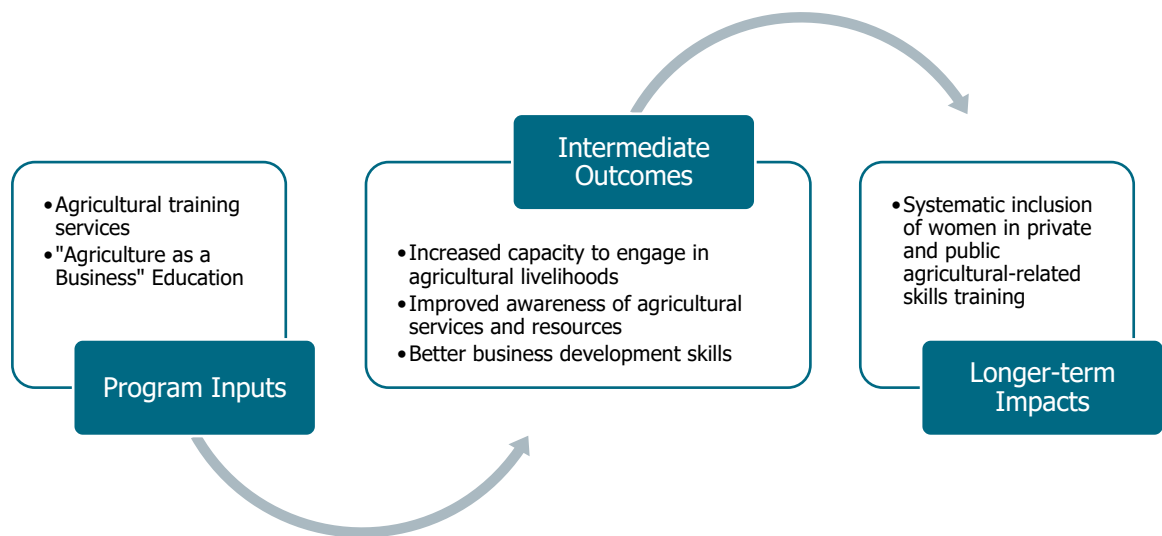
Savings Groups Key Findings

- The treatment group felt more resilient as their perceived resilience bounced back after the midline and in some cases, were better off at endline whereas the comparison group's perception of their resilience continued to decline over time.
- The treatment group was more likely to report that their improved health, better communication at home, and having a better IGA were reasons for their resilience.
- The treatment group was more food secure than the comparison group at endline, despite an economic downturn experienced at the midline.

Outcomes related to Agricultural Extension Support

This section will focus on the relationships between agricultural extension support services and intermediate and long-term outcomes. Figure 13 outlines the relationships explored in this section.

Figure 13: Agricultural Extension Support Theory of Change



Agricultural productivity

The survey participants were asked whether their harvest productivity was better, the same, or worse than the prior year. Both the treatment and comparison groups reported an improvement in harvest productivity at endline compared to both baseline and midline. The treatment group experienced an 85 percentage-point increase between the baseline and endline (9% to 93%, respectively) whereas the comparison group experienced a 60 percentage-point increase (9% to 69%, respectively). The difference between the treatment and comparison groups was statistically significant at endline.

The reason the treatment group felt the growing season was better was due to an increase in rain (almost 100% attributed it to rain) and this was the same for the comparison group. However, the

"The [gender] dialogues we participated in on agriculture resulted in men giving women access to land. Each group has a collective field now and a group can have up to one hectare."

– BRB participant

treatment group was more likely to also attribute the improved productivity to using new knowledge or new planting techniques, using fertilizer and better or more seeds. The treatment group was more likely at baseline to indicate they were using new knowledge or new planting techniques and this stayed higher than the comparison group throughout the three years.

Among those who indicated they were not able to increase their productivity compared to the prior season, a quarter of the comparison group still attributed this to having less rain. Note the high percentage who felt harvest was worse due to lack of

rain at midline for both the treatment (97%) and comparison (99%). At baseline, among those that answered "other", 88 percent of the treatment and 77 percent of the comparison group felt there was too much rain.

In qualitative interviews with the savings groups, the groups shared their perceived improvement in their productivity. Most shared that in the prior year, they produced 3 bags of cowpeas, this year they produced 5, almost doubling their productivity. *"We have better knowledge of production techniques. If we had more support, that would be good."* Also, the women shared that they had gained access to some land that they did not have in the past. *"The [gender] dialogues we participated in on agriculture resulted in men giving women access to land. Each group has a collective field now and a group can have up to one hectare."*

Use of inputs and agricultural techniques

Approximately half of the treatment and comparison groups reported using fertilizer between baseline, midline, and endline. At baseline, the treatment group reported lower usage (39%) compared to the comparison group (71%). At endline, the treatment group had similar rates (59%) of fertilizer use compared to the comparison group (60%). While those in the treatment demonstrated greater use of Zai and composting at baseline and this stayed high throughout, they were much less likely to report using improved seeds, pit construction, and natural regeneration at baseline. At endline, the treatment group overcame this deficit and at times, had greater rates of usage than the comparison group. For example, 4 percent of the treatment group used improved seeds at baseline versus 32 percent for the comparison group; by endline, 27 percent of the treatment and 25 percent of the comparison groups were using improved seeds at endline.

The qualitative research revealed that they desired continued support for access to improved seeds and agricultural equipment. One group shared, *"Currently we have to pay 25,000 FCFA to plow a field, which is expensive."* While the savings groups were taught how to triple bag their cowpeas for

longer-term storage, they were challenged to find the bags and relied more on cans that were more locally available.

Agricultural extension training

At baseline, the treatment group was much less likely (18%) to report receiving training on how to manage crops compared to the comparison group (32%). By endline, they had almost 2 times those reporting having received training (55%) than the comparison group (30%). At baseline, more comparison group members reported that ODE provided them the training on how to manage their crops (55%) compared to the treatment (44%). By the endline, the comparison group was still slightly more likely to report ODE provided the training (77%) than the treatment group (65%).

At baseline, about half of the treatment and comparison groups equally reported agricultural extension workers provided training or education, but this declined over time for both groups; however, the treatment group was more likely to report agricultural extension workers at endline (23%) compared to the comparison group (14%). The treatment group was also more likely to report receiving training from their savings group members. This jumped from 5 percent to 45 percent at endline and this was statistically significantly different from the comparison group (16%).

"The officer attended us and brought us the triple bags. He showed us the proportions of density and how to treat the peas with phytosanitary (plant health) products. We had triple bottom bags. Before we used to use chemicals for conservations, which was toxic."

– BRB participant

The qualitative research highlighted the techniques that were shared with them by the agricultural extension agents. The savings groups learned how to sow, spread fertilizers, manage pests, how to detect plant diseases and how to triple bag their beans for longer-term storage. Some groups indicated that agents visited them twice during the program period.

"The officer attended us and brought us the triple bags. He showed us the proportions of density and how to treat the peas with phytosanitary (plant health) products. We had triple bottom bags. Before we used to use chemicals for conservations, which was toxic." Another group shared this perception of how they treated their crops in the past, *"Before, we had problems with chemicals that kill pests and humans."*

New economic activities

At baseline, the treatment group was two times less likely than the comparison (24%) to report adopting a new economic activity. This dipped for both the treatment and comparison at midline, but rebounded at endline for both. However, the treatment group was statistically significantly more likely to report starting a new economic activity at endline (42% compared to 32% for the comparison group).

Among those who started a new economic activity, the comparison group at endline reported growing and selling cash crops like cowpea and groundnuts but the treatment reported starting a petty

commerce activity (but these differences were not statistically significant). At midline, many more in the treatment group reported using livestock fattening, but this dipped dramatically by endline. They were more likely to report producing and selling dolo, a local beer. There was very little change in growing sorghum or millet. There was slight increase among the treatment group in growing and selling garden vegetables, but this increase was not significant.

Agriculture and livestock as businesses

Part of the education and support provided by the BRB program focused on changing the women's perception that agriculture and livestock rearing could be both for household consumption and for income generation. While the agricultural crops grown by these households tended to be used primarily for food consumption, they used livestock rearing primarily for income generation (or really, as a "savings account on legs" as has been highlighted in previous research conducted in the same area³³).

The comparison group by endline was more likely to report growing crops and raising livestock as both a means to feeding the family and as a business. While the treatment group increased over time in their belief that they can be both, they were two times less likely than the comparison group to report seeing agriculture as both for food consumption and income generation (38% compared to 69% in the comparison group) and two times less likely than the comparison group to report seeing raising livestock as both for food consumption and income generation (27% compared to 59% in the comparison group).

Income

The treatment and comparison groups were both more likely to mention at baseline receiving cash income at both the household and personal level within the week prior to the survey compared to the midline and endline. At the endline, the treatment group (43%) was more likely than the comparison group (28%) to mention receiving income in the week prior to the survey. This difference was statistically significant. Despite the treatment group reporting lower income than the comparison group at baseline, the treatment group reported more income earned at the midline and the endline than the comparison group, but this difference was not statistically significant. It is important to note extreme outliers were removed for the analysis; for example, one savings group member noted earning 700,000 FCFA in the prior week, skewing the endline average for the comparison group.

While there was an increase in perceived amount of income compared to prior years for both the treatment and comparison groups, the treatment group (68%) at endline was more likely to report an increase in income than the comparison group (48%), which is consistent with the overall improvement in their reported income levels from baseline to endline.

Table 5: Agricultural Extension Support Measures

Treatment				Comparison			p-value
Indicator	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Ability to increase what was produced at harvest compared to prior year							
Yes	8.7	26.4	93.5	9.0	8.7	69.3	0.0001
No	87.2	66.3	6.5	88.6	86.2	17.7	0.0001
About the same	4.1	7.3	13.0	2.4	5.1	13.0	0.0001
Why harvest was better							
Increase in rain	57.9	57.7	99.4	73.7	29.4	98.5	
Use of new knowledge or planting techniques	57.9	38.5	40.4	10.5	5.9	12.8	0.0001
Used fertilizer	36.8	25.0	41.5	42.1	17.7	29.3	0.0281
Used better or more seeds	10.5	3.9	15.8	15.8	47.1	0.8	0.0001
Other	0.0	3.9	0.0	15.8	17.7	0.8	
Why harvest was worse							
Less rain	0.5	97.2	7.7	14.1	99.4	24.6	
Land was suffering/poor quality soil	21.6	16.8	53.9	5.7	3.9	9.8	0.0002
No fertilizer	5.0	1.4	38.5	1.6	0.6	6.6	0.0014
Bad/poor quality seeds	0.0	0.0	0.0	0.0	0.0	3.3	
Nothing changed	1.0	0.7	0.0	1.0	0.0	1.6	
Other	97.0	0.0	46.2	84.9	0.0	62.3	
Other explained: Too much rain/flooding	87.6	0.0	0.0	76.8	0.0	0.0	
Client or household member used any of the following agricultural techniques:							
Used fertilizer	39.0	44.0	59.2	71.1	55.6	59.9	
Used farmer managed natural regeneration	3.2	22.8	14.7	1.0	18.4	3.7	0.0002
Used pit construction	15.6	30.1	65.8	65.9	66.3	40.1	0.0001
Used mulch	2.3	4.2	5.4	1.0	0.0	2.1	0.0862

