

RESILIENT AND SUSTAINABLE LIVELIHOODS TRANSFORMATION (RESULT) PROJECT CASE STUDY REPORT

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About the FSPG Case Study Series

In 2019, the Canadian Food Security Policy Group (FSPG) commissioned a series of six case studies to understand how Canadian investments in agriculture support sustainable development outcomes in West Africa. Six case studies of projects supported by Canadian civil society organizations were selected. These projects showcase how such investments support broad sustainable development outcomes such as gender equality, environmental sustainability and climate resilience, improved livelihoods, and enhanced food security. Case studies were informed by literature reviews of project documentation and interviews and focus group discussions carried out in impacted communities with research carried out by local research teams supported by Canadian and local partners.

The FSPG is a network of Canadian development and humanitarian organizations with expertise in global food systems, and food security in the Global South.

Project at a glance: Resilient and Sustainable Livelihoods Transformation (RESULT) Project

Canadian partners: Canadian Hunger Foundation (CHF), Canadian Feed the Children (CFTC)

Local partner: Association of Church Based Development Projects (ACDEP)

Total Project Budget: CDN\$19-million

Duration: 2012-2018

Location: Selected districts of the Upper East, and Upper West Regions of Ghana

Research location: Upper East Region

Participants: 21,100 farmers (70% women) and their families in 140 communities in 7 districts

Value chains: Livestock, Aquaculture

Key objectives: To adopt transformative, sustainable solutions that address the root causes of food insecurity and vulnerability in the northern regions and promote community and household resiliency to secure livelihoods against shocks and stresses.

Sustainable development objectives addressed: Gender equality and women's economic empowerment, access to finance, improved livelihoods, climate resilience and conservation.

Ghana: Understanding the context for investments in agriculture

Agriculture remains an important economic sector in Ghana. It contributes about 20% to the country's GDP and employs about 52% of the country's labour force, with women constituting over half the agricultural labour force.¹ Agriculture offers much potential to the country's economy, especially in its drive to industrialize and enhance value addition to its agricultural products.² Further, it has potential to reduce poverty, especially in rural areas where most people are largely dependent on agriculture. Despite these prospects, the experiences with agriculture in Ghana show that the country has not utilized the full potential of that sector. Farmers in rural areas remain one of the poorest workforces in the country, and agricultural production is low relative to the demands of the country. Even though the country has fertile lands, it has not been able to increase its agricultural yield, resulting in a situation where the country relies on food imports.

A challenge in the agricultural sector has been inadequate investment in innovative solutions that increase the yields of farmers and in the process increase their earnings.² Furthermore, the rural economy is not diversified and there is a need to introduce different income generating activities, both agricultural and non-agricultural, to raise the

¹ GSS (Ghana Statistical Service) (2012): 2010 Population & housing census summary report of final results Ghana Statistical Service. Accra, Sakoa Press Limited

² Food and Agricultural Organization (FAO) (2005). Aqua-statistics on Ghana. Retrieved from http://www.fao.org/nr/water/aquastat/countries_regions/GHA/GHA-CP_eng.pdf

income of farmers. Sustainable interventions that will raise agricultural productivity, reduce barriers to accessing agricultural inputs, reduce poverty among rural farmers, enhance food security, and address the challenges that global environmental change poses to agricultural production are required.

About RESULT

The RESULT project was a 6-year initiative implemented initially by the Canadian Hunger Foundation (CHF) and taken over by Canadian Feed the Children (CFTC) partnering with the Association of Church Based Development Projects (ACDEP). Beginning in 2012 and ending in 2018, the CND 19 million project offered transformative and innovative solutions to address the challenges associated with agricultural production in the rural communities in Ghana. The project aimed to reach 21,000 farmers and their households with the intervention indirectly affecting the lives of 120,000 vulnerable men, women, and children in the northern part of Ghana. Carried out in 140 communities in 7 Districts of the Upper East and Upper West Regions of Ghana, the project helped diversify rural livelihood incomes and increase agricultural production, income, and assets of the beneficiaries.

