Greater Rural Opportunities for Women (GROW): A multifaceted approach to poverty alleviation at scale

Jennifer Denomy and Jennifer Gurbin Harley

Abstract: How did the Greater Rural Opportunities for Women (GROW) project reach over 23,000 smallholder farmers in northern Ghana and achieve impact? This case study describes the project's multifaceted approach to poverty reduction, which combined adaptive management and a comprehensive communications strategy to work toward poverty alleviation at scale. With an initial focus primarily on improved nutrition and food security, the project evolved to include a greater emphasis on women's economic empowerment and leadership. Group formation was an important strategy for providing services at scale, including increased access to market linkages, agronomic information and practices, and financial services.

Keywords: women's economic empowerment, Ghana, agriculture, food security, adaptive management

Introduction

The Greater Rural opportunities for women (Grow) project worked with 23,368 female farmers from 2012 to 2018, training them to grow, utilize, and market soybeans in the Upper West Region of Ghana (UWR), to improve their food security and household income. Project activities were aimed at improving women's linkages to markets to sell soy and other agricultural products, accessing productive land and technology, increasing soybean yields, producing a diverse selection of soybean products to increase nutritional levels in the region, and improving financial inclusion through savings groups and linkages to microfinance institutions. The project also introduced climate-smart agricultural techniques to build resilience.

GROW was a multifaceted project that blended a market facilitation approach with direct intervention to service providers and smallholder farmers at scale, and worked to alleviate poverty. The project tackled the core issues of women's economic empowerment (WEE) including family nutrition, control over land, access to finance and technology, and attitudes toward gender. GROW's adaptive approach to project management meant that new elements were incorporated over the course of its implementation. The flexible nature of the project helped encourage changes

Jennifer Denomy (jdenomy@meda.org), MEDA, Waterloo, Canada; Jennifer Gurbin Harley (jgurbin@gmail.com), Independent Consultant © The authors, 2022. This open access article is published by Practical Action Publishing and distributed under a Creative Commons Attribution Non-commercial No-derivatives CC BY-NC-ND licence http://creativecommons.org/licenses/by-nc-nd/4.0/.
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in programme direction that would respond to barriers that women faced in many aspects of their lives.

Adapting to achieve impact

In 2012, the UWR had the highest prevalence of food insecurity in all of Ghana and the situation for women farmers and their families was dire (Ghana Statistical Service, 2011). Ghanaians suffered from seasonal food shortages during the dry season, when production was more limited. In addition to nutritional issues, women face other barriers in UWR. They have little decision-making power in their households over how money is spent and how their labour will be used on farms and in their homes. Demands of the household, from preparing food, child rearing, and fetching firewood, all come before tending to their own fields. In the UWR, women are the major source of labour for all agricultural production and must contribute to their husbands' land preparation and cultivation at the beginning of the growing season before they can focus on their own. These constraints mean women's fields are comparatively poorly prepared and have even poorer yields. Secure and longer-term access to land remains the single most critical factor in whether a smallholder woman can farm effectively and efficiently. When women have dependable, longer-term access to land, they can plan and invest in that land for the future.

While the project implementation plan laid out a clear course for the goals, activities, and impacts, GROW saw many critical additions and pivots or changes of direction throughout the life of the project. These changes reflected the complexity of life in the UWR and resulted in an increasingly nuanced set of solutions. Implementing organization Mennonite Economic Development Associates (MEDA) originally designed GROW to address the seasonal food insecurity among households, particularly women farmers, in the UWR through the carefully crafted market-based approach, focusing on the soy value chain. As the project evolved, its emphasis on WEE strengthened, GROW facilitated greater access to inputs, appropriate equipment and technology, land, agricultural extension services, and rural financial services, all of which have improved women's participation in markets through their roles as producers, processors, and marketers of soy and other crops. Access to assets, services, and additional supports was another important pathway in facilitating women's economic empowerment. In 2012, the average annual income for GROW women farmers was GHS 538 (approximately US\$72), compared to an average income of GHS 1,104 (approximately \$145) in the 2017 farming season from soybean sales, a 105 per cent increase (MEDA, 2019).