Indicator	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Used Zaï	58.3	47.2	54.4	27.5	13.8	12.5	0.0001
Used improved seeds	4.1	1.6	27.2	31.8	7.7	25.0	
Used composting	65.1	46.6	52.7	16.6	16.8	30.2	0.0001
Used bio-gardening	0.0	0.0	0.0	0.0	0.0	1.6	0.0887
Used other	16.1	1.0	0.5	28.9	3.1	17.2	0.0001
In past 12 months, received education or training on how to help manage crops	17.9	18.1	55.4	32.2	49.5	29.7	0.0001
Training received from whom?							
Family	2.6	11.4	2.94	1.5	0.0	0.0	
Friends and neighbors	5.1	5.7	4.9	4.4	1.0	1.8	
SG members	5.1	8.6	45.1	4.4	0.0	15.8	0.0002
ODE	43.6	85.7	64.7	55.9	95.9	77.2	0.102
SEMUS	0.0	0.0	0.0	0.0	0.0	0.0	
Farmer field schools	0.0	0.0	1.0	1.5	2.1	0.0	
Agricultural extension workers	48.7	8.6	22.6	44.1	7.2	14.0	
Other	2.6	0.0		1.5	0		
Have adopted a new economic activity in the past year	12.4	7.3	42.4	24.2	5.1	32.8	0.0551
Of those that adopted new practices, they....							
Grow and sell 'cash crops' like sesame, cowpeas & groundnuts	11.1	14.3	3.9	3.9	10.0	57.1	0.0001
Petty commerce	85.2	35.7	60.3	43.1	50.0	49.2	
Livestock fattening	0.0	21.4	1.3	7.8	0.0	4.8	
Production and sale of dolo (local beer)	7.4	7.1	34.6	2.0	20.0	7.9	0.0002
Grow and sell cereals and grains like sorghum and millet	3.7	0.0	2.6	0.0	10.0	1.6	

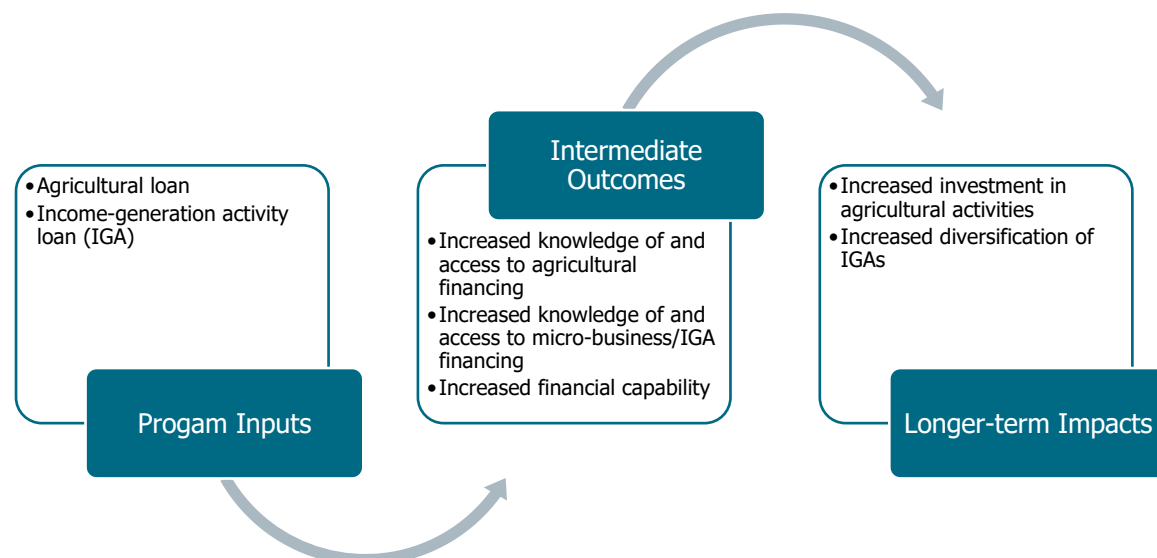
Indicator	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Garden & sell vegetables	11.1	14.3	19.2	27.5	10.0	12.7	
Cotton spinning	0.0	0.0	1.3	0.0	0.0	0.0	
Masonry	0.0	7.1	0.0	0.0	0.0	0.0	
Civil servant/salaried	0.0	0.0	0.0	0.0	0.0	0.0	
Other	3.7	7.1	0.0	17.7	10.0	1.6	
Agriculture as a business							
See growing crops as a business	0.0	0.5	1.6	1.9	0.5	3.7	0.0001
See growing crops only to feed the family	86.7	74.6	60.9	56.9	33.7	27.1	0.0001
See growing crops as both	13.3	24.9	37.5	41.2	65.8	69.3	0.0001
Livestock-raising as a business							
See growing & fattening livestock as a business only	86.7	85.5	71.8	92.4	46.4	39.1	0.0001
Growing and fattening livestock only to feed the family	5.1	1.6	1.1	1.0	6.1	1.6	0.0001
See raising livestock as both	8.3	13	27.2	6.6	47.5	59.4	0.0001
Income							
Households that received cash income in the past week	77.9	49.7	42.9	87.7	36.2	27.6	0.0018
Women who received cash income in the past week	67.9	45.5	34.2	75.4	30.8	25.0	0.0496
Average amount of income received in prior week	5,716.2	8,730.2	11,263.8	7,350.1	6,687.7	9,579.8	
Households that have had an increase in income as compared to 1 year ago	33.5	31.1	67.9	18.0	10.2	47.9	0.0001

Agricultural Extension Support Key Findings

- The treatment group believes their harvests were better at endline; given the poor outlook at the midline due to the drought conditions experienced at that time, harvests appeared to have rebounded by endline.
- The treatment group attributed the improved productivity to application of new knowledge or new planting techniques, fertilizer and better or more seeds. The comparison primarily attributed an improvement in harvest due to rain.
- There was an increase in reported access to agricultural extension training, particularly among the treatment group. While efforts were made to encourage government agricultural extension agents to serve women's groups with information and support, ODE was most often reported as the source of the training.
- More among the treatment group had adopted a new economic activity at endline and this activity was likely producing or selling dolo (local beer) and petty commerce.
- Among the treatment group, while there was an improvement over time in their perception about the role of raising livestock (still seen as a business and less for household nutrition) and growing crops (still primarily for food consumption and less for business purposes/income), the comparison was more likely at endline to report that agriculture and livestock can be leveraged for both consumption and income generation.

Outcomes related to Agricultural and Micro-business Financing

This section will focus on the relationships between access to and use of group-based agricultural and micro-business (known also as IGA) loans developed by RCPB as well as by ODE's MFI arm—FINACOM—and intermediate and long-term outcomes. Figure 14 outlines the relationships explored in this section.

Figure 14: Agricultural and Micro-business Financing Theory of Change

Access to financing is an often-cited barrier to investment in both agriculture and micro-businesses.³⁴ Originally, Grameen Foundation worked with RCPB to develop an agricultural loan product designed for savings group members (a group-based agricultural loan) as well as an IGA-loan that could respond to non-agriculture-based economic activities for which women needed investment capital. ODE's microfinance arm, FINACOM, also designed similar loan products that they could offer to their savings group members who were not being reached by RCPB.

Ability to invest in income generation

Over time, the treatment group found it more manageable to invest in their current IGA, with almost all of them feeling it was very or somewhat manageable to invest in their current IGA by endline. However, the treatment group was also more likely to report it was manageable at baseline compared to the comparison group. At baseline, the comparison group members were more likely to report it was very easy to invest, but this positive outlook decreased over time. By endline, 22 percent of the comparison and 3 percent of the treatment felt it was actually very difficult to invest.

Awareness of agricultural loans

At midline, a little more than a quarter of treatment clients and more than half of comparison group were aware of institutions offering agricultural loans (this question was not posed at baseline). At endline, there was no change in awareness of agricultural loans among the treatment, and awareness among the comparison group decreased over time. In the end, about one-quarter of treatment and comparison groups were aware of an institution offering an agricultural loan.

Among those aware, at baseline, half of the treatment group was aware of RCPB and half reported FINACOM. At endline, almost 100 percent noted FINACOM and very few noted RCPB. The

comparison group had a higher awareness of FINACOM at the midline compared to the treatment group, and this awareness grew, but not as much as the treatment group at endline.

Use of agricultural loans at household level

Between 14 and 21 percent of the treatment group used an agricultural loan at the household level, with the greatest usage reported at the midline (21%). The comparison group consistently reported a higher usage of agricultural loans overtime, except at the midline. Similar to awareness of the agricultural loans, at midline, RCPB held most of those loans, but at the endline FINACOM was the primary source for agricultural loans among the treatment and the comparison groups. The comparison group also noted awareness of and usage of agricultural loans at another local financial institution called URCCOM.

Personal use of agricultural loans

About the same percentage of savings group members in the treatment and comparison groups noted that they *personally* used an agricultural loan; however, the data is not altogether clear at endline for the treatment group as 38 percent personally noted using an agricultural loan at endline while the percentage at the household level was smaller (19%). One might expect the inverse where there were fewer personally using a loan compared to the household level. It could be that when asking about household use of the loan they were thinking of other people (ex. husband, co-wife, child—not including themselves) whereas when asking about them personally, they reflected on their own use of an agricultural loan. For the comparison group, it appears the household and personal use of the agricultural loans was similar enough that the savings group member was likely the one taking the loans for the household. Similar to household use of agricultural loans, FINACOM held most of these loans at midline and endline; however, there was slightly more reporting of “other” for personal use than for household use.

In the treatment group, most reported using the agricultural loan for materials at midline, but by endline, they used it for seed. This was similar for the comparison group.

Satisfaction with agricultural loans

Among treatment groups, 78 percent felt the agricultural loan size was sufficient at midline whereas at endline, almost all felt the loan size was sufficient. The comparison group had lower rates of reporting that the loan size was sufficient compared to the treatment group but rates were still relatively high (54% and 70% for midline and endline, respectively).

Among the treatment group members, a quarter of them were very satisfied with their loan at midline while 61 percent were somewhat satisfied and 14 percent dissatisfied to some degree. The comparison group was more dissatisfied with the loan at midline compared to the endline. Levels of satisfaction increased by endline for both groups and more reported being “very satisfied” by the endline. The treatment group was statistically significantly more likely to report being very satisfied (49%) compared to the comparison group (34%).

Repayment responsibilities

Almost all savings group members (83-84 percent, treatment and comparison groups, respectively) reported that they were responsible for the loan payment and there was very little report of sharing this responsibility with their spouse. Among the comparison groups, about 13 percent reported it was their spouse who was in charge of repayment.

IGA loan use

At both mid and endline, the treatment group was more likely to report taking an IGA loan (almost 2 times as likely; 39% and 49%, respectively) than the comparison group (18% and 26%, respectively). Similar to the agricultural loan, many in the treatment group reported taking this loan with RCPB at midline but the majority were taking the loan from FINACOM by endline. This was similar for the comparison group except they were more likely to note taking the loan from “other” or URCCOM at baseline.