To support agricultural diversification and increased income, the project targeted gender equality and empowerment of women and girls to change community dynamics. In view of this, women constituted the largest share of the beneficiaries at about 70%. Interventions were targeted at poorer female-headed households with the aim of enhancing their capacity and providing an environment that would enable knowledge transfer and strengthen their networks. Key activities aimed to:

- Improve women's access to land and productive resources through awareness raising, advocacy, and education of beneficiary households and community leaders;
- Strengthen women's access to income generating activities and control over their income and productive resources;
- Improve women's access to finance through the formation of village savings and loans associations (VLSAs);
- Improve women's access and adoption of technologies and equipment and tailor their use to the women's needs.

In addition to these gender specific initiatives, other activities included:

- Training and capacity building for Community Agricultural Workers (CAWs) and Community Livestock Workers (CLWs);
- Training and demonstrations on climate-smart agricultural techniques and other aspects of agricultural production for main and dry season crops;
- Group formation, including alternative income generating groups or economic groups such as in aquaculture, soap making, basket weaving, and shea butter processing training and provision of agricultural inputs to farmers (e.g. improved seed varieties and livestock).

The end result was to increase food security and resilience of farmers, especially women, to stress and shocks associated with agricultural production and to help farmers increase their farm yields and improve their livelihoods. Beneficiaries received direct

support from the project through acquisition of skills, inputs, education, and capital assets with the aim of assisting them to become more self-sufficient and better positioned to utilize the agricultural services of the Government of Ghana.

Research approach and focus

This case study examined the impact of the RESULT project on food security and gender relations. It is based on the extent to which the project impacted the following thematic areas:

- Realizing gender equality and the empowerment of women and girls;
- Improving livelihoods;
- Environmental sustainability and climate change resilience;
- Contribution to food security.

The research that informs this case study used a range of methods including key informant interviews, in-depth interviews, and focus group discussions. The two beneficiary communities selected for the study were Dassobligo and Bon-gorigo in the Upper East Region of Ghana. In each community, two focus group discussions were conducted (one group of men and one group of women), and five in-depth interviews were held with women beneficiaries. Further, five key informant interviews were also conducted with individuals from stakeholder institutions involved in the implementation of the project. These stakeholder institutions included the Department of Social Welfare from the Ministry of Gender and Social Protection; the Women in Agricultural Development unit (WIAD), a division of the Ministry of Food and Agriculture; and the Association of Church Based Development Projects (ACDEP). See Appendix 1 for a list of interviews.

After the drafting of a study report, a validation exercise was conducted on the 13th and 14th of November, 2019 with the project beneficiaries at the community level and local implementation partners of the project. At the community level, the validation exercise was conducted with two focus groups: Dasobligo (11 women and 5 men), and Bon-Gorigo (14 women and 4 men). All participants were involved in the project. Local partners who validated the study report included the Department of Social Welfare and Community Development from the Ministry of Gender, Children, and Social Protection; the Women in Agricultural Development unit (WIAD); and extension officers from the Ministry of Food and Agriculture. The validation exercise was conducted at community meeting grounds in the respective communities. During the two-day validation process, local partners who worked closely with the project were also engaged to confirm the validity of the findings drawn from the study.

Investments in agriculture transform lives

Realizing gender equality and the empowerment of women and girls

RESULT improved women's access to productive resources

The project had a positive impact on gender equality, gender relations and the prevention of discrimination against women. Almost all the women who participated in

the study attested to the fact that, due to the project, women currently have more access to resources such as land, seeds and capital, which has enabled them to generate additional income to support their families. Furthermore, they have adopted farming practices which were previously considered the preserve of men. For instance, some women are now growing maize, early millet, late millet, and rearing livestock, activities previously reserved for men. The study revealed that men are now becoming more supportive, and they are more than willing to release lands for the women to farm and even support them in the preparatory stages before the cultivation of crops and during the harvesting stage. A women beneficiary had this to say about the willingness of men to release land for the women:

“Before the RESULT project came to this community, when we ask the men to give us land to farm on, they could decide not to give us. But now they are more willing and even offer support to us. So both of us farm on the land together. They help us to prepare the land and when it is harvesting time they help us do the harvesting”. (A female participant in the FDG)

Engagement with men led to greater sharing of unpaid work

Women informants believe the changing gender relations and reduction in discriminatory practices against women have been largely due to education and sensitization that were given to men under the RESULT project. The project helped in a number of ways to reduce the burden placed on women as a result of the responsibilities that their domestic roles placed on their productive work. Women are now more involved in their productive work because they have the support of their husbands, who apparently are ready to take up some of the household responsibilities, including caring for children. Many women indicated that they are even receiving support from their male partners with regards to their domestic responsibilities which include care-giving work.. Women have leveraged the support given to them by the men to gain more time to engage in other productive ventures such as going to the market to sell their farm produce.