Successes in project management

The project was successful in many important ways, including reaching women farmers at scale and contributing to poverty alleviation. Two main factors that led to this success were: 1) the collaborative and adaptive project management

style; and 2) the comprehensive communication strategy. These two elements of the project provided decision-makers in MEDA's Ghana office and at headquarters in Canada with key information in a timely manner that led to pivots in project activities and the addition of new components and approaches.

In an interview conducted in November 2021 with Catherine Sobrevega, who managed the GROW project for much of its implementation, she shared that 'it took a village' to achieve the successes of the project. Specifically, the key facilitating partners (KFPs) and staff at all levels shared a clear vision. Staff and partners were committed, and reported that they felt listened to by project decision-makers. Annual 'GROW Fairs' were also held: high-profile, public events where clients could present their successes. The results were visible and encouraging for the clients, the partners, and the team. Visits from headquarters were also reportedly very motivating for staff, partners, and clients alike. In addition to ensuring GROW's alignment with MEDA's core technical approaches, these visits served to keep morale high and ensure that the efforts of the team were recognized, as well as making all stakeholders feel connected to each other. Further, contrary to cultural norms in northern Ghana, in-country staff were encouraged to be assertive, creative, and independent without fear of negative consequences, which resulted in increased confidence within the team, GROW's collaborative approach to project management allowed for timely feedback and fostered an environment where adaptations and improvements were encouraged.

A comprehensive communication strategy was also a key success factor and method by which new information and ideas were incorporated into the project activities. Intentional feedback loops resulted in multiple adaptations and pivots over the life of the project. In the 2021 interview, Catherine Sobrevega explained that the project implemented a communications strategy which included quarterly meetings with KFPs to hear about the successes and challenges of working directly with the clients, as well as annual in-depth reflection and planning meetings with a wide range of stakeholders. The project prioritized learning through formal events, but also informally though ongoing, open communication between headquarters, the field team, partners, and clients. Due to the adaptive nature of the project management, the team and partners were able to see their feedback and suggestions incorporated to strengthen project activities and achieve impact.

GROW activities, implemented over the six-year project lifecycle, supported women's economic empowerment in many distinct ways. Though wide-ranging, all interventions were client-centric and worked to remove barriers to women's participation in the market system. Some of these interventions were part of the project design, but others were incorporated at later points in the project because new needs and challenges arose and the project was able to respond, thanks in part to donor Global Affairs Canada's openness to adaptation. What follows here is a description of selected GROW activities and their impact on clients, loosely arranged in chronological order of their introduction to the project. More information on many of these interventions can be found on the GROW Learning Series website (MEDA, n.d.).

Crop selection for maximum impact

At project inception in 2012, malnutrition was the underlying cause in 55 per cent of all deaths in children under the age of five in Ghana. Malnutrition is typically characterized by two indicators: the prevalence of stunting (chronic malnutrition; low height-for-age) and of wasting (acute malnutrition; low weight for height). These outcomes vary regionally. For example, in 2011, the prevalence of stunting was 29.5 per cent nationally but amounted to 30.6 per cent in the Upper West. The prevalence of wasting was also higher in the Upper West at 11 per cent, compared to a 7.6 per cent national average (Ghana Statistical Service, 2011). Beyond malnourishment, the UWR has the highest prevalence of food insecurity in all of Ghana (Ministry of Agriculture, 2009).

Soy was identified at project inception as a promising crop during the proposal process, a choice that was validated when the project launched. The project team established that there was high demand for soy, and low local production levels meant much of the supply was imported. In addition to the market potential, soy was selected because of its potential to address food insecurity and improve nutrition for families in the UWR. As a relatively new crop in Ghana, soy was considered a 'gender neutral crop' and women were able to begin cultivating it without being seen to challenge gender norms.

GROW intentionally oriented the food security strategy away from subsistence farming towards economic empowerment for women who grew soy. The project operated under the premise that while crop production can support the household food supply, entrepreneurial women have always found ways to sell a portion of their crop to gain additional income. GROW trainings focused on empowering women's economic empowerment by supporting them to sell raw soy and processed foods, especially in the dry season.

