

END OF PROJECT FINAL EVALUATION REPORT

of the
“Origination and Development of the Soy bean small holder farmers in Egypt”

Implemented BY:
CARE Egypt



(Soybeans (Glycine max).
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1. Executive Summary

CARE Egypt, with the support of Cargill Inc. and Cargill Egypt, implemented the “Origination and Development of the Soy bean small holder farmers” project in the governorates of Minia, Benisuef and Beheira. The purpose of the 3-year project was to support the communities through increasing agricultural linkages by working to improve socioeconomic conditions for rural communities by increasing local production of Soy beans to reach 6000 metric tons of Soy beans throughout the project life. The project cooperated with the government through Extension Officers, farmers through their cooperatives and professional think tanks through the Agricultural Research Centers.

In February 2017, a consultancy was commissioned for the project final evaluation. After going through some bottlenecks, the consultant was not able to meet the deadline nor deliver. The project team had to seek a new consultant who was hired in July 2017. With time and budget pressure, the methodology was slightly modified to avoid suspicion for collecting the same information twice. Six Focus Group Discussions (FGDs) with farmers took place in addition to FGDs with 6 cooperatives and Extension Officers. The purpose of the evaluation is to examine the extent to which the project has met its four strategic objectives and provide lessons learned and recommendations for the design of the next phase of the project.

The evaluation noted significant improvement in technical knowledge at the level of farmers and Extension officers due to the technical and soft training provided by CARE. The knowledge gain was at its best in Beheira as Soy cultivation was newly introduced in the area. Farmers gained more confidence in trying new seeds, intercropping, new irrigation methods, which reflected positively on their productivity. Some recommended the provision of more facilities such as Aqadeen or fertilizers, but project beneficiaries were generally satisfied with the services provided by CARE. The project crossed its planned 2000 metric tons of soybean per year and Cargill bought the soybean harvest that adhered to its quality requirements and mixed it with the imported soybeans to produce cooking oil during the first season. The local soybean produced amounts to less than a day of operation at the Cargill facility as factory capacity is 3000 MT/day.s

Farmers noted that their best feddan produced between 1000-1250kg before the advent of the project. They reported that their land produced between 1300-1700kg per feddan increasing gradually over the course of the project. Beneficiaries also noted significant improvement in prices of soybeans. Before the project, a ton of soybeans would sell for LE1200-1400, but with the intervention of CARE/Cargill, prices have exceeded LE5000 per ton. The spike in prices was in fact due to another factor in addition to the project. The devaluation of the Egyptian pound has led soybean buyers to resort to the local market thereby increasing the demand for locally produced soybean.

Following the devaluation of the Egyptian Pound, was a severe shortage of foreign currency that lead to temporary shutdown of operations by Cargill. Consequently, Cargill did not buy the local Soy harvest from CARE’s farmers, leaving them with disappointment and confusion. Project beneficiaries were left with mixed opinions around the cooperatives, the project, CARE and Cargill. The lack of communication about the specific role of the ASDF has

made it an easy target for pointing fingers at this time. At the same time, the devaluation created shortage of soybean in the entire local market leading other buyers to seek the locally produced soybeans. The increase in demand on locally produced soybeans increased market prices during the third season.

The net impact of the project is positive in that it presented new knowledge for cultivating Soybeans with higher productivity and improved prices, yet more needs to be done around marketing assistance to the farmers and cooperatives. The report concludes with a number of lessons learned for the new phase. Improving communication with project beneficiaries comes as an important lesson around managing expectations and ensuring a proper introduction of the ASDF to the beneficiaries. The importance of including strong measures to enable farmers and their cooperatives to market their Soy harvest independently by studying gaps in the entire value chain. While the effort exerted in the project was commended by most of the beneficiaries, the monitoring and evaluation system of the project failed to elucidate this in the analysis.

Finally, the key recommendations for the next phase of the project revolve around strengthening the marketing component. The new phase shall continue the technical assistance and awareness raising around Soy cultivation. Deeper involvement of Cargill to take a broader look at the entire soybean value chain in the country shall involve more players that will benefit from local supply of soybeans to their industries. A more robust monitoring and evaluation system is a key recommendation to preserve all the efforts spent in making this project happen.

2. Introduction

The purpose of this Final Evaluation report is to evaluate the “Origination and Development of the Soy bean small holder farmers in Egypt” project implemented between February 2014 and January 2017. The evaluation intends to examine how the Agricultural Service Centers (ASC) and the private sector have contributed to improvements in agricultural production and market opportunities for Soy bean farmers, how cooperatives have facilitated improvements in their governance capacity and how the project may have influenced food and livelihood security for farmers and their families.

The background section sheds light on the importance of smallholder agriculture in driving third world economies. It provides background information on CARE Egypt and Cargill and how this project aligned with their respective strategies and Corporate Social Responsibility goals. It also provides information regarding soybean crop production potential in Egypt and the specific characteristics that make its production in Egypt necessary. The following section describes the project, its objectives and aspired theory of change. The detailed purpose of the evaluation and its objectives followed by the evaluation methodology spanning desktop research, field based activities and case studies are also listed.

The study limitations section explains the factors and challenges that impacted the quality of the report. Findings of this research are categorized by respondent, starting with the farmers, cooperatives’ boards of directors and ending with the Extension Officers. Discussions with each type of stakeholders were categorized into broad issues to facilitate easier reference for the reader. The section ends with a set of five case studies developed for Benisuef governorate to further describe the project and the impact it had on the lives of its beneficiaries. The findings are analyzed against the project strategic objectives listed in the theory of change diagram. The extent to which the strategic objectives and cross cutting themes have been fulfilled throughout the project duration are then examined.

A section was added to address the impact and sustainability of the project. The project, despite its challenges, has already made remarkable achievements and is very likely to continue. The report concludes with lessons learned, devoted to highlighting project challenges and learnings from each of these challenges as well as a set of simple recommendations to consider when designing another phase for the project. An annex was added to include key reference documents for this evaluation.

3. Background

Smallholder agriculture is instrumental in promoting sustainable development within third world economies. The International Fund for Agricultural Development (IFAD) emphasizes that smallholder agriculture is the prevailing economic activity in most developing countries. IFAD reports that “small holders manage 80% of the world’s estimated 500 million small farms and provide over 80% of the food consumed in a large part of the developing world, contributing significantly to poverty reduction and food security”¹. In spite of the size of the smallholders’ economy, they are often neglected. The report concludes that “with the right

¹ <https://www.ifad.org/documents/10180/666cac24-14b6-43c2-876d-9c2d1f01d5dd>

conditions, smallholders can be the forefront of a transformation in world agriculture.”² In Egypt, small holder farmers suffer from low returns on their harvest due to limited accessibility to quality inputs, quality information on best practices around production, as well as harvesting and post harvesting. Land degradation and depletion of natural resources are also common problems since the illegal construction that took place on agricultural land in the post-revolution Egypt. It was reported that Egypt lost 1.2 million feddans of agricultural land as a result of illegal construction during the time of the Egyptian revolution (2011-2013).³

In a recent article, agricultural problems were summarized into high input prices, weak farmer awareness, huge waste of water in the delta area, land salinity, agricultural waste as a result of limited handling expertise, unreliable Agricultural Extension network, weak agricultural cooperatives, lack of statistical agricultural information and the inability of the Agricultural Research Center to produce improved seed varieties for the water intensive wheat and rice.⁴ Most of these have been inherent agricultural issues in Egypt, while agricultural policies

Agricultural policies and organizations that are mandated to oversee and advocate for farmers’ interests are often mistrusted by their beneficiaries. There could be many reasons behind this, but on top of them is the weak institutional capacity to solve numerous agricultural problems.⁵ Farmers in Egypt, being risk averse by nature, are often obliged to rely on middlemen to access markets which frequently leads them to lost opportunities for improved returns.

CARE Egypt is an international nongovernmental organization that works with the most marginalized communities in Egypt as part of CARE International. CARE Egypt’s work is focused primarily on Upper Egypt, where it works closely through a rights-based approach with the poor and marginalized, civil society, and government institutions to improve livelihoods on a sustainable basis. Using community-generated strategies and local resource mobilization, CARE’s work encompasses a number of different sectors including women’s rights, education, governance, civic engagement, agriculture and natural resource management.⁶ An important aspect of CARE’s mission is to help impoverished entrepreneurial men and women to build businesses and create income, opportunity, and economic growth for their families, communities, and countries.