These changes were made possible because of the education and sensitization given to men who were either direct beneficiaries or indirectly benefited from the project because their wives or partners were beneficiaries. Most men responded sympathetically to the idea that generally women use their earnings for the good of the family. Indeed, during the discussions, male participants did acknowledge that the whole family had benefitted from women’s active involvement in their productive activities and recognized the need to support them in their domestic work. Men continue to do this after the end of the project. This point is supported with a quote from a male participant:

“We the men have now decided to help our wives with their household responsibilities so that they can engage in the work that RESULT has given to them because it is really benefiting us all. Looking at the fishing, when they sell the fishes, the money they get, they use it to buy food and cook for the children, and it is helping improve our health care, and we encourage them to go to their work because it is helping us”. (A male participant in the FDG)

It was revealed in the study that support given to women by men in regard to domestic responsibilities is still continuing. Discussions with some key informants indicated that

the project's requirement for men to release lands and support their partners with domestic labour in order for their households to benefit from the project contributed to the men's ongoing willingness to support the women in gaining access to these productive resources.

Finally, male children also took up some of the responsibilities in domestic work, allowing their mothers to engage in income generating activities. The change in behaviours and attitudes among the men can be attributed to the fact that male beneficiaries recognized that their families stood to gain more when their female partners benefitted from the RESULT project. The project has shown that it is important to get men involved in issues that concern women's empowerment and the prevention of discrimination. If there is to be change, there must be a change in attitudes among the men.

RESULT supported women as decision-makers at home and in communities

Another area where there has been much change due to the project was in decision making. Women are now involved in decision making at various levels. At the household level they are more involved in decisions concerning how resources (income) are to be spent in meeting the needs and aspirations of the family. At the community level they take part in meetings and are now members of various economic groups (e.g. aquaculture groups, village saving and loan groups, vegetable gardening groups, basket weaving groups). These groups meet regularly and discuss issues of concern to the group. On some occasions they relay their concerns to other women's groups that are not supported by the CFTC but operate at the district level and are able to, in turn, deliver these concerns to authorities at the regional level. A female beneficiary of the project had this to say about how the project has impacted decision making at the household and community levels:

"One thing RESULT wanted to tackle is to build the confidence of women. In Ghana here, women are mostly excluded from decision making, and our voices [have] normally been [shut] out. But ever since RESULT came, those things changed. When we meet, every person has the opportunity to talk and voice out their opinion without being [shut out]". (A female participant in the IDI)

Women's involvement in decision making has been made possible because of the project's aim to empower women. For instance, in the initial phase of the project, training sessions were held for men, who were made to understand that a large proportion of the beneficiaries were going to be women. The rationale given for this was that when women succeed in their productive work, the benefit trickles down to the whole family. Thus, men's involvement in the project was key. The project aimed to sensitize them using role-playing exercises, not only to change their mindsets about gender relations, but also to help them accept that if their families were to benefit they would need to offer support to their partners.

Findings from the End of Project Report by CFTC (31st May 2018) also show that women's participation in decision-making regarding resources and income continues to increase from an average of 28% at baseline to an average of 57% at the time of the survey. The report goes on to show that men's recognition of women as equals has increased dramatically from a very low value of 24% at the project baseline to 71%.

RESULT promoted women's leadership

The introduction of economic groups also helped women to build their leadership skills since women were given most of the top positions. Some women beneficiaries who are holding positions in these groups said they are able to plan, organize, and preside over meetings. Other women also indicated that they are able to voice their concerns during meetings even when men are present at these meetings. Within the sphere of the family, women are more confident now in voicing their opinions on family matters and also getting involved in short and long-term planning decisions, including the education of children and the acquisition of assets.

Improving livelihoods

There has been a phenomenal increase in income earned by beneficiaries, made possible through initiatives such as the introduction of the village savings and loan association (VLSA), the introduction of new income generating activities, capacity building, technical support, and access to improved seed. In one impact assessment of the project it was revealed that 70% of the women reported an increase in income as a result of yield increase (Millar, 2018).