Cookbooks to promote soy utilization

Soy was selected as GROW's main crop because of its market value but also the ease with which it can be processed for home use. Women were encouraged to plant at least a 1-acre (0.4 ha) plot of soy, which yielded an average of 400 kilograms. Keeping 100 kg of soy would help families through the lean season and selling the remaining soy allowed women to generate income. This dual approach of primarily ensuring food security at the household level before economic gain was important. Women who grew soy could supplement their diet throughout the year.

Initially, however, women did not know how to process and use soy in the household diet. MEDA's KFPs held regular soy utilization trainings that resulted in an improved understanding of the benefits of soy, but many women were still reluctant to eat the unfamiliar food. To reinforce the training, the GROW team identified common dishes into which soy could be added, either as an additional ingredient or as a substitute for existing ingredients with lower nutritional value. A recipe book was created and widely distributed, contributing to the household adoption of soy.

Keyhole and dry season gardens to address seasonal food insecurity

As noted above, the UWR had the highest prevalence of food insecurity in all of Ghana in 2012, and the situation for women farmers and their families was dire. Ghanaians also suffered from seasonal food shortages during the dry season, roughly the months of April to September, when production was more limited. Soy cultivation was an important food security strategy, but soy is typically harvested only once a year in the climate of northern Ghana.

Between April and September, crop production is limited in the region due to lack of rainfall, and food insecurity is particularly acute. Therefore, MEDA incorporated a twofold strategy to promote gardening techniques specifically designed for the dry season. Where possible, dry season gardens were linked to community water sources such as dams, rivers or irrigated areas, occasionally aided by manual pumps. The other technique was to encourage adoption of keyhole gardens: small, raised household plots which use compost and household wastewater (e.g. from washing dishes). Keyhole gardens were first observed by GROW staff on a conference field visit in Rwanda; after an initial pilot, the project scaled the technique with almost 2,500 women (Krainer, 2015). Women grew high value crops, including leafy greens, okra, peppers, and tomatoes. Dry season gardening was one of the most profitable activities for women, in some cases earning them more than the soy crop.

Conservation agriculture for sustainability

With limited access to irrigation systems, GROW smallholder farmers practised rainfed agriculture, relying on rainfall to water their crops. Over the life of the project, more than 21,406 GROW clients were trained in conservation agriculture practices, including minimal or no-till farming, non-burning of crop residues, slash and mulch, crop rotation, as well as compost preparation.

MEDA's KFPs received trainings from Ghana's Ministry of Food and Agriculture and the Environmental Protection Agency and passed this training on to Women Lead Farmers. All clients of the GROW project were part of a Village Savings and Loan Association (VSLA) composed of 15 to 30 women. The KFP-trained Lead Farmers trained the women farmers in their groups, either by organizing specific meetings or sharing their newly acquired knowledge during regular VSLA meetings.

In the baseline data research that was completed in 2013, only 4.57 per cent of the farmers interviewed reported implementing conservation agriculture practices, but the end of project results for the uptake of conservation agriculture practices were significantly higher, with 80 per cent of GROW women farmers implementing at least one conservation agriculture practice and 30 per cent implementing at least three (Chouinard, 2018).

Group formation for scale

GROW's group formation strategy was a critical element, launched shortly after project inception, for achieving scale and overcoming barriers faced by women in northern Ghana's agricultural sector. Women formed farmer groups in order to

access and share agricultural knowledge and techniques, increase access to quality inputs, improve market linkages, and strengthen their bargaining power. Each group selected a Woman Lead Farmer (WLF) who received training from GROW partners on soy production, record-keeping, and group dynamics, and passed that training on to group members. A cadre of over 1,000 WLFs received and passed on training to their farmer groups, including through establishing demonstration gardens to illustrate and show the success of agricultural techniques.

As the groups built internal cohesion and trust, additional services were added to benefit members, including group-administered savings and loans. The majority of the groups were so successful at generating savings and managing loans that they were connected to formal financial institutions, where they were able to open savings accounts and access loans to finance their business activities.