Cargill Incorporated has been active in Egypt since 1994 with activities primarily based in Cairo and Alexandria. Cargill is committed to operating responsibly to feed the world while reducing its environmental impact and improving communities where it operates. Cargill’s main trade business covers grains, oil, seeds, and sugar. It has a majority shareholding (98%) in the ‘National Vegetable Oils Company’ based in Burg El Arab, which is responsible for the

² Ibid.,

³ <http://ik.ahram.org.eg/News/24015.aspx>

⁴ <https://alfallahalyoum.news/مصر-في-الزراعة-مشاكل.html/>

⁵ <https://alwafd.org/غائب-والوزير-ينهار-الزراعة-البحوث-مركز-1211557/وتقارير-أخبار/>

⁶ CARE Linked in

mixed oil production in Egypt. ⁷ Since 2012, Cargill partnered with CARE in Egypt to fight global poverty and help small-scale farmers switch from rice to Soy bean cultivation, a much less water intensive crop that is a primary product used for processing in Cargill Egypt's factories. While Egypt cultivates 23,000 feddans of Soy beans annually with an average production of 1.25 tons per feddan, it continues to be a major importer of Soy globally. With the current economic conditions and limited access to foreign currency, Egypt could greatly benefit from increasing its local production of Soy beans. Through the CARE and Cargill's partnership in Egypt, Cargill provides a formal market for farmers to access while funding activities contributing to the improvement of agricultural practices for better quality and yields of Soy beans as well as the well-being of agriculture dependent families.

4. Project Description

As part of a global agreement between CARE International and Cargill, CARE Egypt and Cargill Egypt implemented a three-year project called "Origination and Development of the Soy Bean Small Holder Farmers". The project was implemented from February 2014 until the end of January 2017. With a total allocated budget of \$370,000⁸, the project has been implemented in three governorates across Egypt: Beni suef, Minia and Beheira.

a) Project geographical coverage

The implementation in Benisuef covered 12 villages in El Fashn district, in Minia it covered 6 villages over the districts of Minia; Abu Qorqas, Mallawi and Mattay and in Beheira 46 villages in the districts of Etay ElBaroud, Damanhour, Shobrakheet, Abu Hummus, Kom Hamada and El Noubareya. For implementing this project, CARE capitalized on its existing operations in Benisuef and Minia as well as the fact that the two governorates have experience in growing Soy beans. Beheira was selected based on CARE and Cargill's intention to select a delta governorate with no previous experience in Soy bean cultivation. Beheira had the added advantage of neighboring the Cargill Factory in Burg El Arab, Alexandria.

⁷ Cargill website

⁸ The total budget is broken down into \$295,000 from Cargill Inc. US Office and \$75,000 from Cargill Egypt.

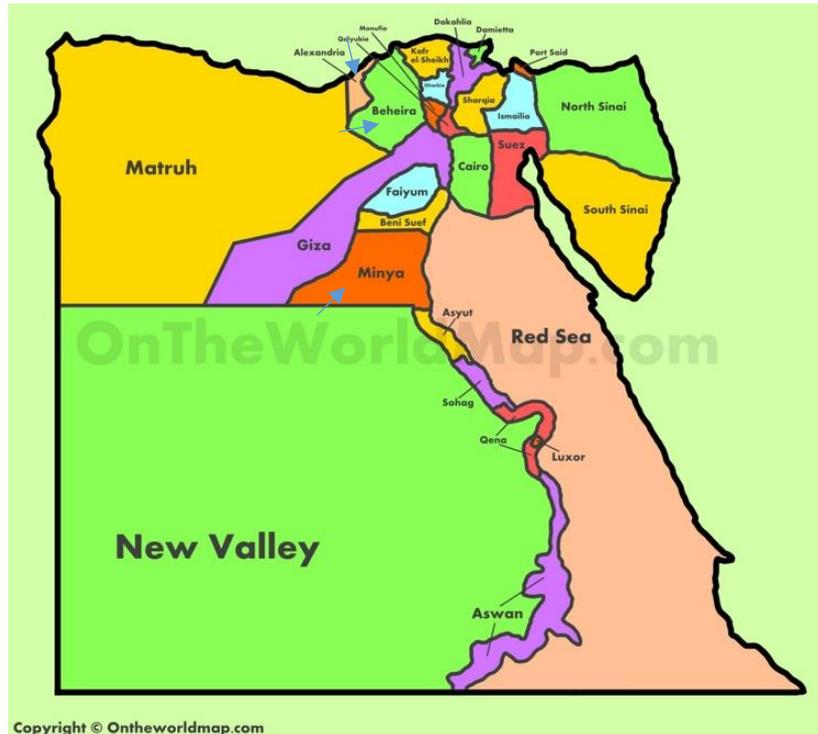


Figure 1: Administrative division of Egypt governorates highlighting Project Locations and Cargill Factory

b) Project purpose

Under the name of “Origination and Development of the Soy Bean Small Holder Farmers in Egypt”, the purpose of the project was to support communities through increasing agricultural linkages. The overall goal of the project was to improve socioeconomic conditions for rural communities by increasing local production of 6000 MT (Metric Tons) of Soy beans throughout the life of the project and developing an effective and sustainable social enterprise model, the ASC. The project plan targeted an annual production of 2000 MT while working with 1000 households annually. The project works in cooperation with many partners including: government through Extension Officers, farmers through the cooperatives, and professional think tanks such as the agricultural centers in the field.

c) The role of ASC – The Agricultural Service Center (Later The Agricultural Services and Development Foundation):

To reach the project goal, ASC (or later on the Agricultural Service and Development Foundation - ASDF) was created with the aim of meeting the specific objectives. ASDF was modeled to be a social enterprise that provides a wide range of services to underserved smallholder farmers. ASDF was also designed to be able to provide needed services to smallholder farmers against fees to be able to cover its operational costs and hence become sustainable. In doing so, ASDF was required to meet the following objectives:

1. 2,000 farming households have improved production quality and quantity, better farming through improved farming practices as well as increasing the number of small holder farmers in Soy beans, maize, and poultry.

2. 1,000 rural households have increased their incomes through collaborating with input suppliers' companies of seed fertilizers that offer inputs to small holders with a focus on women and youth.
3. Increased government attention to food security through policy dialogue and greater awareness among of food security issues among the target population
4. Three field officers have developed institutional capacity to undertake farmer/community initiatives.

In line with CARE strategy of creating agricultural linkages through facilitating relations between farmers, farmer organizations and the private sector economy, the ASDF, as a social enterprise, was mandated to do the following:

- Support farmers by the needed agricultural inputs
- Provide farmers with technical and marketing information
- Increase farmers' access to value added and agribusiness opportunities
- Establish partnership with private sector as tools to market agricultural production
- Support women in small enterprises to increase their income
- In the future, ASCs will work to generate income to cover their operation cost
- Developing more flexible pricing to reduce risks
- Building the organization capacity especially management and good governance

Over the long run, ASDF was planned to gradually undertake the work being done by CARE in terms of facilitating all of the above and assigning an Extension Officer to test the soil and provide technical advice to the farmers. Before the end of the project, the ASDF was intended to be registered as a foundation under Egyptian law. Limited options were available for ASDF to be officially registered as there is no governing law for social enterprises. Accordingly, ASDF was registered at a later stage in the project as a foundation under the umbrella of the Ministry of Social Solidarity, which handles the operations of civil society actors. Unfortunately, however, the pace of operations under MoSS is much slower than the pace required by ASDF to make timely decisions as an enterprise. For example, ASDF had to go through communication in writing with MoSS to receive security clearances and official letters of acceptance to mobilize financial resources, as well as receiving funds from CARE. ASDF had to undergo a 6-month process cycle, from application to approval, to be able to receive the soybean-sourcing grant from CARE.

d) Project Theory of Change

The project theory of change was designed based on four technical pillars. The first pillar is built on ensuring the target beneficiaries are sustainably optimizing farm production by increasing quality of extension services, increasing cooperatives capacity to provide good quality inputs to the farmers, and increasing women's role in production. The second pillar is around effectively linking farmers with formal and informal markets, promoting advanced contracting and increasing farmer access to financial services. The third pillar ensures food and nutrition security of the target beneficiaries by promoting dietary diversity, household soybean consumption, and small-scale and animal husbandry by women. Finally, the fourth pillar focuses on strengthening local governance among agricultural stakeholders by ensuring that communities and cooperatives practice social accountability. Cross cutting

themes throughout all the project activities are gender equity and women’s empowerment, good governance, policy, and advocacy as well as environmental sustainability and resilience.