RESULT contributed to improved access to finance

The current study found further evidence of increased incomes as a result of the project. For instance, participants indicated that members of the VSLAs made contributions in the form of savings and were later able to access loans if they needed money for other purposes such as business investments, their children's education, or emergency situations. Many of the beneficiaries indicated that they now have access to small loans and the interest payment is low. This makes the savings group preferable to other schemes and micro-credit available. The importance of the savings group is captured below:

We have a savings group, and all of us are encouraged to make contribution to the savings group whether small money or big money. This savings groups have been beneficial to us. People [depend] on it to pay their children school fees or buy farm input and later pay back after the harvesting season.
(A female participant in the IDI)

Other reports support these findings. According to the report by the CFTC (2018), by the end of the project 86% of the project beneficiaries had access to affordable credit, compared to 28% at baseline, due to their participation in Village Savings and Loans Associations (VSLAs).

RESULT contributed skills and knowledge to improve incomes

Knowledge and skills acquired through education and training contributed to increased earnings for beneficiaries. In aquaculture, it was revealed that training on how to smoke fish was an added value as it increased the unit price of fish from GHC 8.00 to GHC 16.00, a 100% increase in income (Millar, 2018). Other innovations and new practices were also introduced. These included fertilizer application methods with techniques on

how to apply animal manure to crops to increase yields as well as training on how to rear animals to improve health and reduce deaths. Some of the methods included providing better ventilation in livestock pens, better floors for the pens, thorough cleaning of the pens periodically, and vaccination of the livestock. Participants also indicated that they were introduced to dry season vegetable gardening which also gave them additional income. The training of beneficiaries on the methods and techniques in crop farming and animal rearing improved participants' skills and knowledge, benefits that continue after the end of the project.

These innovations and methods greatly benefited the farmers. Participants said that they saw an increase in their crop yields; in some cases their yields had more than doubled, allowing them to sell high quantities, thus corroborating earlier studies that assessed the impact of the project with respect to income.

RESULT-supported income generating activities had significant positive impacts on livelihoods

In addition to improved skills and increased knowledge, the introduction of income generating activities such as basket weaving, shea butter processing, and soap making helped the beneficiaries to diversify their income sources, especially during the dry season. This year-round productivity has been significant in addressing the food and nutritional requirements of small households (Millar, 2018). The introduction of maize farming to women augmented traditional crops like millet and sorghum, as well as diversifying women's sources of income. Discussions with participants indicated that maize is usually not one of the traditional crops grown in the study areas, however, project beneficiaries now have access to improved varieties of maize which take less time to cultivate. Additionally, the market for maize has increased in recent times.

Participants said that they had each received two female sheep or goats, and, over time, the number and size of their livestock had increased, allowing them to earn more income by selling livestock to meet the needs of their families. The increase in the number of animals resulted from cross-breeding the livestock from the area with improved breeding stock from Burkina Faso, with the support of the RESULT project. The breed from Burkina Faso are taller and bigger.

Also, beneficiaries of aquaculture investments noted additional incomes, a finding that supports earlier evaluation studies of the project. A large proportion (60%) of beneficiaries are women. Beneficiaries noted that there are additional prospects for income generation from aquaculture, as there are now new hotels and restaurants in Bolgatanga and other neighbouring towns where the demand for fish (tilapia) is likely to increase. Even though aquaculture has contributed to increased incomes, it was revealed that beneficiaries had challenges with getting fingerlings locally and so had to continue to bring them from southern Ghana. The breeds introduced were not the very large ones, which affected the market price of the fish. The mixed production systems introduced by the RESULT project have also served new markets, value-chains, and market dynamics (Millar, 2018).

RESULT effectively improved market access for beneficiaries

Improving access to available markets was an important element of the project since it provided a direct link between beneficiaries and buyers. For instance, participants who

were engaged in aquaculture mentioned that there was advertisement made on local radio stations on the availability of tilapia in the communities where aquaculture was being undertaken. The advertisement was part of RESULT strategies to increase market access. Other buyers also helped in increasing the market by relaying information to other buyers and dealers in the sale of fish. All these factors led to increased market for their fish. A participant in one of the focus group discussions had this to say:

“They brought women from Navrongo who now always come to buy the fish and also took us to some Hotels in Bolga where we can sell our fish”. (A female participant in the FDG)

However, there were also instances in the beginning of production where beneficiaries lost fish because of difficulties in obtaining buyers for the product and because they did not have refrigerators to store the fish. The project introduced smoking and fermenting to overcome some of these losses.