Because of the numbers of farmers involved, the groups were able to link women to input and service providers who would not otherwise have considered them viable customers, and to buyers, who were interested in purchasing in larger quantities.

Women sales agents

In the early stages of the project, Women Lead Farmers were envisioned as the entrepreneurial providers of products and services to a network of other women farmers within the WLF's community. GROW's vision was that WLFs would attend training, mobilize and train other women farmers, conduct demonstrations, aggregate farmer products, and sell them to medium and large-scale buyers. As GROW evolved, however, the team realized that most WLFs were more interested in providing training and coaching but lacked the marketing and entrepreneurial skills to successfully connect farmers to markets. WLFs continued the important knowledge transfer role, but an additional role was added to the farmer groups - the Woman Sales Agent (WSA). These women performed a more commercial role, aggregating and marketing soy. In many cases, a WSA is also a Lead Farmer, but it was not a requirement of the role (King and Abdul-Fatawu, 2018). In addition to linking women farmers to higher value markets through the development of reliable supply chains, WSAs can also be important agents of growth and empowerment through the provision of embedded services and increased information flows to producers.

Talking Books to increase access to information

Women in northern Ghana struggle to access agricultural extension services. Though the Ministry of Food and Agriculture trains and deploys a network of extension agents who provide free services to farmers, the vast majority of these agents are men, and cultural norms limit interaction between men and women who are not related to each other. In addition, men do not consider women as farmers in their own right, so extension services are typically provided to men. In the absence of viable extension services for women, MEDA implemented

the Lead Farmer model, creating a cadre of over 1,000 women who received agronomic training from MEDA's KFPs, and who passed on this training to their farmer groups.

In addition, MEDA partnered with Literacy Bridge, the Ghana country office of the Seattle-based communications non-profit Amplio, to provide all GROW Lead Farmers with Talking Books to use at their weekly meetings to disseminate critical technical information in agriculture, nutrition, gender, finance, value chain, and other issues which impact the GROW community. Talking Books are inexpensive, battery-powered mass communication devices that promote learning opportunities for women, men, and children. With its reliance on audio messaging, Talking Books provided an effective means of learning among predominantly non-literate people, especially women. Talking Books are a powerful extension tool because multiple messages are recorded in the preferred local dialect and uploaded into the device for the beneficiaries to listen to and practise as directed. The project also learned that women listen to Talking Books at home 'strategically' - when their husbands are home. They play recordings that they want him to hear, such as those promoting women's inclusion in household decision-making or the importance of good agronomic practices, because he is more likely to believe it coming from a trusted device than from either his wife or a radio. Many women found the Talking Books so helpful that they referred to them as their 'personal extension agent'.

Investment in financial service providers to promote outreach to women farmers

One of the project components built into the design stage was to facilitate access to finance for the women farmers who were members of the GROW groups and value chain actors to enhance the performance of their businesses and allow them to purchase inputs and technologies. MEDA identified that for financial service provider (FSP) partners – Tumu Credit Union and Sissala Rural Bank – a lack of loan capital was one of their primary limitations to meeting market demand. During MEDA's rigorous due diligence, we found that our FSP partners, along with other FSPs in the region, needed operational support to increase their capacity and ensure that they could use the capital effectively. The Loan Portfolio at Risk of both partners was over 10 per cent when the project began, and both institutions requested support to better manage delinquency, as well as ongoing relationships with current clients. To address these gaps in capacity, MEDA implemented two training programmes for five FSPs, including the two primary GROW partners in the region.

In response to the need to better connect with their clients, MEDA offered FSP partners training both on consultative sales and customer experience. The trainings succeeded in addressing two related issues: 1) ensuring clients accessed the product most appropriate for their needs; and 2) ensuring that client needs were taken into consideration during the design of new products. By emphasizing ongoing, regular communication with clients through consultative sales, the institutions were better positioned to respond to the needs of the market and foster strong,

long-term client relationships. Further, upon learning the needs of the client, the loan officer was expected to bring their observations to the team at the branch. Because of the customer experience training, institutions were equipped to record and respond to the loan officers' feedback to streamline or diversify their product offerings to better benefit their current clients, and appeal to new ones. Overall, the two training programmes have equipped FSP staff with tools that both strengthened client relationships and improved team dynamics. The training provided a new, longer-term perspective that has resulted in appropriate products for farmers and more agile FSPs.