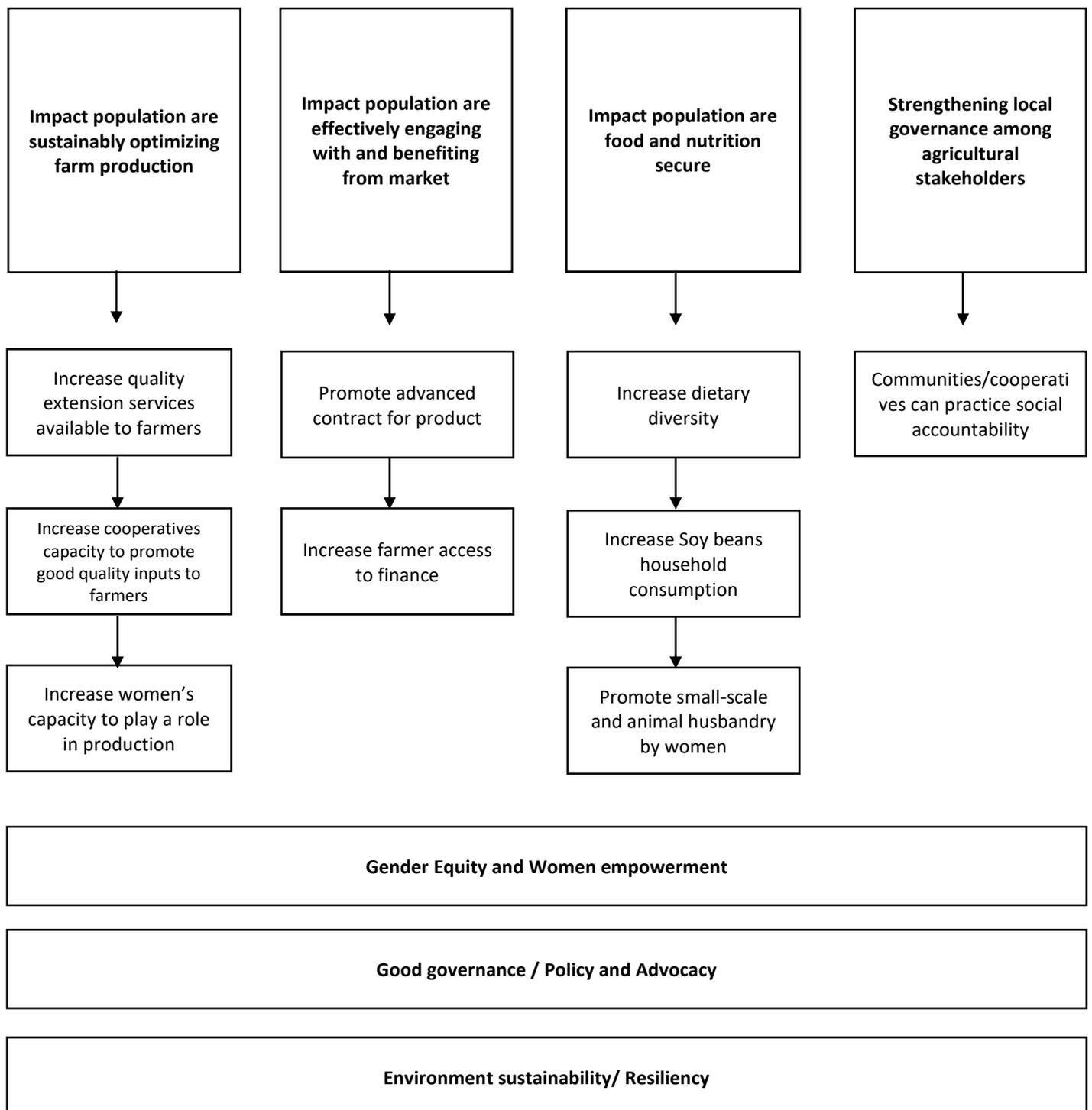


Figure 2: Cargill-CARE Partnership - Theory of change.

e) Project Activities and Achievements

The project aims to achieve its objectives through a number of activities:

1. Training extension agents
2. Arranging Field Schools for farmers
3. Organizing field visits from project staff
4. Providing capacity building for cooperatives
5. Facilitating community dialogue with the government around food security

The project managed to work with 8345 farmers across the three governorates over the course of three seasons. Compared to a baseline of 1250 tons per feddan, the average productivity in Minia and Benisuef reached 1364.9 tons per feddan throughout the project. In the last season, productivity reached 1150 tons in Benisuef and 1400 in Minia governorate. Productivity was at its peak in Mattay, Minia at 1524.44 tons per feddan.

Season (1) 2015/2016 production data					
Governorate	Total Number of farmers served	Total area cultivated in Feddan	Total production per ton	Average production per Feddan in Tonns	Percentage Increase in Average Production from Baseline
Minia	312	963	1425	1.48	18%
Beni Suef	640	787	1192	1.51	21%
Behera	55	81.25	99	1.22	-3%
Total	1007	1831.25	2716	1.40	12%
Season (2) 2015/2016 production data					
Governorate	Total Number of farmers served	Total area cultivated in Feddan	Total production per ton	Average production per Feddan in Tonns	Percentage Increase in Average Production from Baseline
Minia	1163	1151	1545.3	1.34	7%
Beni Suef	1147	994.5	1380	1.39	11%
Behera	597	632.25	770.32	1.22	-3%
Total	2907	2777.75	3695.62	1.32	5%
Season (3) 2016/2017 production data					
Governorate	Total Number of farmers served	Total area cultivated in Feddan	Total production per ton	Average production per Feddan in Tonns	Percentage Increase in Average Production from Baseline
Minia	2222	947.041	1337.15	1.41	13%
Beni Suef	1069	951.29	1250.80	1.31	5%

Behera	304	430.3	506.42	1.18	-6%
Total	3595	2328.632667	3094.37	1.30	4%

f) Project Challenges

One main external challenge in the second and third year of the project changed stakeholders' perception and affected the project results and activities. In the first season, Cargill fulfilled its promise to purchase the soybean harvest. In subsequent seasons, the central bank suffered serious shortage of foreign currency reserves, which made it enforce strict measures on import regulation. It was almost impossible for Cargill to import soybeans and maintain its operations.

Cargill facility's daily productivity is set at 3000 MT/day. Bearing in mind, that the total amount of soybeans locally produced per season was not enough to operate the Cargill factory for one day, the factory could not purchase the locally produced harvest in the following seasons. The factory was obliged to discontinue its operations until further notice and local farmers could not hold their harvest in the stores for long. Farmers resorted to sell their harvest to the local market. Furthermore, both CARE and ASDF were bound by the project agreement to supply Cargill with farmer yields. Hence, they were not able to support coops and farmers in selling their yields to third parties.

5. Evaluation purpose and objectives

As the project approaches its end and the project stakeholders considering another phase, a consultant was commissioned to conduct a final project evaluation. The expectation is that the evaluation provides lessons learned, best practices, conclusions, and recommendations to inform the decision of funding the upcoming phase. After developing the evaluation methodology, research tools, and collecting data from the field, the consultant withdrew from the assignment. This consultant will be referred to thereafter in the report as the "previous consultant". CARE Egypt then requested the assistance of Fathia Hussein to analyze the data collected and to produce the final project evaluation report. The purpose of the final evaluation is to measure progress achieved in the project against its objectives and to inform the design of the new phase of the project.

6. Methodology

The evaluation took place in the three project governorates; Minia, Benisuef and Beheira. The data collection happened over two attempts. The first attempt was by a previous consultant where the data collection tools covered Capacity Assessment tools for two cooperatives in each governorate in addition to 6 Focus Group Discussions for the farmers. The data was planned to be collected over two days in each governorate. This target could not be achieved in the first attempt and not all the data collected was retrieved for analysis. The case studies were the only set provided to the current consultant and they covered one governorate.

In the second attempt the data was collected by project Field Coordinators. The sample was a system random sample from every 20th farmer in the farmer lists kept by the Extension Officer. Each Extension Officer was asked to select three farmers from the lists produced for the focus group discussions. Two focus group discussions were held for farmers in each governorate (Total size focus group discussions) and focus group discussions with extension officers were added for validation and proper triangulation of information. Meetings were held with cooperatives and the capacity assessment tool in most cases was used as an interview guide instead. The reason for reducing the sample size is the skepticism that data collectors faced with the cooperatives as they were collecting similar data sets for a second time. CARE staff mentioned difficulties of data collection recently. This could be attributed to security restrictions imposed on International NGOs after the revolution as well as the subsequent NGOs Law, which was recently issued. CARE staff reported a number of verbal refusals and cautions from the Ministry of Agriculture around data collection from the field for other projects. The project team also received an official letter from the Ministry of Agriculture constraining CARE from undertaking data collection activities.