Further, Esoko, a company specializing in providing information services, provided beneficiaries with information on market prices for their produce, which enabled them to be competitive in the local and outside markets by not overpricing or underpricing their fish. Some of the beneficiaries interviewed also pointed out that they were given some training on customer care and how to maintain good customer relations. All this helped to increase the number of customers, customer loyalty, sale price for processed fish, and therefore total income.

Increased incomes had a positive impact on households

Some participants indicated that with the increased income they are now able to support their husbands in providing for the needs of the family. These needs include daily expenses for food items which they do not grow on their farms. Some women participants also indicated that they are now investing in their children’s education, including moving them to better schools and providing their wards with good learning materials to enhance the quality of education. The quote below highlights the importance they have come to place on the education of their children as their income has increased:

“So when I save, I use some to buy a pen for my child, as they have reopened school and the child doesn’t have footwear, pen or book., It is expected of me to buy for the child so in [the] future the child will be self-sufficient and can also care for me. I am able to buy all these materials sometimes using money borrowed from the loan I take”. (A female participant in the FDG)

Ensuring environmental sustainability and climate change resilience

RESULT enabled local leadership on climate change and environmental sustainability

Climate change is having significant negative effect in northern Ghana as extreme weather events affect farming activities. Climate change contributes to flooding, soil

erosion, and low yields, and makes it difficult for farmers to plan for farming seasons,. It is within this context that RESULT's support for addressing the challenges associated with climate change became paramount. It was important to use approaches that required the collective efforts of all. Informants indicated that the education they received in the course of the project helped them to become more aware and knowledgeable about agricultural practices that protect their environment. For instance, it was revealed that community and opinion leaders are now taking the leading role in ensuring that community members do not cut down trees close to reservoirs where aquaculture is occurring. Furthermore, group leaders (e.g. aquaculture groups, maize farmers groups etc.) are also ensuring that farmers promote water conservation, soil fertility, and the prevention of erosion. At Bon-gorigo, it was revealed that part of the dam protecting the reservoir had collapsed and needed to be repaired. The collapsed portion of the dam was repaired relatively quickly through community efforts with some external support. Previously, when this had happened it took years to get the government to repair the dam. However, with community support, repairs to the dam took just five months.

Beneficiaries were also shown how to plant grass and trees along the sides of reservoirs being used for aquaculture. This practice has reduced rainwater runoff, flooding, erosion and pollution in the reservoirs. Discussions with the beneficiaries indicated that they had been involved in these climate resilient practices. Education and training helped in the adoption of these climate resilient practices.. Based on observations during the field work and engagement with beneficiaries, it was evident that great strides had been made in protecting the environment. Other techniques that have contributed to the conservation of water in the soil include the introduction of diesel-powered water pumps to support irrigation, as well as mulching and planting in trenches.

RESULT supported environmentally sustainable farming

The RESULT project introduced a number of new methods and techniques that sought to improve the environment and consequently improve crop yield. Beneficiaries said that they were given training in the application of animal manure, composting, the preparation of organic insecticides using neem trees, and dry season vegetable gardening. Training in the application of animal manure helped improved the fertility of the soil, while the dry season gardening, which was facilitated by the introduction of water pumps, improved the nutrients in the soil and made food available throughout the whole year, thus enhancing food security. Further, during the interview sessions most of the participants indicated that the project helped them to learn about planting in rows, something they had not previously done. Participants learned that planting in rows allowed more crops and vegetables to be grown using less space and allowed the circulation of air. Weeding and other agronomic practices were much easier when crops were planted in rows.

Results from the CFTC report show that due to the adoption of these improved farming practices and technologies, maize yields increased from 209kg/acre at baseline to 884kg/acre, even exceeding the projected target of 800kg/acre. There has also been a significant adoption of good agricultural practices (GAPs). Row planting for maize improved from 41% at baseline to an average 86%. The percentage of project beneficiaries who adopted improved technologies, such as the use of certified seed, fertilizer, and ideal plant populations increased from 15% at baseline to 31%.

Further, discussion with participants indicated that they were still using these sustainable farming practices even after the project had ended, and they continue to see improvements in their yield. Discussions held within the women-only focus group also affirmed these findings. Women explained that they are still using these methods in their own farms. However, they did mention that further training on new methods, in addition to what they have learned, will further increase their capacity.