Financial stress

Field et al³⁵ developed a financial stress index to assess the impact of flexibility in loan terms in India. The index includes four questions that ask about perceived ability to cover loan payments, time spent thinking about repayment, disagreements with one’s spouse or other household members regarding repayment, and anxiety about repayment. Using these same four questions, the results suggest that among any savings group member who reported having a loan (whether an agricultural, IGA, or loan with the savings group), half of the treatment group at midline indicated they were not anxious about

their loan payment and the other half were slightly worried. By endline, 6 percent of the treatment group reported being very anxious about their loan payment whereas 40 percent of the comparison group were very anxious about their loan payment.

There are women who take credit for their husbands, which strengthens the relationship between men and women. Women are also taking more and more money. [We believe there is a need for] couple’s training in financial education to prevent men from withdrawing some or all of the credit for other purposes.”

– BRB partner staff

The majority of the treatment group (89%) indicated they argued with their spouse about the loan payment at endline; while the comparison group was also more likely to indicate arguing with their spouse at endline compared to midline, they were more than half (32%) as likely to argue with their spouse compared to the treatment group.

The treatment group was more confident (89% compared to 48% in the comparison group) they

would be able to come up with the money at both points of time. In contrast, almost half of the comparison group was confident they could come up with the money, but the other half was not as confident as to where they would get the money.

At midline, about half of the treatment group indicated they thought about their loan payment for a few hours, with 12 percent of them saying they thought about their loan payment all day; by endline,

almost half spent all day thinking about their loan. The comparison group was more likely to report that they spent a few hours or less thinking about their loan payment (92%) at endline compared to the treatment group (44%).

The qualitative data highlights men's and women's perspectives about the use of credit within the household. From men's perspectives, women's access to credit brings value and they recognize that it is through her, he gains access to credit he does not seek or receive himself. One focus group with men revealed their beliefs about their wives' access to credit, *"Women have more access because they are better organized and more credible to microfinance institutions (MFIs). They mobilize more savings than men and pay well too. In the last two years, [women have gained] access to credit. Women talk to their husbands before taking credit. Husbands give advice on how much to request, depending on the activities to be funded. There are women who take credit for their husbands, which strengthens the relationship between men and women. Women are also taking more and more money. [We believe there is a need for] couple's training in financial education to prevent men from withdrawing some or all of the credit for other purposes."*

A discussion with another men's group found similar sentiments, *"It's obvious that it's women who take more loans, but you have to agree to take loans [as a couple] because if each member takes loans it can put the family in difficulty. Women have better discipline in managing their loan - they do not like humiliation. We rely on women to access loans. Some of us can no longer get loans - this is a matter of agreement, you have to pay back, otherwise you lose that source of funding. You have to be smart and know where the interests of the family are."*

Women acknowledge some of the power this gives her as they also note the lack of possible creditworthiness of their spouses. *"Men do not have easy access to credit. With them, the conditions are harder (required collateral, high interest rate etc); Women have easier access because they are organized into savings groups. They are solvent and inspire confidence in repayment. In addition, networking with RCPB and FINACOM has facilitated access to financial services for women members of savings groups. As a result, some husbands go through their wives to get credit."* Another women's group shared that, *"men are proud and refuse to repay their loans. Men do not have access to credit because they are not in groups (but with pleasure). Now we have easier access to inputs, we can bail out our husbands and they can pay back later (you manage together). There is more support for agricultural inputs and [livestock] fattening."* Women also acknowledge that prior to informing their husbands about the opportunity to take a loan, they discuss this in the group first, *"When we take the loans, we meet together between us for instructions to be followed by the members, then we inform our respective husbands."*

The implementing partners acknowledged this dynamic and had some initial ideas how they manage it. *"Women take credit and give it to their co-wife or to their husband. If there is a problem loan, there is a man behind [it]!"* Another partner shared, *"Gender is important. We lightened things for women but we did not forget men. However, we see cases where women give some credit to men, we are almost sure that men are behind it; it causes problems. Some men are aware that the benefits that women have through access to credit, they can enjoy - we pretend not to see."* When asked how to manage this dynamic, *"we should make loans to households. We need to look at this more closely."*

Table 6: Agricultural and Micro-business Financing Measures

	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Perceived difficulty to invest in current IGA							
Very difficult	12.8	8.3	2.7	16.6	32.1	21.9	.0001
Find it manageable	74.3	85.0	94.0	55.5	46.4	69.3	
Find it easy	11.0	2.6	1.1	27.5	7.7	4.2	
Unable to invest in IGA	0.9	2.1	1.1	0.5	6.6	1.0	
Currently do not have any IGAs	0.9	2.1	1.1	0.0	7.1	3.7	
Have heard of institutions that offer agricultural loans	-	26.7	26.6	-	54.5	28.6	
Name of the institution that offers the agricultural loan							
RCPB	-	50.0	4.8	-	16.7	5.6	0.017
FINACOM	-	50.0	95.2	-	33.3	55.6	
URCCOM	-	0.0	0.0	-	33.3	33.3	
APFI	-	0.0	0.0	-	0.0	0.0	
Ecobank	-	0.0	0.0	-	0.0	0.0	
Other	-	0.0	0.0	-	16.7	5.6	
Households that have used an agricultural loan	13.8	21.2	18.5	31.3	15.8	21.9	
Name of the institution where household agricultural loan is held							
RCPB	-	36.6	8.8	-	19.4	2.4	.0001
FINACOM	-	60.9	88.2	-	19.4	52.4	
URCCOM	-	0.0	0.0	-	35.5	33.3	
APFI	-	0.0	0.0	-	0.0	0.0	
Ecobank	-	0.0	0.0	-	0.0	0.0	
Other	-	2.44	2.9	-	25.8	11.9	
Personally use an agricultural loan	13.8	19.7	38.8	15.6	12.8	19.8	.0001
Name of the institution where personal agricultural loan is held							
RCPB	—	18.4	2.9	—	8.0	0.0	.001
FINACOM	—	81.6	97.1	—	28.0	78.9	
URCCOM	—	0.0	0.0	—	36.0	15.8	
APFI	—	0.0		—	4.0	0.0	
Ecobank	—	0.0	0.0	—	0.0	0.0	
Other	—	0.0	0.0	—	240	5.3	
Objective of loan							
Materials	—	52.6	17.1	—	68.0	8.5	.188
Seed	—	7.9	75.7	—	8.0	78.7	

	Treatment			Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Labor	—	0.0	2.9	—	4.0	10.6	
Purchase of livestock	—	0.0	4.3	—	4.0	2.1	
Other	—	0.0	0.0	—	0.0	0.0	
Felt the loan was sufficient to cover the cost of their expense	—	77.8	95.7	—	54.2	70.2	0.0001
Level of satisfaction with the loan							
Very satisfied	—	25.0	48.6	—	25.0	34.0	.035
Somewhat satisfied	—	61.1	48.6	—	45.0	51.1	
Somewhat dissatisfied	—	13.9	2.9	—	30.0	14.9	
Dissatisfied	—	0.0	0.0	—	0.0	0.0	
Person responsible for the loan payment							
SG member	—	—	84.3	—	—	83.0	
SG member’s spouse	—	—	7.1	—	—	12.8	
SG member and spouse	—	—	7.1	—	—	4.3	
Someone else in the family	—	—	1.4	—	—	0.0	
Other	—	—	—	—	—	-	
Personally use an IGA loan for non-ag activities	—	38.9	48.6	—	18.2	25.5	.012
Name of the institution where the personal IGA loan is held							
RCPB	—	28.6	2.9	—	0.0	0.0	.006
FINACOM	—	71.4	97.1	—	0.0	66.7	
URCCOM	—	0.0	0.0	—	25.0	25.0	
APFI	—	0.0	0.0	—	0.0	0.0	
Ecobank	—	0.0	0.0	—	0.0	0.0	
Other	—	0.0	0.0	—	75.0	8.3	
Anxiety about loan payment							
Yes, a little	—	39.9	55.6	—	66.7	32.0	.441
Yes, very	—	6.1	22.2	—	6.7	40.0	
No	—	54.6	22.2	—	26.7	28.0	
Argued with spouse about loan payment	—	3.1	88.9	—	0.0	32	0.003
2-3 days prior to the due date of your loan, confidence in ability to repay							
Confident I'd have the money	—	68.8	88.9	—	46.7	48	.1
Confident I'd have the money even though I didn't	—	31.3	11.1	—	40	48.0	

Treatment				Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
know where I was going to get it							
Not confident, wouldn't be able to pay in full but maybe some	—	0.0	0.0	—	6.7	4	
Not confident, not sure how I'd pay it at all	—	0.0	0.0	—	6.7	0.0	
Amount of time spent in the 48 hours prior to the payment thinking about your loan payment							
not at all	—	37.5	11.1	—	42.9	12.0	.038
less than an hour	—	6.3	11.1	—	21.4	36.0	
a few hours	—	43.8	22.2	—	21.4	44.0	
all day	—	12.5	44.4	—	7.1	4.0	
more than a day	—	0.0	11.1	—	7.1	4.0	

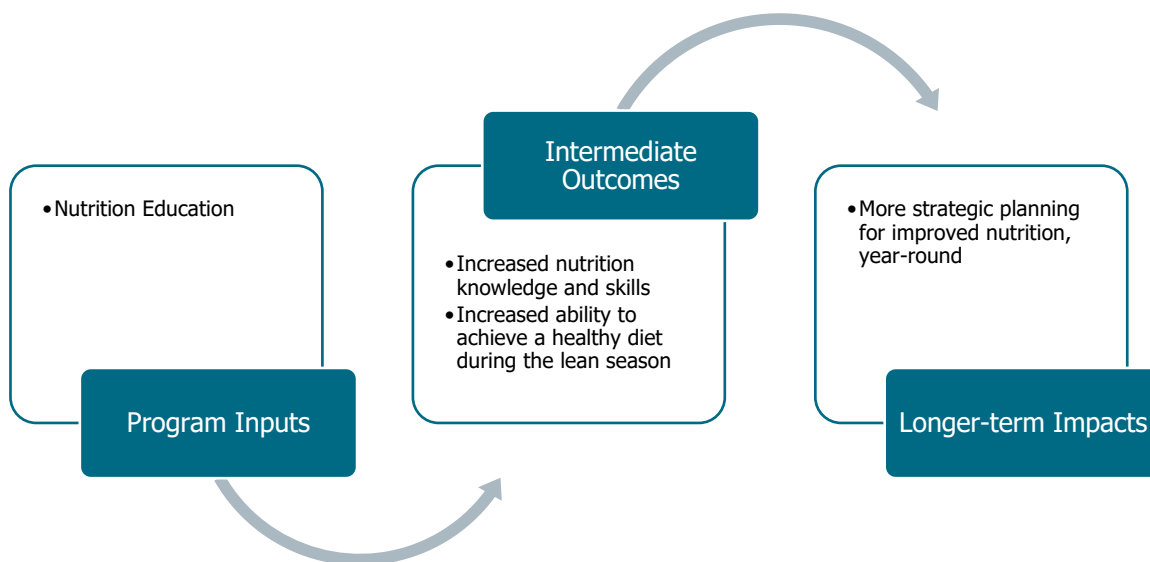
Key Findings on Agricultural and Micro-business Financing

- There is not a dramatic increase in agricultural loan usage between midline and endline (nor did awareness improve either).
- Those aware may be those taking the loans as the numbers are very similar.
- There is a greater use of IGA loans by the savings group members by endline.
- The satisfaction with the agricultural loan grew over time and savings group members were more likely to report the size was sufficient for covering their costs.
- Savings group members noted they were primarily responsible for repaying the loan, but they also noted increasing financial stress regarding their loans. While they are confident they can come up with the money, they are arguing more with their spouse, thinking about their loan payment and feeling anxious about the payment.
- The qualitative data suggests that women are taking some loans on behalf of their spouse; this means while she is responsible for repayment, she may not be directly benefiting from the loan. This should continue to be explored, particularly given the increase in women reporting being afraid of the spouses and believing they must tolerate violence to keep the peace at home (see more in the gender section further below).