As a result, the data collection was planned initially to use a number of methods for a more comprehensive evaluation of the project, but then the sample had to be reduced and the data collection restricted to Focus Group Discussion. Focus Group Discussions, Capacity Assessment tools, and Interviews were administered by Cargill Project Field Coordinators and in some instances observed by the project Monitoring and Evaluation Officer. The data collectors were reported to have already received training on data collection.

The methods used for the evaluation were a review of project documents and field based activities:

a) Desktop review:

The aim of the desktop review was to provide a better understanding of how the project started and evolved. Any information gaps were communicated during a meeting with data collectors/field coordinators. The desktop review enabled the writer to provide a description of the project plans, activities, challenges and issues from inception to date. The desktop review covers the project baseline data, project logical framework, monitoring and evaluation plan, and progress reports. More general information on CARE Egypt and the funding organization (Cargill) also fell under the review. Since research instruments had already been developed, they were also covered in the desktop review. Most of the desktop review took place simultaneously with the data collection and transcription. In 2016, the project field coordinators collected statistical data covering the responses of the farmers in Minia and Benisuef. The sample totaled 2222 farmers, 48% and 52% from Benisuef, excluding Benisuef, with all of them being males. It was also reported that even if there were female land owners, they always chose to be represented by a male. This data was also included in the review and analyzed with the findings whenever possible.

b) Field-based activities:

The research instruments for the field activities were developed by the previous consultant to help answer the following research questions:

- How have the ASC and the private sector improved market opportunities and assured product quality for Soybean farmers in Egypt?
- How have the cooperatives improved their governance capacity?
- How has the project influenced food and livelihood security of the farmers and their families?

Answers to these research questions were initially planned to be collected using the below described data collection tools. The case studies for farmers, capacity assessment tools for the board of directors, and the focus group discussions for the farmers.

i. Case study

Case studies in research provide more background and details about the project activities and help the reader understand the real impact of the project on communities' lives. In practice, the case studies sought to find out how the ASC (ASDF) and the private sector may have helped in improving market opportunities and assuring the quality of Soybean production in the three governorates. Six case studies were planned for collection, but only five case studies were handed to the report writer. The project staff could not retrieve the all the data collected in the previous assignment. The basis for the selection of the case studies was not clarified to the report writer nor was it clarified in the previous consultant proposal. A set of 5 case studies were handed to the report writer from the previous consultant.

ii. Capacity Assessment Tools

The Capacity Assessment tool was planned to be administered with cooperatives' board members. The aim was to compare the data with the baseline which was supposed to be collected at project inception. A total of six FGDs were held with the board of directors of six cooperatives; two in each of the governorates of the project.

The Capacity Assessment Tool sought to assess how the cooperatives may have been able to demonstrate accountability, whether they have a financial system in place, whether there have been any improvements related to the gender component of the boards and whether there are regular and democratic elections in the cooperative board.

In practice, the Capacity Assessment tool was turned into a Focus Group guide rather than an assessment tool with some of the cooperatives. Other cooperatives in Beheira, which is contextually different, hardly had any components of the capacity assessment tool administered. Rather, a set of questions resembling those of the farmers and the meetings with the Extension Officers were administered. It was reported by the data collectors

that the model of operation in Beheira was different from Benisuef and Minia.

iii. Focus Group Discussions (FGDs)

Initially 60 FGDs were planned for the previous consultancy. Field Coordinators held six FGDs instead with farmers in each of the three governorates. Each of the farmers was related to one of the six cooperatives with which CARE has worked throughout the project.

The FGDs mainly aimed to explore how the project may have influenced food and livelihood security of the farmers and their families. The facilitators discussed the areas of Soybean cultivation and the factors affecting the expansion in the cultivated area. It also discussed the respondents' relationship with the ASC (ASDF) and their feedback on the capacity building received during the course of the project. The FGDs also covered farmers' access to various resources such as credit and farmer inputs and whether the project has enabled the farmer to acquire more assets. Finally, the farmers were asked about the impact of the project on farmers' ability to provide for their family.

iv. Interviews with Extension Officers

Although initially unplanned by the previous consultant, the Cargill Project field coordinators covered Extension Officers during the data collection for the project evaluation. They considered triangulation from Extension Officers as important to ensuring the data is analyzed from the perspective of different project stakeholders. The discussions during the interview covered their role in the project, their knowledge of similar projects, their views regarding the agricultural land grown in Soy and the CARE/Cargill project. The discussion also covered how they view the factors affecting the farmer decision to grow Soy and any suggestions they have for the future.

7. Study Limitations

The field work has been carried out during a total of six days, two days in each governorate. The limited time frame did not allow the writer of this report to be part of the field work and to be able to seek more details about interesting findings from the evaluation. That being said, the field coordinators exerted great efforts to collect the required data for the evaluation, performing data collection during their working day despite having daily responsibilities for the project. The information lacked sufficient depth and interviews did not include enough time for probing to generate deep information, nor did the report writer have time to go to the field and spot check.

Quantitative methods for data collection were banned by security for the time being. Quantitative information is especially useful during final evaluation to cover a broad range of project stakeholders and beneficiaries and to extrapolate data to be representative of the population. Also to enable providing a good portrayal of the population. Lack of a demographic description, such as education levels and living standard, of the research respondents particularly with farmers prevented a thorough understanding of their language and their responses, which were thought to be somewhat exaggerated. It is understood that the project targeted small-scale farmers, but this should not be a reason to make assumptions about their background, their level of education or their living standard. Understanding issues like whether they live among an extended family or as an independent small family for example will give a different interpretation to what they may have done with the extra profit they may have gained from cultivated Soybeans. Understanding their consumption patterns could guide the new project phases as to what interventions would be most useful to the farmers. The same would apply for the Extension Officers and interpreting their training needs and their perceptions of the different seeds used in growing Soy beans.

Breaking down the assignment over two contracts has definitely affected the quality of the report, with some information, which had already been collected in the previous contract being lost. It would have been very important for the previous and the new consultant to convene and handover the work before the termination of the previous contract. However, the previous consultant was unreachable and timely action needed to be taken to develop and finalize the report. Attempts to overcome this shortfall included one meeting with the Field Coordinators/ data collectors and one meeting with the project manager. These meetings helped understand their reflections from the field and the challenges they encountered from the different stakeholders involved in the final project evaluation. It also helped explain some of the exaggerated reactions of the farmers during the data collection, which will be explained in footnotes.

8. Findings

a) Farmers

A total of six focus group discussions were held with farmers in the three governorates; two in each governorate. The discussions covered their change in their technical awareness levels, how they view the services that have been provided to them as well as their views towards production, marketing, sales, and the role of cooperatives in supporting them with respect to Soy Beans.

In terms of farmers' profiles, the project targeted small scale farmers in a higher age bracket than was expected. As per statistics collected in Minia and Benisuef, the farmers targeted fall in older than expected brackets. Only 16.7% of the farmers targeted fell between the age of 31-40 years, while 70% were above that age. CARE staff reported that these were

the age brackets interested in joining the project, since younger ages were engaged in more income generating activities than Soy bean cultivation.

i. Awareness

Before the project, Minia and Benisuef had grown Soy bean but stopped due to unsatisfactory productivity levels and difficulty of finding a market for their harvest at reasonably profitable prices. Their attention picked up with the advent of the project through the Extension Officers. Some followed immediately while others waited for beginning of the following season before they make this decision. In Benisuef particularly, the farmers stated that the above-market prices offered by Cargill were the main driver for them to go back and grow Soy bean again. Beheira was very new to this kind of crop. For the majority, it was their first time to grow Soy bean in this area.

In general, all farmers appreciate all their new learnings from the CARE project whether through the training, field visits or Extension Officers. The marginal learning was especially high in Beheira area since it is a newly introduced crop there. Some referred to the new Giza111 seeds and adding the *Aqadeen* as very valuable in securing good productivity when growing Soy beans. Beheira farmers emphasized their new knowledge that growing Soy is beneficial to the following crop.



Figure 3: Researchers follow up on Farmers in the field

The majority of the farmers said that they tried to intercrop and are happy with the results. According to the statistics from Minia and Benisuef, 84%⁹ intercropped Soy beans with other crops. A farmer from Saf Abu Gerg (Beni Mazzar, Minia) reported that intercropping has produced around 1070 kg soybeans per feddan and 40% of the full Maize feddan¹⁰. Yet, a few preferred not to intercrop. One farmer explained that he is worried if one crop gets a disease it would be contagious and another farmer preferred that during harvest he does not face any bottlenecks from another crop. Most of the

⁹ 84% of the 2222 in the sample drawn by CARE officers.