RESULT reinforced climate resilient communities

The project reduced the vulnerabilities of community members to climate related challenges. The introduction of information on weather and climatic conditions was an innovation in the project. This information was communicated to farmers from seasonal and daily information provided by Esoko. Beneficiaries were also sent messages about weather conditions by SMS. This helped the beneficiaries to prepare for planting at the right time for impending rains and to ensure fertilizer and pesticides were used at the right time.

Beneficiaries also profited from new climate adaptive methods. For instance, beneficiaries, particularly those involved in fish farming, indicated that they were trained in the building of energy saving stoves. The energy saving stoves initially were used for the fish processing, but subsequently beneficiaries have developed smaller versions for use in their kitchens, an innovation which is reducing the amount of wood that would have been cut down as fuel. The stoves also have chimneys which reduce exposure to indoor air pollution. This has helped in reducing fuel (wood) consumption and the loss of trees, while at the same time replaced the open fires which they used traditionally in cooking.

Contributing to food security

RESULT improved food security

Food security was a goal of the RESULT project and previous impact studies indicated that the intervention in crop production has satisfactorily led to enhanced food security. One study of RESULT also confirmed that food security improved from 3 months to 10 months among project beneficiaries (Paschal et al, 2018). The results from this case study also support these findings. First, participants pointed out that the methods, techniques, and innovations introduced by the RESULT project increased the quantity of food harvested. Use of PICs (Purdue Improved Cowpea Sacs) bags reduced post-harvest losses. Further, they pointed out that the cultivation of different kinds of crops also enhanced food security. In this case, households had access to vegetables in the dry season. Also, using cage-based aquaculture to introduce tilapia, which had not previously been part of the fish stock in the reservoirs in the area, improved nutritional diversity.

In addition, beneficiaries were able to supplement food crops with fish and livestock. The production of these food items increased due to the methods that were introduced to beneficiaries. It was noted from the interviews that since the completion of the project, the beneficiary communities had not suffered any serious shortage of food throughout the year. With the technologies still in place, including the water pumps, it is expected that the quantity and availability of food will continue to increase.

One woman explained as follows:

“though they still apply the best practices taught by RESULT project in their farms, the rain patterns are not consistent in this part of the country and can sometime cause poor yields. Nonetheless, beneficiaries can [depend] on livestock provided by the project to sell. They can also use profit from IGAs to buy food and supplement what they got from their farm to sustain them throughout the year”.

Innovation and good practice in agricultural investments

RESULTS harnessed local expertise and partnerships

An important aspect of the project was the partnerships that the project developed with other organizations, both government and non-governmental. Partnerships enabled the sharing of knowledge and expertise. Together with the Food and Agriculture office of the districts, the project trained beneficiaries on new farming methods using demonstrations. Other government bodies included the Social Welfare department, which assisted in educating beneficiaries on the need to improve women’s access to resources to enable them to engage in more productive work. The project also drew from the expertise and experience of institutions such Veterinary Service Officers, Fisheries Officers, the Department of Social Welfare, and the Women in Agricultural Development unit. The Women in Agricultural Development (WIAD) unit in particular helped mobilize the women and train them to use new innovations and technologies in crop production and aquaculture. Stakeholders occasionally shared knowledge about their experiences in the course of the implementation, thus allowing operational challenges to be addressed in the course of the implementation.

Other non-governmental bodies that partnered with the project included groups such as a shea butter group from Navrongo, basket weavers’ groups, and state-owned enterprise (SOE) women’s group. The shea butter group offered advice and training to beneficiaries who were starting out in shea butter processing, while the basket weavers group from Asaka also trained the women beneficiaries on how to make different types of baskets for the market.

Lessons learned

- ***Education and sensitization for men, women, and community leaders help change attitudes that serve as barriers to women’s participation in agriculture and food security programming.***

The project demonstrated lessons in how agriculture and food security programming contribute to gender equality. Gender equality education given to men, community leaders, and women and girls increased the success of the project interventions by helping change long-held perceptions, attitudes, and stereotypes that prevented women’s full participation in agriculture and alternative livelihoods. By changing these attitudes, it allowed women access to productive resources such as land. It also gave

women the opportunity to engage in other productive activities which directly benefited men and their families. The lesson learned from this is that the involvement of men is important for programmes that seek to empower women. In view of this, education and sensitization must always be key components of future projects.