Outcomes related to Nutrition Education

This section will focus on the relationship between the nutrition education provided by the community agents to the savings group members and intermediate and long-term outcomes. Figure 15 outlines the relationships explored in this section.

Figure 15: Nutrition Education Theory of Change



Awareness of a balanced diet

Knowledge of foods in a balanced diet started off high except for knowledge about fruit, which actually declined by the midline and then recovered by endline. Given how knowledge dipped at midline and then sometimes recovered by endline suggests that this also might be reflective of what they are actually consuming. At midline, more reported starch slurry or millet were part of a balanced diet and then by endline, more reported animal proteins, fruits, and oil and/or sugar. Knowledge was similarly high for the comparison group and in some cases better at all points of time. Knowledge of animal protein decreased over time for the comparison group. Given the lack of increase in knowledge at midline and endline suggests that the education alone was not that influential on improving knowledge.

"Most decisions are made in a concerted fashion. Balancing the diet is usually the decision of the woman. Men contribute to food expenses. Some of us did not give land to our wives, we do it now. Participation in the gender dialogues has led us to change." "Women now have fresh vegetables for a long time (June to April). This improves the nutrition of the family, even in the dry season."

– BRB participant

Use of kitchen gardens

The treatment group was consistently more likely to report having a garden and this increased over time. Having a garden also increased over time with the comparison group, but not to the same degree. Most grew tomatoes, gombo (okra), sorrel, onions and then a few grew cowpeas. The treatment group was more likely to report growing okra and sorrel and cowpea, whereas the comparison was more likely to grow onions and cassava.

Healthy strategies used during lean season by the household

The treatment group is more likely to mention that they put food aside to eat during the lean season (66% compared to 45% of the comparison group) and saved to buy food during the lean season (44% compared to 26% of the comparison group) and for health expenditures (7% compared to 3% of the comparison group) and more likely to put aside livestock (79%) than the comparison group (38%). In many cases, the comparison group started out higher at baseline mentioning these strategies and the use of these strategies decreased over time for them.

Dietary diversity

While starting out with similar dietary diversity scores at baseline (both treatment and comparison groups consumed on average 3.6 foods in the day prior to the survey), the treatment group had a more diversified diet by the endline (4.0 foods compared to 2.5 foods among those in the comparison group). The treatment group was also more likely to have consumed dark green vegetables, vitamin A foods, fruits and vegetables, and meat and fish.

The qualitative data demonstrates an interesting shift in the involvement of men regarding household nutrition. Men shared that most decisions regarding nutrition are still made by women, even though men may be responsible for providing money for food expenses. *“Most decisions are made in a concerted fashion. Balancing the diet is usually the decision of the woman. Men contribute to food expenses. Some of us did not give land to our wives, we do it now. Participation in the gender dialogues has led us to change.”* *“Women now have fresh vegetables for a long time (June to April). This improves the nutrition of the family, even in the dry season.”* Men also see the nutrition education resulting in important impacts at the household level, *“There is much more hygiene and fewer cases of illness in our families. Our women are nicer, our children are cleaner and well-fed. There are fewer cases of malnutrition because the diet is balanced. There is also birth spacing, which allows for healthier children.”*

Women also see men taking a more active role in household nutrition, *“Men have begun to get involved in these issues; before all was resting on women. Men have understood that savings groups also benefit them.”*

Table 7: Nutrition Education Measures

Treatment				Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Knowledge of foods required for a balanced diet							
Starch slurry or millet	83.9	93.8	66.3	79.2	80.6	89.1	0.0001
Green vegetables	89.0	76.7	71.2	85.3	87.2	74.5	
Animal proteins	82.1	61.1	81.0	90.5	81.6	77.6	
Fruits	17.4	8.8	27.7	9.0	30.6	14.1	0.0011
Oil and/or sugar	46.3	20.7	52.7	27.0	9.7	14.6	0.0001
Has a garden	36.7	47.2	59.8	15.6	40.3	45.3	0.005
Plants grown in the garden							
Tomatoes	26.3	57.1	71.8	75.8	63.3	72.4	
Gombo (okra)	25.0	31.9	60.0	33.3	41.8	40.2	0.0058
Sorrel	71.3	71.4	68.2	33.3	31.7	44.8	0.001
Onions	51.3	73.6	59.1	66.7	72.2	72.4	0.0516
Potatoes	0.0	0.0	0.0	0.0	1.3	0.0	
Cassava	2.5	2.2	2.7	0.0	10.2	10.3	0.0264
Cowpea	20	29.7	17.3	21.2	3.8	3.5	0.0022
Peanuts	0.0	0.0	1.8	0.0	2.5	1.2	
Sesame	0.0	0.0	0.0	0.0	0.0	0.0	
Other	67.5	29.7	40.9	87.9	36.7	55.2	0.0464
Healthy strategies used during lean season by the household							
Nutritious foods from garden	8.7	14.0	4.9	10.4	12.8	7.8	
Eat stored grain with vegetables, fruits, and protein	67.4	47.2	20.1	29.9	43.4	15.6	
Put aside food to eat during lean	57.3	61.1	65.8	52.1	48.0	44.8	0.0001
Save in advance to buy food during lean season	34.9	49.7	44.0	41.7	12.8	25.5	0.0002

Save for health expenditures	5.5	7.3	7.1	17.5	2.6	2.6	0.0428
Identify local health providers	0.5	1.0	0.5	0.0	21.9	0.0	
Put aside livestock	13.8	35.8	79.4	33.7	27.6	38.0	0.0001
Other	1.8	1.6	0	10.4	2.6	12.5	0.0001
Women's Dietary Diversity Score	3.6	3.3	4.0	3.6	2.6	3.5	0.0065
Foods consumed in 24 hours prior to the survey							
Starch	99.5	92.2	92.4	100	70.9	96.9	0.0528
Dark green vegetables	59.2	34.2	88.0	69.7	33.7	77.6	0.0075
Other vitamin A foods	6.0	24.4	12.0	12.3	39.3	5.7	0.0329
Other fruits and vegetables	86.2	47.7	70.1	83.9	27.6	46.9	<.0001
Organ meats	0.5	5.2	2.2	1.0	6.1	1.6	
Meat and fish	60.8	62.7	69.6	56.4	33.2	58.3	0.0235
Eggs	4.1	24.4	4.4	5.7	10.2	2.6	
Legumes	22.9	28.0	50.5	21.8	13.8	46.9	
Milk and dairy	11.0	15.0	12.5	10.9	21.4	13.5	

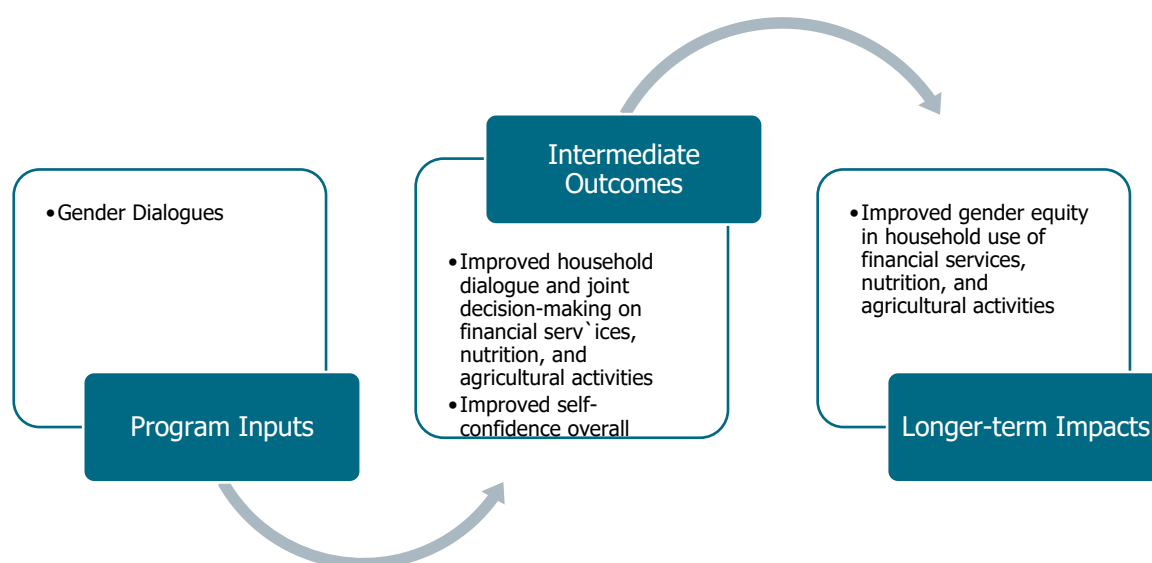
Key Findings on the Nutrition Education

- It appears that the treatment group has implemented more strategies to prepare and cope with the lean season.
- The treatment group has a more diverse diet by endline compared to the comparison group. Despite the dip at midline in dietary diversity, the treatment group's dietary diversity rebounds to an even greater degree by the endline compared to baseline. The comparison group's score takes a greater dip at midline and rebounds by endline, but not to baseline levels.
- The treatment group is more likely to consume meat and fish, other fruits and vegetables (such as tomatoes and onion), dark green vegetables and other vitamin A rich foods. At baseline, the treatment and comparison groups had similar dietary patterns.
- Changes in dietary diversity may be due more to improvements in cash flow (food access) or availability of food due to expanded use of gardening and less aligned with knowledge change due to an education intervention.

Outcomes related to Gender Dialogues

This section will focus on the relationships between gender dialogues facilitated by an ODE male and female team and intermediate and long-term outcomes. Figure 16 outlines the relationships explored in this section.

Figure 16: Gender Dialogues Theory of Change



Self-perception of empowerment

At baseline, slightly less than half of the women felt empowered as a woman in her household (45%) and even fewer felt empowered as a woman in her community (24%). At midline, there was even less of a perception they were empowered (34%), but by endline, this perception of empowerment at the household rebounded to baseline levels (46% at endline) and improved at the community level (32%). The comparison group felt more empowered than the treatment group at baseline (66%), but their

perception of empowerment decreased over time to half the baseline level (30%). By endline, the treatment group felt more empowered at the household level compared to the comparison group and this difference was statistically significant. Similar to the treatment group, the women in the comparison group gained in their perception of empowerment at the community level (31%).

Since the advent of Saving for Change, there are more and more empowered women. Since the creation of savings groups, women have emerged that were once in the background because of poverty. An empowered woman is seen by other women as a model. Other women envy and respect her."