¹⁰ At baseline, the average productivity per feddan was reported to be 1250 KGs. This farm was able to produce a yield equivalent to 85% of a feddan of soybean in addition to 40% of a feddan of Maize.

farmers reported that soybeans were grown as a cost effective alternative to maize and other traditional crops like potatoes.

All of the farmers stated that they participated in more than one training event and sometimes up to six events. Farmers frequently reported more than one visit from the Extension Officers to their field, field-days, and in-farm training. All these activities were done before, during, and after harvesting the soybeans. Farmers reported having regular contact with the Extension Officer and being able to contact him by phone as well. *“The Extension Officers told us everything; how to irrigate, how to fertilize and when to spray. Many times they came with us to the field to look at our crops and we also spread the information”*. Many farmers also reported that they have corrected some misconceptions especially around irrigation practices which made a lot of difference to the quality of their output. Farmer from Minia and Benisuef felt especially grateful to the new seed Giza111 which, in their view, is better than the traditional *“Baladi”* seeds that they have used before: *“we have found that it fights plant diseases and produces less green content”*. The statistics in Minia and Benisuef show that 67.3% used Giza111 and 29.7% used Clark seeds.

ii. Services

Farmers were not aware of any similar projects like CARE’s within their area. They were generally happy with the services that were offered to them particularly when the outcome at the end of the season was increased financial gains from their harvest. They have found that the Soy beans cost less in terms of inputs, require little physical effort in harvesting, and the market can offer a high price for it. Yet, marketing difficulties in the second and third seasons seem to have undermined the services that were offered. In Nubareya, Beheira one farmer had to reduce the land grown as a result of his inability to sell the Soy beans.¹¹

In terms of their suggestions for services improvement, many farmers asked for the provision of seeds on credit, and in some instances for free. Some farmers reported lack of *Aqadeen*, except in demo farms, and asked for it to be available in their area. Yet, requests for assistance in marketing were recurrent whether in the form of providing marketing training to the farmers or helping them open marketing channels. One farmer from Beheira asked that CARE assist them in opening a marketing area in every Markaz to ease the load on the buyer and *“not leave them at the mercy of the market”*.

As for sourcing their seeds, Minia and Benisuef data in 2016 reveal that 25% of the sample bought their seeds from cooperatives, 24% bought them from the market and 22% prepared them at home.

¹¹ Initially, the entire project was built to market the Soy bean harvest to Cargill. The prices offered by Cargill Egypt lead to raised farmer expectations which were the least to say not met in subsequent seasons. Cargill faced huge Soy bean shortages due to the disappearance of foreign currency from the market, which prevented the operation of their factory in Borg El Arab.

Cooperative	25%
Market	24%
Home	22%
Agricultural Extension	18%
Agricultural research Center	12%

Figure 4: Sources of seeds for Farmers of Minia and Benisuef, 2016

iii. Production

All farmers from the Upper Egypt governorates; Benisuef and Minia had grown Soy before the project, yet they reduced the size of land or stopped due to low productivity of land and their inability to sell at competitive market prices; *“The best feddan produced 1000kg before the project”*. For Beheira, they had never grown Soy beans before the advent of the project.

Farmers were very satisfied with what they have learned throughout the training seminars and field visits, especially that it reflected positively on their productivity and profit. One farmer referred to the Giza111 seed as more productive and producing less green content.¹² All farmers that were consulted understand very well that Soy bean is much more profitable to produce than other traditional crops due to lower input costs and higher productivity as well as the fact that it does not require as much physical effort during harvest as some traditional crops such as maize. Yet, farmers could not give up growing maize because it has many domestic uses compared to the limited uses of Soy. Most of the family and its cattle rely heavily on maize to secure their food and nutrition needs, while Soy has to be treated with heat and used in small quantities only for cattle. Some farmers reduced the size of land they use for maize to be used for more Soy production, others who did not have enough land were able to rent more land to increase their Soy production: *“when we were blessed with profit, we were able to rent more land and grow more Soy”*.

In Ettay Al Baroud (El Beheira), farmers provided the below table to compare between the costs of producing Maize versus Soy beans:

Service	Soy beans	Maize
Seeds	LE450	LE800
Irrigation	Every week	Every two weeks
Cost of fertilizers	LE300 + Aqadeen LE150	LE2400
Waste	Hay is sold	Firewood is a burden

¹² Soybeans with green content were rejected by Cargill Egypt. In the Clark seed flower blooming happens gradually, while Giza111 seed matures fully at the end of the cycle. However, Giza111 has a cycle of 120 days which is longer than Clark (100 days). Some farmers failed to follow the technical advice of the Extension Officer and used the wrong seed for the wrong cycle and their seed did not have full maturity (High green content).

Production	1.4 tons*LE7000 = LE9800	20 Ardeb * 300 = LE6000
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The improvements in land productivity have been experienced to all farmers. All of them reported that productivity before the project ranged between 1000-1200kg per feddan at best. Now most farmers reported having witnessed productivity above 1500kg per feddan and up to 2000kg per feddan especially if it is supported by Agricultural Extension (demo farm). The statistics collected in 2016 from Minia and Benisuef confirm this finding, reporting that productivity per feddan in 2015 was 1300kg which increased to 1700kg in 2016¹³.

In referring to the new skills they have acquired through agricultural extension and training, farmers particularly appreciated their new learnings around irrigation from CARE. They learned that irrigation should be every 15-20 days rather than 45-50 days, which reflected positively on their harvest quality. Before learning that, Benisuef and Minia farmers's Soy plants had suffered from dryness and falling leaves for some time before they corrected their irrigation method. Some also referred to Aqadeen as an important input, but complained that it was not always available except in Agricultural Extension land (Demo farms)

iv. Marketing and sales

All farmers stated that their crops were marketed to Cargill in the first season. Interestingly, Beba, Benisuef reported that the farmers received their money late. Many of the farmers shared the belief that they needed more support in marketing their crops after the first season. Farmers expected to sell at the Cargill high prices at the beginning of the season like they did previously. But Cargill did not buy the harvest which caused farmer frustration. Both CARE and ASDF had a binding agreement with Cargill to provide them with the agreed upon supply of soybeans, which restricted their support in marketing soybeans to other market players. Having sold profitably the first season, farmers had acquired an understanding of the market potential, yet they do not have a lot of power to withstand buyer manipulation. Market for soybeans is very "heavy" as one farmer described it. It has very limited domestic use compared to maize.

When asked about their motivation for expanding soybean cultivation, farmers stated the number one reason as the presence of a higher value market for their crops: *"when this happened, the market was uncovered for the growers and led the farmers to expand"*. Conversely, they also stated marketing as the main barrier for cultivating more soybeans. Farmers very frequently referred to the *"Gameya"*, the cooperative, as having harmed them after they worked to expand their cultivated Soy land to acquire more profit. The number of farmers and area cultivated increased in the second season of the project, which coincided Cargill's inability to buy directly from farmers.

¹³ This figure reflects the case of farmers who followed agricultural extension precisely. Average production was around 1350 kgs in Minya and Beni Sweif

Agricultural cooperatives had binding contracts with both ASDF and Cargill to provide the supply of soybeans that constrained them from selling soybeans to other traders early in the marketing season. Accusations like “*we were tricked!*” were used to express the frustration felt by farmers because the ASC not able to market their Soy beans to Cargill as it did in the first season. In Minia, farmers agreed to increase their cultivated land for subsequent seasons by 40% after they sold to Cargill with a higher-than-market price. All farmers stated that, when Cargill refused to buy their harvest in the following seasons, they were left at the mercy of the middlemen who enjoyed a profit margin of LE2500-3000 per ton. The difference in price occurred as farmers had contracted prices set early in the season when demand was still limited. Traders on the other hand had the ability to withstand freezing their capital, in the form of soybeans, later in the season when market prices surge. All farmers felt they were more worthy for their effort to earn this money than the market buyers.¹⁴

Farmers in Minia reported using a very small quantity of crushed soybean for feeding their poultry and cattle after baking it in the oven to remove ‘a poisonous substance’. The high content of oil in soybeans requires technical capacity to regulate the oil and protein content in the fodder to match animal needs without harming them. A group of farmers said sarcastically “*This is a rewarding crop, but if we can’t sell it, what can we do?! Eat it?!*”. Many smallholder farmers cultivate their land and buy their inputs on credit, let alone if they are renting their land. They cannot wait to get their profit at hand to repay all their rents and dues and use what is left for personal expenses. Due to the seasonal nature of agriculture, many farmers timed major consumption with the harvest season. Hence, it is imperative that farmers are aware of the expected time of payment.