The result for clients was that in the last year of the project 65 per cent said they had access to appropriate credit/loans, 84 per cent said the loans were sufficient, and 95 per cent said they were timely. This was compared to 33 per cent who had access to financial services before the project began (Empiriks Ghana, 2018).

Matching grants for women and businesses: Technology Fund

Increased access to information, through MEDA partners, Talking Books and Lead Farmers, and FSPs, improved women farmers' productivity and confidence. However, most still cleared land, and cultivated and harvested their crops by hand. In 2017, the GROW project launched a large-scale smart incentive programme to increase women's access to select technologies through local commercial providers. MEDA worked to build a more sustainable market for the technologies by working on both the supply and demand sides. Even with increased supply, the technologies are expensive for smallholder women farmers, many of whom would be unable to purchase even a single item of technology without financial support. For a limited period of time, the Technology Fund offered a matching grant to women involved in the GROW project, allowing them to purchase and test a technology they could not otherwise afford. The matching grant programme was designed to link women directly to local businesses selling technologies, businesses which had not previously considered them to be viable clients. Women purchased a coupon for a particular technology from a local GROW partner and then redeemed it at the commercial provider. These businesses were pre-screened by the GROW project to ensure they could provide quality equipment at an agreed-upon price. They also agreed to provide specific after-sales services, such as training on use and maintenance.

Women could select from a menu of technologies that facilitated land preparation (e.g. personal protective equipment), planting (e.g. manual rotary planters), growing (e.g. chain link fences to keep animals away from crops), post-harvest (e.g. tarpaulins on which to dry soy and other crops), utilization (e.g. grinders to turn soybeans into paste), and marketing (e.g. weighing scale) of soy. Women farmers were consulted extensively, providing information on issues they faced and specific technologies they believed could address these challenges. In addition, MEDA formed a GROW Procurement Committee, which acted on the women's recommendations and selected local suppliers in UWR that could meet demand. A 2018 project study found that the introduction of technology allowed women to spend an average of 13 per cent less time on their production, processing, and marketing activities, and earn significantly more money – an average of over 400 per cent more, in the study sample (Denomy et al., 2018).

One technology offered to Women Sales Agents, entrepreneurial women aggregators, were motorized tricycles. The land that women clients are able to access is often far from their communities, requiring them to walk up to 10 km each way, manually carrying inputs and farm produce in a practice locally termed as 'head-loading'. The tricycle had a significant impact on transportation to and from their remote farms and allowed women to connect with more distant markets, but also opened up additional income streams. In a 2018 survey of 18 sales agents, all experienced an increase in their monthly profit; increases varied significantly, ranging from 20 per cent to 1,300 per cent. On average, the women's income increased by over 400 per cent after they accessed equipment through the Technology Fund (Denomy et al., 2018). All of the sales agents surveyed in the 2018 project study reported economic and social benefits to owning tricycles. Many women have begun to use their tricycles to provide transportation services to community members: they bring group members together for VSLA activities, provide transportation to health clinics in neighbouring villages, and bring community members to weddings, funerals, and other social events. In some cases, women talked about choosing not to charge people for transportation services, such as taking another woman to a health clinic or a funeral. Owning and controlling such important technologies has placed these women in more prominent positions in their communities. Significant social changes began to occur: women described being invited to town meetings, and being consulted by family and community members, even local chiefs, for the first time in their lives.

Engaging men for the benefit of communities

While not a component of the original project, the findings of a 2013 gender analysis revealed that male control over land, agricultural inputs, and access to markets was a high risk for women clients of the GROW project, especially in the more conservative villages. The analysis identified the potential for men to take over women's assets, such as land and resources, and productive work. This was especially true if men began to see the financial value of soya.