– BRB participant

In the qualitative research conducted at the endline, women revealed feeling more empowered. They defined an empowered woman as "a woman who can make decisions, but is always under the authority of

her husband.” “The 10 you are interviewing are all empowered women. Since the advent of Saving for Change, there are more and more empowered women. Since the creation of savings groups, women have emerged that were once in the background because of poverty. An empowered woman is seen by other women as a model. Other women envy and respect her.”

Men say an autonomous woman “does not have the power of a man, but is a help to the man. She is a submissive woman, making her the pride of her husband.” “The trust is based on the behavior of the woman if they are in conformity of society.” “She’s not a threat, but a help.”

Decision-making power

Women in the treatment group were more likely to report over time that their husbands have more influence over decisions regarding use of financial services. By endline, 80 percent of the treatment group and 69 percent of the comparison group reported that their husbands make most decisions compared to 45 percent of the treatment group and 49 percent of the comparison reporting this at baseline. Similarly, husbands’ decision-making power increased over time as it related to agriculture decisions as well. The treatment and comparison were similar at endline with about 80 percent reporting that their husband made the decisions regarding agriculture. In contrast, both the treatment and comparison groups reported making joint decisions when it came to responding to shocks the household experienced. The comparison group was only slightly more likely to mention that husbands were most likely to make these decisions (23% compared to 13% among the treatment group).

While almost all of treatment and comparison groups at endline noted that they did not have to seek permission to leave the house compared to the very few who were able at baseline, less than a third of the comparison group members and 14 percent of the treatment group members could leave home without seeking permission to travel for agricultural activities. The difference between those leaving without permission for agricultural activities was statistically significant at endline. Fewer in the treatment group at endline were able to leave compared to baseline and midline for agricultural activities. This may suggest that the continued restriction of mobility for agricultural activities may have less to do with simple permission from one’s spouse and more to do with issues such as safety to travel to plots far from the home. This is something to be further explored.

The qualitative interviews asked men and women what decisions regarding agriculture, financial services, and health were taken together or alone. Regarding agriculture and financial services, it appears that while women are consulted, it is ultimately the spouse that makes the final decision. “It is with the spouse we decided where to grow millet, corn, sorghum for food, cowpeas, peanuts or sesame for women. Even if there are discussions together, the last word goes to the spouse who is the head of the household. In monogamous couples, the two discuss and decide together, under the final decision of the man. In polygamous households, each woman has her piece of land and takes care of it. For the order of labor, sometimes one begins with the family field and then the field of the first wife and so on.” “At the production level, before there was a kind of jealousy. Now there is a convergence of efforts.”

But women noted an important change, that men recognized how some of their decisions negatively impacted the family, *“Before, the man could make the decision to sell millet to the detriment of the food of the family. Now we find a solution together to this problem. Now there is food all of the time.”* This may be attributed to the increased role that women take in the decisions related to responding to shocks mentioned earlier. Also, the gender dialogues seemed to have created a natural opportunity to discuss challenging topics, *“[the dialogues] allowed men and women to talk, to exchange. Men are interested in knowing what women are learning. We learned that when you live together, you have to be complementary.”*

Men, interestingly, saw decision-making related more to *“who is right”*: *“[The decision] does not belong to anyone. This is the opinion of the person who is right, in the interest of the family.”* But some men recognized that times have also changed, *“Before, women were not entitled decision-*

“Before, since women had no income, their opinion counted little. Now they are financially independent, husbands consult them because they contribute. Participation in savings groups and gender dialogues helped a lot in this direction.”

– Spouse of BRB participant

makings. Today, they have received training through the BRB project, which has provided them with a lot of knowledge compared to men. This makes their opinion very important in decision-making.” *“Before, since women had no income, their opinion counted little. Now they are financially independent, husbands consult them because they contribute. Participation in savings groups and gender dialogues helped a lot in this direction.”*

When asked about mobility during the qualitative interviews, women noted that while they do not have access to sacred places such as traditional ritual sites,

over time they have gained the flexibility to go alone to more places. *“Before you always had to ask permission from the spouse, even to participate in savings group meetings. Now we are free to go without permission.”* Their husbands agreed. *“As confidence is established, she can to Yako and even go to Ouahigouya. If confidence is established, the woman is free to move around.”*

Fear of spouse and tolerance of violence

Over time, fewer in the treatment group reported fearing their spouse most of the time (from 9% to 3% by endline); however, the percent that were sometimes afraid increased over time with almost half reporting that they were sometimes afraid (38% at baseline, 66% at midline, 51% at endline). The comparison group had more women reporting they were afraid most of the time at endline (13%) and sometimes afraid (56%). These differences were statistically significant.

While there was a decrease in the treatment group who strongly agreed a woman must tolerate violence to keep the peace in the family, there was an increase in those that somewhat agreed, with almost 60 percent believing to some degree that violence must be tolerated at endline. Almost 90 percent of the comparison group agreed strongly or somewhat to this statement and these differences were statistically significant.

The qualitative data contrasts the quantitative data: both men and women report that the occurrence of domestic violence was down and has been for several years. As one focus group discussion with men found: *“There has been no case of spousal violence here. Today men understand the importance of women and cooperate. Men are much more supportive of their wives and even serve as guarantors when needed. We must always continue to educate couples.”* Another group of men equated the reduction in violence to *“the training received and the exchanges made in this village.”* *“See women come together, they receive advice that benefits men—it brings peace.”* *“The woman had needs and asked her husband all of the time. If he could not [fulfill those needs], it was a source of conflict. Now they solve problems that the man could solve, this leads to agreement in the home.”*

A group of women confirmed this: *“The violence has decreased, we have fewer demands on our husbands and there is less exasperation on the part of the man.”* *“Before people gave birth like goats, too many children and poverty and that was what led to quarrels due to too many responsibilities.”*

“See women come together, they receive advice that benefits men—it brings peace.”

– FGD with spouses of BRB participants

Given the concern regarding women taking out credit on behalf of their husbands, the implementing partners were asked whether they had heard of any stories where men leveraged their wives for credit was found to be problematic. One partner shared, *“Yes. Misappropriation of the purpose of the credit has resulted in cases of unpaid bills because the member's spouse took a portion of the credit. These are the cases where the solidarity guarantee does not work (the woman finds herself [alone] in front of the cashier). So we added the needs of the husband to the credit application.”* When asked what their recommendations were for avoiding this kind of situation, they indicated they saw a need for *“sensitization within the household, [a need to] sensitize the couple (integrate the man) before the establishment of the credit.”* Also, they felt it would be important to possibly conduct education with

family members who were not members of savings groups, to incorporate *“a gender approach into the credit supply mechanism.”*

“[the dialogues] allowed men and women to talk, to exchange. Men are interested in knowing what women are learning. We learned that when you live together, you have to be complementary.”

– BRB participant

Another implementing partner also heard of a divorce case. *“The woman had to leave and the savings group went to seize the husband for reimbursement. We must continue the gender dialogue, because the husband can feel destabilized; if there is a dialogue, it evens out. We need to see how to support the husbands of these women. The big problem is that the financial institutions no longer trust men.”*

Public engagement

While the percent of women who were very comfortable speaking in a meeting with other women actually decreased over time for both the treatment (22% to 16%) and comparison groups (31% to 14%), the treatment was more likely to report being fairly comfortable (72% among the treatment group and 55% of the comparison group). Women in the treatment were also more likely to feel fairly comfortable speaking about issues in a meeting with men and women, with 75 percent feeling very or fairly comfortable, compared to only 35 percent of the comparison group feeling very or fairly comfortable.

Men interviewed for the qualitative recognized the changes in women and how this plays out even at home: *“There is better understanding between women. There are more friendships and affinities between women leading to greater family and social cohesion.”*

Support from savings groups

More treatment group members believed at endline that if a crisis were to strike their household, they would seek help from their savings group (95% of the treatment compared to 76% in the comparison group); this increased over time for the treatment group but decreased over time for the comparison group.

More treatment group members agree that they have gained new knowledge regarding productive agricultural practices from their savings groups; this increased over time (though midline and endline levels are similar).

Ninety-eight percent (98%) of the treatment group compared to 85 percent of the comparison group agreed that they have gained new knowledge regarding nutrition from their savings group and this increased over time (though midline and endline averages are similar).

“There is better understanding between women. There are more friendships and affinities between women leading to greater family and social cohesion.”

– Spouse of BRB participant

Women also shared qualitatively the benefit they received from their savings groups, *“The integration of women into groups has made women more humble, which facilitates communication with men. Humility comes from training, how to convey messages, listening attitude and reception of women. They adopt the same attitude with their husbands. There are also exchanges of experiences with women from other groups.”* *“Savings groups have encouraged women to work, invest. Before women did nothing even if she had abilities.”*

Men seemed to agree: *“Since the last sixteen years we have witnessed the emergence of empowered women because they are organized in savings groups and have benefited from a lot of training and have easy access to credits in their groups and with FINACOM and the Caisse Populaire (RCPB).”*

Table 8: Gender Dialogue Measures

Treatment				Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Feels empowered as a woman in her household	45.0	34.2	46.2	65.9	30.1	30.2	0.001
Feels empowered as a woman in her community	23.4	22.8	31.5	25.1	25.0	31.3	
Household decision-making power regarding use of financial services							
Believes she has more influence	27.1	8.8	6.5	28.4	10.7	10.9	0.046
She and husband have about same influence	27.5	27.5	13.6	22.3	32.7	20.3	
Husband has more influence	45.4	63.7	79.9	49.3	56.6	68.8	
Household decision-making power regarding agricultural decisions							
Believes she has more influence	19.3	5.2	5.4	28.0	22.5	5.7	
She and husband have about same influence	34.9	25.9	17.4	17.1	20.4	14.1	
Husband has more influence	45.9	68.9	77.2	55.0	57.1	80.2	
Household decision-making power regarding responding to shocks							
Believes she has more influence	12.8	6.7	2.7	15.2	10.2	3.1	0.0691
She and husband have about same influence	34.4	73.6	76.1	52.1	65.3	64.6	
Husband has more influence	41.3	14.5	12.5	23.7	16.8	22.9	
Other family member	5.1	3.1	5.4	3.8	3.6	4.2	
Can leave home without seeking permission	3.2	15.5	92.9	4.3	7.7	96.9	0.081
Can leave home for agricultural activities without seeking permission	22.0	21.8	13.6	28.0	25.5	33.3	0.000
Fear of partner in the past 12 months							
Was afraid most of the time	9.6	10.4	2.7	8.5	19.9	12.5	0.0002
Was sometimes afraid	38.1	66.3	51.1	52.6	41.3	56.3	0.0002
Was never afraid	52.3	23.3	46.2	38.9	38.8	31.3	0.0002
Degree of agreement that a woman must tolerate violence in order to maintain stability in the family							

Treatment				Comparison			p-value
	Baseline %	Midline %	Endline %	Baseline %	Midline %	Endline %	
Strongly agree	20.6	39.4	14.1	29.4	36.7	33.9	0.000
Agree	17.0	34.7	47.8	44.6	42.9	56.3	
Disagree	51.8	24.9	31.5	19.0	16.3	8.3	
Strongly disagree	10.6	1.0	6.5	7.1	4.1	1.6	
Comfort level speaking at a meeting of other women to talk about some common issue							
Yes, very comfortable	21.6	25.4	16.3	31.3	32.7	14.1	0.000
Yes, fairly comfortable	54.1	51.3	71.7	43.6	34.2	54.7	
Yes, but with difficulty	13.3	18.1	10.3	5.7	21	20.8	
No, not at all comfortable	11.0	5.2	1.6	19.4	12.2	10.4	
Comfort level speaking at a meeting of other women and men to talk about a common issue							
Yes, very comfortable	4.1	20.2	10.3	10.9	24	6.8	0.000
Yes, fairly comfortable	30.7	39.9	65.8	22.3	36.7	28.1	
Yes, but with difficulty	40.8	26.4	20.7	33.2	25.0	39.6	
No, not at all comfortable	24.3	13.5	3.3	33.7	14.3	25.5	
Would go to SG for help if crisis were to strike her household	72.0	81.9	94.6	93.4	60.7	76.04	0.0001
Feels she has learned new knowledge from members of her SG about productive agricultural practices	79.8	98.9	97.8	89.1	96.4	84.9	0.0001
Feels she has learned new knowledge from members of her SG about nutrition	72.9	100	97.8	76.8	99.5	84.9	0.0001

Key Findings on Gender Dialogues

- While women are gaining confidence in speaking out, even in groups where men and women are present, they are also increasingly reporting that women must tolerate violence to keep the peace at home.
- About half of the women reported being afraid of their husband at least sometime during the year, whether they were from the treatment or comparison group.
- Men, over time, are reported to more likely to be the ones making the decision on financial services and agriculture.
- Men and women seem to appreciate the gender dialogues as these have created opportunities to initiate difficult discussions that challenge existing social norms.
- Men and women both attribute the entry of savings groups as an important mechanism for changing intra-household relationships and views about women and their value.