Before the project, prices of Soy were around LE1200 to 1400 per ton. While farmers were happy with the sales price in the first season where it jumped up to between LE3000-5000, a few complained that the input price jump may not have given them a chance to enjoy the profits they made in the first season. Those farmers who joined the project from the first season sold their crops to Cargill and enjoyed a big price advantage. The statistics collected from Minia and Benisuef in 2016 show that the above is true. The highest price a ton of soybeans has reached was LE5600 and the average sales price was LE4877. Farmers were fortunate that Egypt was going through local currency devaluation. With soybean prices linked to the international market, imported soybeans became unaffordable to some industries, which protected the prices of local soybeans from a deep drop as a result of increased domestic supply.

v. Role of Cooperatives

¹⁴ Farmers failed to understand that middlemen primarily benefit from demand and supply gaps. In the first season, the prices of Soy bean increased because of the competition between Cargill/CARE and the middlemen. Farmers can sell their harvest at the end of the season for higher prices, which is what middlemen do, but they are usually risk averse and have considerable debts to pay back by the time of harvest.

While cooperatives acted as a facilitator between farmers and the project, farmers did not provide much feedback on significant roles played by them. In Beni Mazzar, Minia, farmers asked for more facilitation of services that would support them in cultivating the land such as the provision of inputs on credit.

b) Board of Directors

CARE/Cargill project field coordinators managed to meet Boards of Directors of the six cooperatives for data collection. However, the data collection tools used to collect information was not the same in Beheira governorate as was used in Minia and Benisuef. In Minia and Benisuef, the Capacity Assessment Tool was used as a Focus Group guide rather than a tool, while in Benisuef a questionnaire similar to the one used for Extension Officers was followed. Nevertheless, all the information collected was captured below. Information that was mainly captured from Beheira was under the title “other information”.



Figure 5: Cooperatives Meetings, Final Project Evaluation

i. Administrative and support functions

Minia and Benisuef cooperatives had board members in place and listed some staff members as well for administrative functions such as Cooperative Advisor, Store Keeper, and Treasurer. It seemed that Beni Mazzar (Minia) cooperative has other projects to provide butane gas to farmers and had one officer in charge of this project. In Benisuef's El Fashn District, the cooperative reported having three women on their board.¹⁵

ii. Technical and support functions

All cooperatives in Minia and Benisuef reported that the awareness raising provided through Agricultural Extension and all the training provided by CARE were free of

¹⁵ The project staff reported that two of the females on the board came as a result of the gender mainstreaming and governance activities carried out by the project.

charge to the farmer. Cooperatives provided all input materials with prices that are competitive when compared to purchasing from the market. They also added that the inputs from the cooperatives are safer than the market bought ones. Bani Mazzar cooperative (Minia) has a Butane gas Project selling gas to farmers and allows farmers to purchase seeds on credit¹⁶. In Mattay (Minia), the cooperative has a special contract with the Veterinary Unit to allow farmers to check their animals. In El Fashn (Benisuef), the cooperative rents tractors to the farmers at a cost that is below the market. It also allows farmers to purchase seeds on credit with a 12% interest rates compared to the commercial 18%. Beba (Benisuef) cooperative provides seasonal loans and also provides household products for the farmers with a minimal profit margin.

Bani Mazzar is the only cooperative reporting having strong networks with seed companies, fertilizer companies and Butane companies. All cooperatives in Minia, Benisuef and Nubareya (Behiera) reported regular networking with the Agricultural Research Center. Minia listed more organizations such as the Ministry of Agriculture and Land Reclamation, Ministry of Irrigation and the Agriculture Development Bank.

iii. Culture and structure

Not much was said around cooperatives' vision. Most of their future plans are confined to expanding Soy beans and improving their marketing capacity to support the farmers. Nubareya cooperative plans to build on its previous experience marketing fruits and vegetables to find new markets for the Soy beans.

iv. Resources

This section was not covered by the data collectors in their discussions with the Board of Directors.

v. Other Information

a. Awareness and Marketing

In Beheira, the cooperatives got introduced to the project through the Project Technical Advisor who moved the knowledge from Upper Egypt (Minia and Benisuef). Nubareya cooperative states that they initially agreed to cultivate 150 feddans of Soy beans and now they have 550 feddans. Ettay El Baourd cooperative members stated that Soy cultivation was not popular in their area. It only started growing when the project started and targeted 33 feddans. Although they have earned a remarkable LE5000 per feddan of soybeans, they complained that they were left out in marketing efforts after that. Apparently Al Beheira area was

¹⁶ Many areas in Egypt still suffer from efficient natural gas infrastructure. Many Egyptians depend on butane gas cylinders as the main source of fuel for household and basic businesses. However, underserved areas in Egypt suffer from lack of gas cylinders whereby prices can surge in certain area because of the high demand against limited supply.

especially disadvantaged with the lack of marketing in subsequent seasons because they were completely dependent on CARE to market their crop to Cargill. They did not have an established Soy growers group like in Upper Egypt.

b. Training Received

Nubareya cooperative in Beheira and Beba Cooperative in Benisuef were appreciative of the training their board has received from CARE. The Board received training on governance, financial management, and effective communication. Nubareya cooperative board stated that they now have registers for all the training they received and have just approved a grievance procedure. They are happy they are now networking with wholesale Soy buyers from Upper Egypt.



Figure 6: Cooperatives training

c. The cooperatives role in the project

There is a strong understanding at the cooperatives level of the importance of their role to making the project a success. With no exception, all cooperatives provide inputs and technical assistance to the farmers. Some cooperatives even go further and provide inputs with payment facilities to help the farmer secure safe and competitively priced inputs.

d. The ASDF

It does not seem that the cooperatives ever had a clear understanding of the ASDF and its role in the project. The only thing they know is that it is affiliated with CARE. Some have a perception that it is the reason behind their inability to market their soybean crops. The coincidence of introducing ASDF as a facilitator to regulate quality control to match Cargill needs with Cargill's inability to purchase soybeans from farmers raised speculation. For example, Beba cooperative in Benisuef suspected that it may have been attempting to contract a Soy price with the farmers that is lower than the price it would sell to the market with.

e. Areas for improvement in CARE/Cargill project

Through all the discussions, it was clear that the cooperatives appreciate the project, particularly the technical assistance, and how it helped them uncover an unexplored market for soybeans, yet they still require support in some aspects of the Soy cultivation process. Their requests ranged from marketing and initiating advanced farming contracts to providing quality inputs with lower prices. Most of the cooperatives requested more training in marketing to empower them to sell through more than one channel. Cooperatives asserted they wanted to diversify their marketing channels to include more market players.

c) Extension Officers

As mentioned earlier, interviews with Extension Officers were not planned. The Cargill/CARE project field officers drafted their own interview guide to cover how they became aware of the project, their understanding of their role as Agricultural Extension Officers, and their outlook as to the land that will be cultivated for Soy. Their perceptions as to how useful the Cargill/CARE project was and their recommendations for areas of improvement were also covered. Extension Officers were also asked about the factors that would affect farmers' decision to grow Soy and their understanding of the role of the Agricultural Service Centers (ASDF).

a. Awareness of the Cargill/CARE project

Not much information was shared around how the project was introduced to the Extension Officers. In Beni Mazzar, Minia the Extension Officer referred to Mr. Sami who worked with them to select the beneficiary villages. No further information could be picked up from the transcripts around project introduction.

b. Role of Extension Officers

The Extension Officers have a strong understanding of the importance of their role in supporting the farmers. All of them referred to regular field visits before, throughout and after the cultivation process. They also provide training seminars and collaborated with agricultural researchers to provide farmers with accurate information. In Minia and Benisuef, Extension Officers stated that they are also available for answering farmer questions through the telephone. In Ettay El Baroud (Beheira), Extension Officers develop print outs to disseminate to farmers with agricultural instructions.