- ***Investments in smallholder agriculture support local farming communities' capacity to adopt new technologies and reduce the risk of joining the market.***

The project has also demonstrated that a focus on smallholders and local markets has a place along-side typical monoculture agricultural projects focused on large scale farming and export markets. Smallholders have the capacity to adopt new technologies to increase their production based on local market needs. They can become more food secure without the risks of contract farming or becoming low wage laborers. A number of the new methods of farming are still in place and the RESULT farmers are using them on their farms. We observed mixed cropping on farmlands and the information communicated to us was that this followed some of the RESULT demonstrations.

- ***The inclusion of local partners in implementation contributes to success and long-term sustainability.***

The project also showed that the inclusion of both governmental and non-governmental stakeholders has been important in contributing, not only to the dissemination of knowledge and skills to beneficiaries, but also to sustained support post project. Continued certification of the Community Livestock Workers by the Department of Agriculture, for instance, and continued technical oversight of the aquaculture businesses by the Fisheries Commission are possible entirely because of relationships built up during RESULT. Participants confirmed that local partners like MoFA, the Department of Social Welfare and Community Development, the Department of Cooperatives, NFED, and the fisheries commission have been visiting the communities since the end of the RESULT project, ensuring the sustainability of the project.

- ***Local farmer groups provide opportunities to mobilize communities and promote women's leadership.***

The formation of local farming groups did enhance the success of the project. The formation of local farming groups has enhanced the leadership capabilities of women who now hold important positions in these groups. They are instrumental in mobilizing members in the community for meetings, disseminating information, and ensuring members adhere to practices that protect the environment.

- ***The project improved market access for beneficiaries. Continuous assessment is needed to ensure that activities generate local demand for products.***

The project improved market access for beneficiaries who were in aquaculture as well as those producing maize, soyabean and groundnuts. Market information was available from Esoko, but for more sustainable market linkages, more attention should be paid to the market dynamics of the various products, for instance: information on what farm produce or income generating activities are in demand, where the market for the produce are, what quantity does the market need, and the types of value addition that

would raise incomes.

- ***Livelihoods projects require sustainability plans early in the project so that beneficiaries have time to get used to knowing the suppliers and growing their markets.***

Some women's groups, such as the shea butter processing, soap making, and aquaculture groups reported that they have started experiencing drops in sales for their products as well as difficulties in obtaining raw materials or inputs for their businesses. This appears to have been compounded by increases in the cost of production inputs.

- ***Conducting an analysis on gender inequality and climate vulnerability helped contextualize the project activities.***

One important strategy that the RESULT project adopted was that climate vulnerable people such as women in the targeted communities were identified and defined by differences in vulnerability. This process helped the project introduce interventions that helped build the adaptive capacity of these vulnerable people by strengthening their control of, and access to, knowledge and assets such as land, access to local institutions and linkages, the adoption of innovation practices, and the ability to make decisions now and in the future as the climate changes.

- ***The commitment of local partners to continue monitoring, mentoring and providing relevant technical support to groups and farmers is an important part of exit strategies.***

The study found a desire for continuous training in new farming practices and techniques for farmers. This will continuously upgrade their knowledge and equip them with the methods to deal with the new challenges that they will be confronted with, especially in as a result of climate change and changing expectations from the market. The RESULT Project engaged various relevant local stakeholders including MoFA and other decentralized departments of the District Assemblies in the development of the project exit strategy. However, the commitment of these stakeholders to continue monitoring, mentoring, and providing relevant technical support to the groups and farmers (as highlighted in the exit strategy) appears to be a challenge. Farmers and most production and processing groups indicated visits by these technical departments and stakeholders were very rare after the closure of the RESULT Project.

Recommendations

Based on discussions held with beneficiaries and key informants and our own observations, the following recommendations are directed to civil society organizations interested in making similar interventions in the area:

- ***Engage and involve local partners in the design and implementation of development projects.***

As was the case of RESULT, local partners came in with expertise and skills that helped build the capacity of beneficiaries. In the process, partnerships were built and learning experiences were also shared. Through field demonstration organised by the local

partners, the beneficiaries were trained in new conservation agriculture management techniques in order to develop new income-generating activities on their own smallholder farmland. This helped reduce food insecurity in the communities and also increased incomes.