Discussion

BRB leveraged women's savings groups to coordinate and sequence a series of support services, all designed to improve household resilience, health, food security and reduce household vulnerability and poverty.

By the end of the BRB project, 83,241 women's savings group members and their households had been reached by ODE and SEMUS. Table 9 below represents the final outreach of all project components:

Table 9: Building Resilience in Burkina Faso Outreach

	ODE	SEMUS	Total	Target
Savings group membership				
No. of villages where BRB was implemented	121	120	241	—
No. of savings groups	1,863	1,863	3,699	—
No. of savings group members	40,763	42,478	83,241	80,000
Formal financial products				
No. of savings groups reached with agricultural loans made by RCPB	85	284	369	1,000 groups; 20,000 members with appropriate financial products
No. of savings group members who used an agricultural loan	596	5318	5914	
No. of savings groups reached with IGA loans made by RCPB	600	466	1066	
No. of savings group members who used an IGA loan	9242	8346	17,588	
No. of group-based IGA loans made by FINACOM	229	0	229	
Agricultural extension support				
Ministry of Agriculture extension agents trained by BRB staff on gender/power dynamics	10	11	21	—
No. of savings groups reached by agricultural extension agent support	610	866	1,476	1,000
No. of savings group members reached by agricultural extension agent support	13,373	19,231	33,604	20,000
Education				
No. of savings groups receiving “Agriculture as a Business” education	1666	1,635	3,301	—
No. of savings group members receiving “Agriculture as a Business” education	36,225	33,301	69,526	50,000
No. of savings groups receiving nutrition education	1,025	1,109	1,435	—

	ODE	SEMUS	Total	Target
No. of savings group members receiving nutrition education	19,873	24,260	44,133	50,000
Gender Dialogues				
No. of communities where gender dialogues occurred	53	34	87	—
No. of female gender dialogue participants	9,690	2,905	12,595	—
No. of male gender dialogue participants	2,001	1,584	3,585	—

Results from the BRB project demonstrate, that *despite an economic downturn that occurred during the project period, savings group members experienced sustained savings amounts most likely due to the fact that savings groups function as a commitment device for savings accumulations*³⁶. While the comparison group held more savings at baseline, the treatment group held more savings than the comparison group at midline and endline. Women participating in savings groups alone have been found to experience increased incomes and savings, consumption smoothing, enhanced and/or diversified livelihood activities³⁷, improved business outcomes³⁸, positively impacting women's economic, social, and political empowerment. Savings groups have also not been found to adversely affect reports of domestic violence.³⁹

Many savings group members reported improved access to agricultural training support and that this new information resulted in improvements in their productivity and their ability to diversify their income streams. Qualitatively, they also reported appreciation for the support they received from government extension officers and ODE agents. Women historically have lacked access to extension support and training due to them not being recognized as farmers or for the critical roles they play on the farm, the difficulty in engaging women in farmer group meetings due to mobility constraints or other social norms, their lack of ownership to land, among others.⁴⁰ Research has shown, however, that women both desire and benefit from agricultural extension trainings and support and that supporting women's empowerment in agriculture can lead to improved productivity among smallholder farmer households.⁴¹

Agricultural financing is a well-known gap and determinant of agricultural household investment on the farm.⁴² While savings groups provide mechanisms to accumulate savings and access loans for potential agricultural investment, they are often limited in their ability to meet the demand for credit.⁴³ With BRB, savings group members are linked to formal agricultural financing and IGA loans through a partnership with a local credit union network (RCPB) and the MFI-arm of ODE, FINACOM. *While there was not a dramatic increase in awareness and use agricultural loan usage between midline and endline, savings group members and their spouses both voiced appreciation for access to these tools.* There are, however, risks to consider. There is both quantitative and qualitative evidence that households/husbands are leveraging women's membership in savings groups to gain access to loans and that the women are experiencing varying degrees of financial stress. Data also suggests that women have limited decision-making power over the use of financial tools. For women

challenged by social norms that limit their control over financial decisions, this potentially puts women at risk for economic abuse. Given the fairly high percentage of women voicing periodic fear of their spouses, it is important not to underestimate this potential risk. On the flip side, the qualitative data also suggests that men appreciate their wives' access to credit and that this potentially improves their relationship with their wives due to her increased perceived value to the household.

From the numbers in Table 9 above, it becomes apparent that not all savings groups received all components of the project, with about 50 percent receiving the nutrition education. This might explain the confusing results related to nutrition, where there were *more positive nutritional behaviors among the treatment group, but not necessarily better knowledge*. Given not all treatment group members received education, *it is likely that the improved nutritional behaviors are more related to having better cash flow and income and related to purchasing or accessing food through increased gardening than due to improved knowledge*. There is research to support this possible conclusion. A study conducted in Ghana⁴⁴ found a connection between improved dietary diversity and household income and access to credit. A recent study conducted in Burkina Faso also established the relationship between increased household production of crops (such as cowpeas) and positive impacts on dietary diversity.⁴⁵ It is important to note, however, at the time of the design of the baseline survey, the nutrition education content had not yet been developed and a general approach to evaluating nutritional knowledge was used. Therefore, the variables presented in this evaluation may have missed an opportunity to capture knowledge change where it was most likely to occur.

Similar to the nutrition education, not all groups and savings group members participated in the gender dialogues. In fact, approximately 15 percent of savings group members participated in them, and even fewer of their spouses or other male community members did. This is not altogether surprising given the methodology takes quite a bit of preparation, requires two well-trained facilitators (one woman, one man), and needs to be scheduled to occur outside of existing savings group meetings.

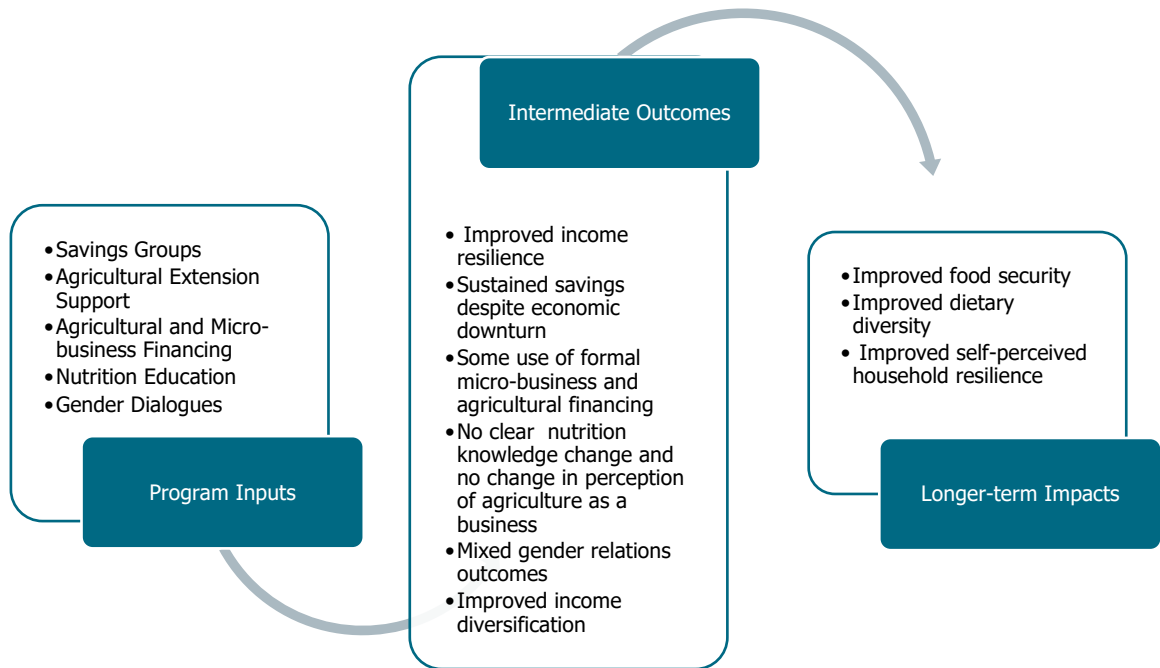
Overall, it is challenging to interpret the gender data, as the quantitative and qualitative data do not align well. Women seemed to have reported more male involvement in decisions and more fear of their spouse in general over time. Some of this can likely be attributed to a drought and associated economic downturn at the midline; however, the fact that women increase their justification of spousal abuse over time is concerning. While not a satisfactory finding, the BRB team did have to question whether anything about the design increased intra-household conflict. One interpretation is that the economic downturn at the midline resulted in increased financial stress and conflict in the household. Research conducted in Tanzania suggests that there is a link between economic downturns and domestic violence as they found households exposed to rainfall shocks experienced increased likelihood of domestic violence in the household.⁴⁶ Alternatively, this particular population has participated in multiple surveys over the past several years, and it is equally likely that women are simply being more honest about their answers, since prior research conducted in Burkina points to the importance of honoring one's husband and not "airing one's dirty laundry" with an outsider.⁴⁷ There is a growing body of evidence suggesting that surveying effects can impact one's behaviors simply by raising awareness about a particular issue through the interview process,⁴⁸ which may have

resulted in women reporting higher levels of decision-making power of their spouses and justifications of abuse at midline and endline than at baseline.

Paying attention to these gender dynamics is crucial. Prior research has found that there are associations between women's autonomy and decision-making and other crucial outcomes such as food security⁴⁹ and households' abilities to cope with shocks⁵⁰.