Figure 7: Extension Officers follow up on Farmers in the field

c. Other agricultural projects in the area

None of the Extension Officers spoke about any other agricultural projects in their area except in Ettay El Baroud, Beheira. The Extension Officer said there are 61 Agricultural Extension fields devoted to Soy bean projects falling under entities other than CARE.

d. The size of Soy cultivated land

From previous discussions, it was clear that the main driver for changes in the land cultivated with Soy would be the availability of a market for it. A direct question was asked during the interview as to why the cultivated land is declining for Soy. Yet, the Extension Officers did not confirm whether the cultivated land declined or not, they did use it as a reason to complain again about the marketing. In Beheira, the Extension Officer said the Soy bean was a heavy crop to sell because it is new to the area and the farmers got stuck with the Soy in their stores keeping them from paying their dues and debts after the harvest. Yet, Beni Aly cooperative in Bani Mazar said that the cultivated land has grown from 60 to 100 feddan in the second year and attributed this growth to high productivity of Soy beans and low input costs compared to Maize. Beba (Benisuef) highlighted that it grew the cultivated land by 40% and promised more growth in the cultivated land if there will be a market for the crop.

Extension Officers explained that the growth in Soy cultivation was mainly on the account of Maize even though they stated that the farmer is forced to grow maize for its multiple domestic uses for the family, poultry and cattle compared to the limited use of the Soy bean. In El Fashn (Benisuef), Extension Officers explained that Maize cultivation may grow again with all its disadvantages compared to the Soy beans, but because farmers are able to market it better than the Soy bean.

e. Extension Officers training

All Extension Officers reported having gone through CARE training. They referred to effective communication, governance, gender, financial management, technical training on Soy cultivation. Ettay El Baroud referred to training on organizing awareness campaigns which could be part of the effective communication training received by the other Extension Officers. Mattay Extension Officers referred to a new technique to tie the Soy crop before harvesting which helped a lot in the harvesting process.



Figure 8: Field training for Extension Officers

f. CARE performance

All Extension Officers acknowledged CARE's role in introducing and/or re-introducing the Soybean to their area. Most of them had not known much about the Soy cultivation process especially with the new seed variety, irrigation methods, and other techniques they have learned through the CARE project. They now know how to increase the productivity of the land. The Extension Officer in Beni Mazzar explained that intercropping has grown in his area gradually from 25%, to 40% and then to 60%. In Benisuef, the Extension Officers acknowledged the organization and support of the project to the development of Soy cultivation through introducing new techniques and new seed varieties. Yet, failure to help with marketing the crop cast its shadows on their opinions.

They unanimously recommended further assistance with marketing Soy beans in any form when they were asked what CARE can add to its support. An Extension Officer in Ettay El Baroud (Beheira) recommended more training on climate change, its impact on the crop, and how to avoid the impacts as well as more specialized training on fighting Soy diseases. Beni Mazzar (Minia) officers recommended providing seeds, Aqadeen and making advance payment for the harvest (contract farming) and the introduction to mechanization of Soy cultivation. Minia officers generally asked for raising the frequency of their visits to the Soy farmers. El Fashn officers asked for exploring more seed varieties that have higher productivity, shorter life, and more resistance to diseases.

In terms of seed variety, Mattay in Minia and all Benisuef Extension Officers reported that Giza111 may not be the best seed since it produces dry hay which is

not very useful to the farmer who feeds his cattle. They also stated that its cycle at 120 days is much longer than that of Clark seed at 90-100 days. In their perspective, Giza111 does not reach full maturity, as farmers tend to delay the seeding schedule. Mattay Extension Officers also reported that the Giza111 seed was not made available to some of the farmers.

Add somewhere: the idea of selling to Cargill at the beginning of the project is the reason behind raising their expectation as to prices. Cargill did not buy their harvest in subsequent years, they had to face the local market. Nevertheless, they did recommend the continuation of the project. Cargill process at the beginning of the marketing season determined the dynamics of the price fluctuation and market price. Buyers waited for Cargill to set the prices and based on it they determined their own purchase prices.

g. Factors affecting farmers' decision to grow Soy

All Extension Officers who responded prioritized availability of a market as the number one factor affecting the farmer's decision to cultivate soybeans. This is particularly important for soybeans due to its limited domestic use in the three governorates and in Beheira especially as it is a new crop in this area. The officers in Beheira recalled that farmers had to get in touch with buyers from Upper Egypt to get their harvest sold, as they knew of no other way.¹⁷ In Beheira, Extension Officers added the provision of in-kind support in the form of seeds, pesticides, fertilizers, and providing a guiding market price for the crop at the beginning of the season as very important. In Mattay (Minia), officers said that farmers calculate the cost of their inputs before cultivating their land and resorting to the black market due to the shortage of safe fertilizers through the cooperative.

h. Aqadeen¹⁸

All officers gave credit to using Aqadeen. Since it is an affordable and effective ingredient, it was used to cut down on the use of fertilizers for the soybeans and reported good results. They all advise farmers to use Aqadeen. Yet, Beheira officers reported that Aqadeen is only available to Agricultural Extension Farmers and not for other land.

i. ASDF

About the ASDF and its role, Nubareya Extension Officers believed that it may have been behind the failure to market the Soy beans produced by their farmers and explained that it created a big problem for the farmers. They even said it lead them

¹⁷ CARE did not intend to facilitate marketing. Some of the farmers demonstrated against the cooperatives when their harvest was not sold on time and CARE had to intervene to connect Beheira cooperatives to upper Egypt to avoid any further escalation.

¹⁸ 'Azotobacter' – Nitrogen fixing bacteria.

to losing trust in CARE as an organization. *“If it weren’t for Eng. Osama the farmers would have never grown Soy again in the area”* explained one officer¹⁹.

d) Case Studies

a. An Independent Life

Magdy Gergis is a 39-year old father of two girls, Tina (11 years) and Malak (4 years) , who lives in El Fashn district, Benisuef. In a community where living with extended family is very common, Magdy decided to separate with his small family into his own private house. This was very challenging because it meant separate expenses, but he took the risk and moved with his wife and children into a humble house with uncovered red-brick walls. *“I had nothing at this time, but I was growing wheat, maize and soybean,”* explained Magdy.

It was a long learning process. At the beginning, Magdy was not able to differentiate between the different seeds and sometimes local merchants cheated him because of that. In some instances, he lost money. One day, he heard about the project and the soybeans sessions held at the community development association in the area. He attended the sessions and was very eager to learn, but he did not have enough money to cultivate his land with the new techniques he learned. Luckily, the community development association was offering seasonal loans to cover land cultivation and the payment of these loans would be installed so he would not have to repay all input costs at once after harvesting his crop. So again, he took the risk and applied for the loan.

Now, Magdy is very happy he is able to pay the rent of his land, buy food for his animals and fix the walls of his house. This is all attributed to the profit margin he gained from soybeans. He even bought a ceiling fan to make his wife happy and a TV and refrigerator for his children. He is also able to save for his children’s education, because the most important thing to him is make his children a better future.

b. Better Knowledge Means Better Life

Tharwat Adly (45 years) lived in El Fashn district, Benisuef with five children; three boys and two girls at different stages of their life with the eldest just completing his vocational school and the youngest still too young to go to school. Tharwat rented a feddan of land to grow wheat, maize, and soybeans. At the beginning, he had many issues with improving the quality of his harvest. When he heard about the training sessions that are being offered on cultivating Soy beans, he thought he had nothing to lose if he participated in these sessions

¹⁹ Again, this was explained by the project staff as due to farmers’ high expectations. Nevertheless, the ASDF did support the marketing in the second and third seasons.

“The sessions were an eye-opener. I learned about the seed varieties that have higher productivity. I changed my seeds from the traditional Clark seed to the Giza111 seed which has much higher productivity”. Now, Tharwat brings safe and high quality seeds from the community development association and after harvesting his crop, they help them sell his product. Tharwat made a profit and was able to rent an additional half feddan to grow more soybeans. Now he is working to gain more profit so he can help his elder daughter get married and save more money for his children’s education.

c. A Bright Future Ahead

Hany is 20 years old. He began helping his father cultivate his land since he was 12, but when he reached 16 years old, he decided to be responsible for his own piece of land. His father had a total of half a feddan with a quarter used to cultivate Soy and the other quarter to grow maize. Hany was always curious about the difference between soybeans and maize, but his father would always promise to “tell him later”.