- **Focus on improving women's access to credit.**

The RESULT project formed and trained women's VSLA groups to help them get access to credit they desperately needed to invest in improved agricultural inputs and practices. With this start-up capital, beneficiaries were able to invest or buy inputs for their agricultural activities which would otherwise have been out of reach for most beneficiaries. VSLAs are a powerful approach to evening out cash flow and absorbing small shocks to the household. It should be combined with other agricultural interventions for smallholders from the start.

- **Engage with all groups, especially men and community leaders, in the implementation of the project to address barriers to gender equality.**

The involvement of male household and community members in the RESULT project was one of the key successes of the project. Discussions at the community level that focused on promoting gender equality and women's economic empowerment produced benefits for the entire household while also encouraging women to adopt improved agriculture practices and marketing skills. The beneficiaries (mostly women) created management committees for various innovations, such as Aquaculture, with the involvement of men, thereby ensuring the men's buy-in and support. However, key management positions within the committees were held by women, giving them control over critical elements such as the financial management of the business.

- **Future projects for smallholder farmers should continue combining agricultural interventions with interventions aimed at promoting gender equality. This combination seems to lead to success in food security.**

In order to make a significant impact on women's empowerment and food security in poor, vulnerable communities, a gender-responsive approach to innovative agricultural interventions that identifies and addresses the both the different constraints faced by men and women and their different capabilities should be used.

- **Support women's access to markets.**

The RESULT beneficiaries have strong ties to markets that help them access information from multiple sources. They confirmed that, through market linkages created by RESULT, they have ready buyers from Navrongo, Tamale, and Wa. Also, some hotels and restaurants within the region buy their fish. Beneficiaries also learned to run promotions advertising their fish on the radio and on posters at key vantage points. This market access strategy came from RESULT. The beneficiaries have continued to run such promotions.

- **Develop gender sensitive value chains.**

Projects that add gender equality dimensions to value chains will increase the beneficiaries' productivity and income. To do this successfully, value chain research is

recommended early in the project to ensure that links between suppliers and buyers are well established by the time the project ends.

- **Focus on increasing women's competitiveness to improve livelihoods.**

RESULT beneficiaries, mostly women, received multiple trainings on different issues, such as improved production practices and business and marketing skills. For example, groups that were engaged in soap making were taught how to package their products to make them more attractive and marketable. Aquaculture groups were also trained in value addition (smoking and salting) to prevent post-harvest losses and increase earnings.

- **Ensure efforts build from existing farmer expertise.**

The project focused on identifying local knowledge among both men and women farmers as the starting point. The project recognised that practices adapted to local contexts and replicable by the beneficiaries will resonate with beneficiaries and help to encourage their engagement with and ownership of the project.

- **Develop exit strategies with local partners to ensure long-term sustainability.**

Farmers and groups continued with their activities after the end of the project. However, the absence of local partners, according to farmers and groups, meant a lack of recognition and motivation. This adversely affected the productivity and sustainability of the project's ongoing benefits.

References

Canadian Feed the Children (CFTC) (21st July 2018) Resilient and Sustainable Livelihoods Transformation (RESULT) in Northern Ghana, Project No. A-035430, End of Project Report.

David Millar (2018). Resilient and Sustainable Livelihood Transformation (RESULT) Project Synthesis Report. Lessons Learned Study. Canadian Feed the Children (CFTC).

Paschal B. Atengdem and Co. (April - May 2018) "Beyond RESULT", The end of result project evaluation report. The resilient and sustainable livelihoods transformation (result) project, Canadian feed the children (CFTC) & Association of church based development projects (ACDEP)

Appendix 1

Table 1: List of Interviewees

Venue	Type of Interview	Number
Focus group discussions (FDGs) and In-depth interviews (IDIs)		
Community 1 - Dassobligo	FGD 1 (male)	9
	FGD 1 (female)	9
	IDI - females	5
Community 2 - Bon-gorigo	FGD 1 (male)	9
	FGD 1 (female)	9
	IDI - females	5
Key Informant Interviews		
Agriculture and Association of Church Based Development Projects (ACDEP).	KII (Male)	1
Department of Social Welfare from the Ministry of Gender and Social Protection, and	KII (Female)	1
Women in Agricultural Development unit (WIAD) of the Ministry of Food and Agriculture	KII (Female)	1
Extension Officer- Ministry of Food and Agriculture	KII (Male)	1