The qualitative data suggests that *men and women appreciated the gender dialogues, because they created an opportunity to have a conversation about topics that tend to be sensitive*, such as men's role in household nutrition decisions and women's access to land. A Grameen Foundation savings group program that integrated gender dialogues to address family planning decisions in Benin found a similar appreciation for the dialogues as they created the space to initiate a conversation that naturally would not occur regarding family planning.⁵¹ A randomized control trial implemented in Cote d'Ivoire⁵² compared savings groups with and without a gender dialogue component that consisted of husbands/wives participating in eight gender dialogue sessions. The savings groups that participated in the gender dialogues resulted in slightly lower reporting among women of intimate partner violence (physical or sexual) (though this finding was not statistically significant) and acceptance of wife beating was significantly reduced and there was less reporting of economic abuse. Women reporting participating in more than 75 percent of the gender dialogue sessions reported less physical abuse, indicating that prolonged or sustained exposure to gender dialogue sessions can increase the impact.

When each of the individual components of the BRB project are assessed, there are clear improvements in some areas, mixed results in others, and a few where benefit was not clearly detected. Figure 18 below attempts to summarize the key findings. *In summary, while not all savings group members received all components of BRB, the BRB package of interventions seemed to result in improvements in income diversification and adoption of new agricultural techniques and income generating activities, sustained savings despite an economic downturn, some use of micro-business and agricultural financing, and mixed results on nutrition knowledge and gender-relations outcomes, resulting in likely longer-term improvements in food security, dietary diversity, and self-perceived household resilience.*

Figure 17: BRB Results

There is some difficulty in interpreting the data due to the complicated and integrated nature of the intervention, but the BRB results are consistent with other research conducted on similar integrated approaches. Savings groups-plus (SG+) programs are interventions that leverage savings groups to provide complementary services such as education, agricultural extension support, and health services. The evidence on this approach is still limited⁵³ but there is a growing body of evidence^{54,55}. In India, Grameen Foundation found that women in an SG+ program implemented in rural Rajasthan who received nutrition, gender, and agricultural support services improved their breastfeeding behaviors, use of oral-rehydration solution for treatment of diarrhea, household food security and nutrition as well as their decision-making power regarding food purchases.⁵⁶ Women participating in an SG+health program in West Bengal also saw improvements in nutrition and health practices, but less impact was observed regarding household gender dynamics.⁵⁷ This could be expected given the latter program did not directly attempt to influence social norms or other gender dynamics. Women participating in an SG+ programs in Mali implemented by Oxfam America⁵⁸ and Benin by Grameen Foundation⁵⁹ who also received family planning health education and linkages experienced improved knowledge and behaviors related to family planning. In Benin, where they also received specialized health savings and gender dialogues they experienced qualitative improvements in spousal relations related to decisions on family planning and continued use of the health savings for basic health expenses (very little of the health savings were used for family planning costs suggesting out-of-pocket expenses were not a constraint to uptake of contraception). The BRB project results are consistent with the positive findings found with these other SG+ approaches.

Similar comprehensive and integrated programs have equally been found to be effective. A program implemented by Hellen Keller in Burkina Faso that targeted women with integrated homestead food production, nutrition and health behavior change communication found reduced wasting in children, reduced diarrhea and anemia.⁶⁰ In addition, a similar program run by ODE in partnership with Oxfam Great Britain and Christian Aid was implemented in the North and Central-North regions that border the regions where the BRB program was implemented. This program, while not based on the savings group platform, supported households with crop production, market gardening, household businesses, awareness-raising on good nutritional practices, and carried out community-level disaster assessments as well as distributed livestock and cash transfers. Research found that these combined interventions improved household resilience, use of improved agricultural practices and decision-making power among women.⁶¹ Ultra-poor programs, that include livelihood trainings, productive asset transfers, consumption support, savings plans, and healthcare and considered to be one of the more comprehensive integrated program approaches for very poor households, have been found to result in increases in income and consumption, assets, food security, and health.⁶²



Savings Group meeting. Photo: Grameen Foundation

The findings need to be interpreted within the context of the research limitations, paying particular attention to the fact that the comparison group was not very comparable at baseline coupled with the fact that it is highly possible savings groups in the comparison groups received many of the intervention components except for the nutrition education and the gender dialogues. Given savings group members in the treatment group did not receive all program

components, it is also important to consider that savings group membership alone may have been highly influential on savings group member outcomes. Also, at baseline, it was not yet clear what the nutrition and agriculture-as-a-business education modules would have as specific learning objectives. Therefore, the questions in the survey were fairly general and therefore likely missed an opportunity to learn more about the real impact of the education. Lastly, while the three year period provided the BRB project the opportunity to collect data at three points of time, the scaling of each of the project components was not equal given the different work streams required to deliver the financial services, the gender dialogues, the education, and the agricultural extension activities. A longer implementation period would be expected to result in more participation in all project components.

Conclusion

The research supporting the BRB project suggests a sense of “bouncing back” among the treatment group members, and among the comparison group to a lesser degree, after the drought that occurred during 2017. The treatment group appears slightly more resilient, which is consistent with their greater self-perception of resilience, something they attribute primarily to their income diversification and improved intra-household relationships.

The lessons learned from BRB can be leveraged for future replications of this program approach:

1. **Determine how to involve men thoughtfully and purposefully for all program components:** One of the most important findings from this research suggests the need to involve men more in the overall approach as well as individual components. Research conducted by CARE assessing men’s roles in savings groups demonstrates that mixed-gender savings groups that have women in leadership positions performed better in several indicators, such as improved income, than women-only groups.⁶³ Research conducted by Freedom from Hunger in Benin with village banks that formed either with mixed-gender or women-only groups found there were important tradeoffs: mixed gender groups resulted in better health knowledge and behaviors but women-only groups resulted in better social capital and women’s confidence.⁶⁴ ODE and SEMUS also reflected that finding a way to develop financial services and literacy strategies that involve men would recognize their strong role in financial decision-making as well as their use of the financial services access by their wives would likely mitigate the risks of that women face when using financial services. More deliberately engaging men could also reduce the risk of alienating men because they feel excluded. Being given a choice to opt-out is better than not being provided the option at all to join an savings group, for example.
2. **Consider re-design of loan products and processes to account for intra-household decision-making and use of loans:** For savings groups that primarily target women and for formal financial services designed primarily for women, it is often a well-known “secret” that husbands and other household members are the actual recipients of loans. Financial service providers should consider whether loan product designs incorporate this information into loan design. Women’s access to credit is a double-edged sword. While credit may provide women with economic and financial opportunities, credit can also create conflict and cause financial stress, particularly if they are responsible for loan repayment but not benefiting from the loan. Research shows that savings groups provide women with an opportunity to protect their money from spouses, particularly if their spouse is more biased towards the present versus long-term financial needs⁶⁵. The same research also indicates that that people are more “patient” when they make financial decisions together with their spouses. Rozenkrants⁶⁶ conducted research on husband/wife couples and their money and found that “joint decision-making” as it relates to financial decisions tends to favor men’s preferences and that financial service providers should provide incentives to couples to engage in financial matters together, and financial tools should have requirements for joint decision making.

3. **Explore the role of mobile money and other financial services designed to help household respond to shocks.** Prior to BRB, Grameen worked with local actors to build a mobile money infrastructure for linking savings groups to mobile money wallets and formal savings accounts. The original intent of BRB was to integrate the mobile money component into the project but this was not feasible during the project period. There are, however, opportunities to consider how digital financial services can better serve savings groups living in remote areas who have continued limited access to formal financial services. Given those in the treatment area live where efforts were made to facilitate access to mobile money accounts and linkages to formal savings accounts, there is an opportunity to continue with the development of the digital financial services to the groups, to help lower cost and management of those loan products. A study in Kenya found that M-Pesa, the most successful mobile money product in East Africa, improved consumption, reduced financial vulnerability and the number of households living in extreme poverty.⁶⁷ Applications of mobile finance, like M-Pesa, help women gain financial strategies to better their livelihoods. For example, women can use their mobile savings to manage financial emergencies or losses⁶⁸, particularly related to shocks that most concern them. Prior research in Burkina Faso and Senegal found that women prioritized emergency savings over agriculture insurance, for example, which suggests women feel more threatened by health shocks than other others losses.⁶⁹ Particular attention could be paid to designing products such as health financing that directly respond to the shocks most frequently faced and reported by women.



Education session. Photo: Grameen Foundation

Low income households, and women in particular, are both the most vulnerable to shocks and the most unprepared when they occur. Well-designed products and services can help households anticipate, mitigate the effects of, cope with, and bounce back from shocks as they are experienced, whether they are climate-related, health-related, or due to the

loss of an income earner.⁷⁰ This study contributes to the resilience literature

in four ways: first, it reflects a growing body of evidence regarding the influence SG+ interventions can have on household resilience; second, it demonstrates how community-based dialogues with savings group members and their spouses can influence social norms; third, it highlights how provision of financing (both for agricultural and non-agricultural businesses) can influence investment at the household level; and fourth, it demonstrates how women can be reached with agricultural extension support typically geared toward men.

Annex

Loan Characteristics

Characteristics	Agricultural Loan	IGA Loan
Physical Access	<ul style="list-style-type: none"> Individual savings group members make a request at the group level for an the agricultural or IGA loan and the savings group submits a group loan application based on the aggregated individual requests. If savings group lives close to an RCPB branch or kiosk, savings group leaders can physically visit the branch or kiosk to apply for loans If savings group does not live close to an RCPB branch or kiosk, savings group leaders can coordinate with an RCPB field agent to schedule a meeting to make a loan request. 	
Repayment period	6-8 months	6 months
Interest rate	10%, declining rate	
Mode of reimbursement	2 payments at 6 and 8 months	Flexible, RCPB determines frequency of repayment based on the type of activity loan is requested for
Guarantee	<ul style="list-style-type: none"> Mutual guarantee; no material guarantee or savings requirements. Insurance: 0.68% of the amount requested 	
Loan sizes (FCFA)	According to the production cycle: <ul style="list-style-type: none"> 15,000 to 75,000 15,000 to 100,000 15,000 to 150,000 	According to the activity: <ul style="list-style-type: none"> 25,000 to 150,000 25,000 to 200,000 25,000 to 300,000
Procedures	<ul style="list-style-type: none"> RCPB field officer assists the savings group with loan application and helps them gather loan requirements Loan funds are wired to group account and they withdraw the funds from kiosk or branch 	
Promotion	<ul style="list-style-type: none"> Sensitization of the product details, such as loan terms, by RCPB agents and savings group members 	

Select Client Stories

Sophie

Sophie is a Burkinabe woman of the Gourounsi ethnic group. She is 49 years old and shares her life with her husband, Sezond. Married at the young age of 19 years, Sophie is currently mother of 9 children, including 5 boys and 4 girls. A practicing Catholic and literate, she is the first wife of a polygamous husband. For the past five years, Sophie has been a member of the "Ozoudoin" savings group, which means *to unite to solve the daily problems of the household*.



Photo: taken by Lessokon Sarl

Goumi, the village where Sophie lives, belongs to the rural commune of Didyr. Didyr is the most “urban” locality in the commune and is located about 200 km from the capital of Burkina Faso, Ouagadougou. Goumi in 2016 had an estimated population of 4000 residents. The village has a single school of 6 classes and has 5 neighborhoods. It is difficult to access Goumi during the rainy season as the roads are simple rural dirt tracks. There is no Health and Promotion Center (CSPS) on site. Instead, villagers must travel to the health facility in Pouni-North which is 8 km away. In February 2018, there were

4 boreholes in Goumi, and only 2 were functional sources of water. There is no lively market. There are lowland areas yet to develop. In the rainy season, agriculture and animal husbandry remain the main activities; in the dry season, it is market gardening (onion, tomatoes, cabbage, etc.) and small trade.