The project engaged men with the hope of ensuring that 'newly empowered women and girls [were] stepping out into a world that is ready to receive them' (Glinski et al., 2018: 12). In 2015, GROW piloted the Male Gender Advocates (MGAs) initiative, in which men were trained to serve as allies to GROW women clients and as advocates for gender equality and equity within their communities. GROW staff and local partners provided the MGAs with annual training on facilitation techniques and key gender concepts such as unpaid care work and the differences between sex and gender. The purpose of the MGAs was threefold: 1) to assist with the recruitment of project clients by speaking with family members to encourage women's participation in the project; 2) to raise awareness of gender

issues by facilitating dialogues with men in the community on gender constraints; and 3) to be advocates for changes in sociocultural norms that hinder women's access to productive resources to improve livelihoods of women and households. This initiative was a way to engage men in GROW activities beyond simply inviting husbands and male family members to participation in GROW's trainings. MGAs were volunteers who were self-selected and welcome to participate as long as they met three criteria: they had an interest in gender equality; were a known and accepted resident of the community; and had no history of violent conduct, especially toward women and children.

The men met in groups and discussed issues related to their discomfort regarding the shifts in power they were witnessing in their communities due to the GROW project activities. These sensitization and awareness raising activities, led by MGAs, gave men the space to question, vent, and discuss the changing dynamics within their household and at the community level. One woman farmer noted, 'Before the MGA concept, our husbands did not permit us to attend community meetings but with the sensitization of the MGA, we now participate in all community meetings and our husbands do not complain.' Gender-based violence is a risk of economic development projects, especially projects involving changing social structures and power dynamics. The MGA initiative allowed men to become aware of their power and privilege, to begin to question 'masculine' roles, and provided men from the community with a safe space for dialogue and transformative change taking place in the community. Beyond the social impact of the involvement of MGAs, communities that participated in this initiative were more open to working with KFPs and therefore were able to better benefit from GROW's activities.

Impact and conclusion

The legacy of the GROW programme will be the sustainability of its proven model which shifted the food security paradigm from subsistence farming to a multifaceted economic empowerment powerhouse for GROW women. It impacted women, their households, their communities, and their region. In 2018, GROW reached 23,368 women farmers cultivating soybeans in rural UWR and over 163,879 secondary beneficiaries.

The nutritional status of both women and children improved significantly over the project period. By 2018, approximately 88.7 per cent of women had a body mass index (BMI) in the normal range and only 18.4 per cent, 2.3 per cent, and 11.4 per cent of the children were stunted, wasted, and underweight respectively according to the anthropometric results. That compares very favourably to the 2014 Ghana Demographic and Health Survey results for the UWR which found that 72.3 per cent of women had normal BMI and 22.2 per cent of children were stunted, 4.4 per cent were wasted, and 13.5 per cent were underweight.

MEDA saw a dramatic shift in the lives of smallholder women farmers and their households. Their health, education, incomes, agency, skill sets, capacities, and self-worth underwent significant positive changes. At the end of the project,

the final stakeholder discussions did not focus on issues of food security, but rather the extent to which GROW women had moved from subsistence farmers to becoming empowered economically. Women's economic empowerment had clearly taken root throughout the region. Asked what their next steps would be during a focus-group discussion held in the project's final year, a group of GROW women responded that they would like to purchase tractors, an unthinkable goal even a year earlier. Many of the women had undergone a transformative evolution from farm labour to agri-business leaders.

Keyhole gardens were a successful late addition to the project which allowed for year-round cultivation that resulted in access to nutritious vegetables for family consumption. The inclusion of this activity was directly related to the value the project placed on learning, communication, and feedback among all project stakeholders, as well as the adaptive approach of project management. The learnings from the GROW project may help to inform other more recent, or current, economic development projects. Working toward the alleviation of poverty at scale has become even more challenging amid the pressing global realities of COVID, climate change, and conflict. The ability to foster strong, collaborative teams, and swiftly and effectively adapt to changes in context, are necessary tools for implementation. The challenges facing smallholder farmers are being compounded, but multifaceted, organic, and flexible approaches can help increase the resilience necessary to move out of poverty.

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