When we asked Sophie the current context of her household, she said: *“I am in a household with 3 co-wives who are all members of savings groups. Many of our children are in school. We use solar panels as sources of electricity. We have ordinary toilets. My co-wives and I do not have a mattress or bed. We sleep on mats.”*

Sophie shares that prior to joining her savings group, her situation was challenging: *“After the rainy season, I only sold tobacco, the only income-generating activity I was doing. There was no good agreement between my husband and me. For me, it was he who put me in this precarious financial situation. It was the same for my co-wives. During the lean season, I could not feed my children properly (wild leaves sought in the bush, boiled with a little salt for the kids). I could not get even a good dress. The day I earned 250 FCFA (\$0.50 USD) it was like 25,000 FCFA (\$50 USD). I sold my cereals at a low price to satisfy certain needs.”*

Sophie's household was food insecure. She could cover basic needs for her family on average 7 months out of 12. From May onward, the quantity of food rations was revised downwards. Animals (poultry and small ruminants) from the household were sold to manage shocks. The women of the village were not grouped or united.

Since joining her savings group, Sophie has benefited from training and sensitization on food and personal hygiene and she can serve a variety of meals as a means to stay healthy. She also received training on how to increase sales, farming techniques and water conservation (Zaï, cordon). She benefited from improved sorghum and cowpea seeds starting in 2017. The training of poultry (purebred chicken) was helpful. At the end of the apprenticeship, she claims to have received a rooster. She was able to contribute to her savings group, benefit from micro-credit and share experiences with other members of the group.

About change and impact, Sophie tells us with pleasure the following: *“I was able to buy drums and 4 pots at 57,500 FCFA as dolo production tools. I contracted 20,000 FCFA as a loan to help my husband pay for my daughter's schooling. In case of illness of a child, I no longer wait for my husband to bring [my child] to the hospital. I [have] diversified my activities. Per week, I can have a profit of 3,000 FCFA on the production of the dolo, 1,000 FCFA on the sale of the fish, and 30,000 FCFA per campaign of production of the onion. I now grow sorghum, millet, peanut and cowpea.”* There is more harmony and understanding in the household. The meals consumed are varied. The contribution of women, Sophie believes, is important in the schooling of children.

At the village level of Goumi, the impact of savings groups Sophie feels has been remarkable. For example, the School Management Committee has asked each Savings Group to contribute 1,000 FCFA annually for routine maintenance of the school's borehole. This has been done by some groups. Others offered equipment (dishes) for the school canteen. In winter, savings groups provide collective labor at affordable prices for the benefit of the community.

Sophie, very happy, gives the following advice to men and women still reluctant to join the savings group: *“we must not rely on the man to flourish. The Savings Groups open our minds, bring us light. I invite women to join groups to share ideas, to have dignity, to keep their heads up, to manage their daily problems of clothing, food and others. Today, I give thanks to God. That's what I want, to buy according to what I earn as soon as I leave the market.”*

Thinking back on the years she and her family suffered from chronic food insecurity, Sophie shared a final reflection: *“Not having anything to eat for anyone is a shame. But, not having something for a child to eat is worse. It's dishonorable and irresponsible for his parents.”*

Elisabeth

Married at 19, Elisabeth has been a member of the Savings Group "Relwendé" since 2014. Aged 37 years, a Catholic, she is a mother of 6 children including 4 boys and 2 girls. She is a holder of a Certificate of Primary Studies. Elisabeth shares her life with her husband, Tebda in the village of Boura. This locality is about ten km from the municipality of Yako.

Boura was estimated to have a population of 1117 inhabitants in 2016. The village does not have a health center or a market; the nearest health center and market are in Songnaba which is located 3 km from the Boura and there is no paved road between the villages. The village has mosques and several places of worship. Rainfed agriculture and livestock are the main income-generating activities



Photo: Taken by Lessokon Sarl

and are both perceived to be under-developed. The water reservoirs and hydro-agricultural infrastructure are non-existent and the inhabitants consume water from wells. The village is led by a village chief, a land chief and a counselor.

Elisabeth shared that a few years back, her situation was not one of the most glowing: *“In case of illness, I borrowed from the neighborhood and people of good will. I scavenged for shea nuts to turn them into shea butter for sale. But, funding was based on the cowpea that I sold during the harvests at low prices. I did not use mineral fertilizer for lack of financial means. I lacked courage and*

self-confidence. There were constant arguments between my husband and me. My household was facing food insecurity (needs covered 8 months out of 12). We did not have a latrine.”

Elisabeth has been immensely impacted since joining the savings groups: *“I was able to increase my cowpea yield through improved access and use of mineral fertilizer and improved seeds. The number of bags of cowpea produced has doubled from 2 bags to 4. In case of illness, I am consulted in a health center. I have learned to consume rich and varied foods. Also, I was able to obtain a credit of 100,000 FCFA from RCPB. This allowed me to buy a cow at 120,000 FCFA. My husband has contributed to the purchase of this animal up to 20,000 FCFA. I also contributed 40,000 f to the purchase of a motorcycle that my husband bought at 275,000 FCFA. I was able to get a personal bike at 25,000 FCFA. Currently, I do not pick up shea nuts, but I buy them wholesale from people who come to deliver them. I have increased my purchase of shea nuts from 180 kg to 360 kg and I now process 4 cans of 20 liters each of shea butter up from 3. Before, we lived in houses in huts. Recently, my husband was able to build a tin house. I contributed in part to buy a bag of cement (5,000 FCFA) and bricks up to 10,000 FCFA. At present, children are eating well. The number of meals was easily increased from 2 to 3 per day.”*

At the village level, it appears that the savings groups have brought the community closer together through coordinating social events and encouraging community members to fatten and raise livestock (sheep and pigs). Savings group members also strengthened their collaboration of working together in the fields on collective crops. Women also clean schools between September and December to protect students from snake bites.

Elisabeth KISSOU thinks that all women who want to be autonomous must seek to join savings groups: *“There is mutual help; useful and practical advice is obtained; there is more connection in the event of happy and painful social events; access to credit becomes a reality and it promotes the exercise of income-generating activities.”*

Natalie

Aged 35, Nathalie is a young Burkinabe woman. She is married and lives in the village of Golo, a town located 7 km from the province of Passoré. Nathalie is of Mossi ethnicity and a practicing Catholic. She is the mother of 5 children, including 3 boys and 2 girls. The first wife of a polygamous husband, she lives in a 15-member household made up of herself, her co-wife, her mother-in-law, her husband and the children. Nathalie belongs to the savings group "Relwendé", which means, “to rely, to confide in God.”



Photo taken by Lessokon Sarl

Golo, Nathalie's home community, is one of 40 villages in the rural Yako commune. In 2016, the total population of this center was estimated at 1086 inhabitants. The village is made up of 3 neighborhoods and has neither a health center nor a livestock market. The nearest health facilities frequented by the inhabitants of Golo are in the localities of Songnaba (3km) and Yako (7km). The village is not formalized, which means it has no official roads, is not yet electrified by the national electricity distribution network (SONABEL) and it has no dam or large reservoir of water suitable for market gardening in the dry season. The houses are, for the most part, built in

“banco,” or a mud and clay combination. Some houses constructed in red stone exist. The village has a primary school of 4 classes since 2008. Another building of 3 classes is under construction. Golo is crossed by the non-paved Yako-Latodem road. There are boreholes in the village, a mosque, a cathedral and a Protestant church. Agriculture and livestock are the main economic activities of the inhabitants in the rainy season. In the dry season, women engage in small activities such as selling dolo, condiments, etc.

Nathalie shares about her situation before joining the Relwende Savings Group in 2013: *“I was unable to buy good clothing for myself or for my children. I did not have cooking utensils (quantity and quality) to help with social events (baptisms and funerals). Added to this is the fact that I did not have good food to prepare in case I received guests in my home. We relied on the family field and my husband for feeding the family. There was food insecurity from the month of May and we had to wring our hands in worry.”*

In addition, Nathalie did not have a mobile phone. To communicate, she asked to use the mobile phones of others in her household and had to put credit (units) on their phones before making her calls. There were also a lot of social events to contribute to, but Nathalie could not attend any of them because of the minimum amount required to participate (4 to 5 USD).

Economically, she doesn't feel that her situation was very good. Her only income generating activity was the production of dolo, but she lacked materials, such as pots, to produce it or carts to transport it. She borrowed these tools from other women and made dolo once a fortnight because of her very limited ability to finance this activity on her own.

Nathalie Larba YELKOUNI's household did not enjoy a good socio-economic situation. She tells us this: *"My co-wife and I lived in huts, our husband in a mud house whose roof is made of wood (Nubian vault house). We did not have a latrine. Defecation was done in nature. In case of illness such as malaria or diarrhea, we mainly used herbal teas for lack of financial means. The children went to school. But, they were very often out of class because of late payment of tuition fees. It is the husband alone who provides the education expenses. We did not have a motorcycle; we had to use our husband's bike for travel. In case of emergency, it was necessary to request a motorcycle from the good will of others. We did not have a plow. Agriculture is based on daba (use of traditional farming tools such as rustic hoes). We did not use mineral fertilizer and manage composting. Clothing purchases were only made during holiday periods (Christmas, New Year, Easter). The household's food was poor and mainly based on sorghum maize meal, except for holidays where meat and rice were the privilege."*

Since joining the savings group, Nathalie has received a lot of support. She contributes weekly savings, receives microcredit and participates in the collective activities of her savings group. She was put in touch with a financial institution (RCPB). In addition, Nathalie received training on the cowpea production (use of fertilizer, treatment of diseases, irrigation techniques, conservation, etc.). The sharing of experiences with the other members of the Savings Group has been tremendously supportive. The advice of the SEMUS facilitators on various themes (management of activities, hygiene, cleanliness, respect of the husband, etc.) contributed to Nathalie's economic empowerment.

Nathalie is very proud to be part of a savings group and tells us that her membership in the Relwendé Savings Group has had a major impact on her life and that of her household: *"In 2017, I was able to contribute to the schooling of children, up to 71,500 FCFA, or 144 USD. I bought goats and 3 pigs, a 7500 mobile phone (15 USD). I was also able to purchase 2 pots (12,000 FCFA) and 2 barrels (11,000 FCFA) in total to strengthen my dolo production activity. Every year, I am able to invest 30,000 FCFA in peanut speculation. My cowpea yield at 1/4 hectare went from 5 bags to 10 thanks to a better use of the fertilizer."*

"Currently, my household lives decently. We are able to feed ourselves without much difficulty, 12 months out of 12. We live in roof houses. We have a slab latrine. The household has a plow and a cart. My husband now owns a motorcycle that I helped buy. I was able to buy solar lights to make schooling easier."

In conclusion, Nathalie shared: *“I thank the SEMUS association and its partners for having the idea to create savings groups. It is a real tool that helps lift women out of poverty. Without SEMUS, how could I have access to a loan at the level of RCPB? It would be very difficult, if not impossible.”*

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