When he heard that the community development association is offering orientation session about soybeans, he decided to find out about the difference between soybeans and maize himself. He was very proud he made this decision. He gained new knowledge that equipped him to make a deal with his father. He would plant six carats of land on his own. He knew it was a big risk to take in front of his father, but he armed himself with the new techniques he learned and the new type of seeds he got introduced to (Giza111) in the awareness sessions. Yet he reduced the experiment to only three carats of land. When the season was finally over, the results were great and the following season he cultivated the whole six carats. I convinced my father to grow soybeans as well. He is now growing more soybeans than maize. *“Now I feel I can depend on myself and earn my own income. I can also think of starting a family of my own”*

d. Better Quality of Life

In Beba, Benisuef has lived Hazem Raafat with his small family for ten years. Life has been kind to him and granted him Nada (9 years old) and Mohamed (1 year old). Mohamed has been cultivating land all his life to provide for his family. He owns one feddan and rents another twelve carats. He has been cultivating soybeans for four – to five years but he stopped because he could not catch his breath with the decline in the market prices of Soybeans. He did not see any point in growing soybeans again as it hardly covers his household expenses and he finds it very difficult to find a market for it. *“The local buyers at that time were exploiting us and we hardly made any profits from sales”.*

When the CARE project started, the sales price for Soybeans jumped because we sold directly to the Cargill factory. The Extension Officers also helped us use new

techniques in cultivating our land which made a lot of difference in the crop. Hazem used the profit to build two more rooms in his house where he can raise some cattle to support him in feeding his family when times are hard. He was able to save a lot of effort and time for his wife when he bought her an automatic washing machine. His children can also watch TV and be happy after he bought them a TV. The entire family is experiencing a better quality of life with the small improvements their dad has made in their household.

e. Protecting My Earnings

Gomaa's (49 years old) father passed away when he was a one year old baby. He was brought up by his uncle who took him to the field with him and taught him to cultivate land. When he turned 14, his uncle allocated 4 carats for him to cultivate on his own. His uncle travelled for 2 years and one day he called Gomaa and asked him to marry his cousin. Gomaa was puzzled because he owned nothing to be able to support a family, but he felt grateful for his uncle and decided to do as he was told. He and his wife now have 4 children; 3 girls and a boy.

"I earn my living through agriculture. I am a farmer and I raise some animals to provide for my family". Gomaa's family can use these animals for cheese and butter. Gomaa has been cultivating Soy beans using Clark variety for many years. He could hardly produce 800 kg per feddan and the prices were very low to sustain this crop. He stopped growing Soy bean altogether.

But the new project introduced a new type of seed; Giza111. When Gomaa used it, his production jumped to 1600 kg per feddan. The interventions made by the community development association to support marketing of the crop protected him from the market greed and won him a lot of money. The Extension Officers are also very supportive to Gomaa, they drop by twice a week to follow up from the very beginning of the season up until harvest point. They help him with planning his land.

Gomaa is grateful for the outcome he experienced with Soy beans. He is now able to cover the expenses of his daughter's marriage. There is still more money needed for her marriage and this is why he will keep cultivating Soy beans.

9. Analysis of findings

As per the project theory of change illustrated earlier in this report, the project was designed around four strategic objectives:

- Strategic Objective 1: Impact population are sustainably optimizing farm production
- Strategic Objective 2: Impact population are effectively engaging with and benefiting from market

- Strategic Objective 3: Impact population are food and nutrition secure
- Strategic Objective 4: Strengthening local governance among agricultural stakeholders.

This section builds on the report findings and analyzes the extent to which the strategic objectives have been achieved. It explores areas of improvement for subsequent project phases.

Strategic Objective 1: Impact population are sustainably optimizing farm production

CARE has succeeded in introducing a new more productive seed variety to the farmers in the three governorates. The majority of the farmers have used it and have reported higher productivity per feddan reaching 2000 kg per feddan in Demo farms. However, more care should be taken in the future to secure enough seeds for the demand. Although this information was not echoed by the farmers, Extension Officers in Mattay district in Minia reported that some farmers had to use Clark variety because the Giza111 was not available to them. Yet some farmers applied the wrong cultivation techniques which lead a few to provide negative feedback regarding green content and dryness of their cultivation.

Intercropping was another technique that farmers found most valuable. Although they were conservative at the beginning, farmers gradually increased their intercropping and have reported achieving great results. Yet, some farmers are still skeptical when it comes to intercropping. Their concerns evolve around avoiding contagious disease from spreading from one crop to another or making the harvesting process easier. It was not clear whether they are expressing these concerns based on previous experience.

There was unanimous agreement across all stakeholders involved in this project that training, capacity building, and field visits were an invaluable aspect of the project. Farmers, Board of Directors and Extension Officers have all acknowledged learning new techniques that made a turning point in the outcomes of cultivating their land for Soybean especially the knowledge around new seeds and irrigation methods. More opportunities for learning were requested by all stakeholders, especially with regards to marketing. Other topics included climate change mitigation, disease control, and new seed varieties. The most tangible benefits of training were evident among the farmers as it was reflected directly on their land productivity, profit, and the secondary products generated from Soy beans such as cattle feed. Yet, what make the capacity and skills last is the fact that the Extension Officers have acquired the knowledge and are expected to keep circulating this knowledge as long as they are working.

The cooperative remains a protective arm for the farmers everywhere. But farmers demanded more support from CARE (perhaps through the cooperative) in the form of credit or seasonal loans to help them expand their production and purchase high quality and safe input material to make use of such a profitable crop. These facilities can help the farmers wait and search for better markets for their Soy beans. Extension Officers explained that farmers cannot take the risk of waiting to sell their crops due to the debt and land rent

burden they incurs every year. This is the number one reason farmers could not tolerate any marketing hurdles or risks.

With the new cultivation techniques farmers used, all stakeholders were in consensus that the productivity of the land has increased, even those farmers who used the Clark variety reported increase in their productivity though not as high as the Giza111. In conclusion, to a great extent, Strategic Objective 1 has been met. It may not be clear whether this is the optimum use of land, but certainly the farmers are making better use of their land. Agricultural experts can examine whether more can be done to increase land productivity through new seed varieties or mechanization for example.

Strategic Objective 2: Impact population are effectively engaging with and benefiting from market

In the first season, the project was able to demonstrate the potential of Soy in securing local input to some industries like oil and fodder thereby uncovering an important local need. Yet, the sustainability of this marketing channel remains in question. All project stakeholders reported that CARE was able to show the market potential for Soybeans and clarify the profit Soy beans can provide for farmers but the project did not fulfill their expectations to enable them to use this potential to their advantage. CARE connected them to one channel but was not able to link them with multiples channels. Those who grow Soybeans are at higher risk of loss for a number of reasons. One reason is because to the farmers, Soy beans have limited domestic use and especially for the Beheira governorate farmers who grew the Soy bean for the first time and had no idea how to sell it to other buyers apart from Cargill. Some farmers demonstrated against their cooperatives when they could not sell their harvests.

Marketing challenges and issues have been brought up in every single discussion with all stakeholders. Even though they were all able to highlight many great aspects to the project, they were all able to identify what went wrong and many were angry and frustrated by losing their only buyer leaving them at the mercy of the market buyers who *“sucked up the profit in their bellies”* as many of the respondents described. Advance contract farming frequently came up as one of the measures to make the farmers feel they are more secure in terms of sales, but the project reports and stakeholder feedback did not reveal any progress on this front.

Project effectiveness in marketing was hard to measure during the second and third seasons due to the shortage in foreign currency reserves and the devaluation of the local currency respectively. Cargill’s inability to buy from farmers, being the sole buyer in this project, left them subject to market dynamics. While farmers were not satisfied by prices during the second season, the surge in market prices during the third season, due to the devaluation in the currency, helped farmers sell at a higher price than expected. However, the project was very limited in measuring the actual impact of devaluation on farmers. On the one hand, the devaluation of the local currency increased nominal local prices that doubled the price of imported soybeans. This resulted in a surge in demand on local soybeans, which increased the market price for local soybeans. On the other hand, the devaluation also caused high inflation rates of more than 30 percent. It is, therefore, hard to determine whether

devaluation had a beneficial or adverse effect on farmers. It is imperative for future phases to have a strong and sustainable marketing arm whether through providing training in marketing and networking or creating a sustainable body to support this process. It has proven to be very risky to rely on one marketing channel to absorb all the soybean produced by the project farmers - an issue that must be overcome, if the project will have further phases.

It is important to note that profitability is a product of many activities such as reducing inputs, increasing sales prices, sales of secondary products or increased productivity. Cultivation on beds reduces the amount of water and the fertilizers required. In conclusion, farmers reported that the prices are generally better since the intervention of Cargill in the first season. Indeed, stakeholders understood some market dynamics for the Soy bean crop and realized its potential, but they are still far from being able to engage and benefit from the market for Soy beans on their own.

Strategic Objective 3: Impact population are food and nutrition secure

It was clear that project stakeholders' reliance on traditional crops such as maize and potatoes to secure their nutrition needs is actually part of their culture. Of course, cultural norms are difficult to change and would take time that may extend way beyond the project life to accomplish. This was very clear when farmers explained that the Soy bean crop is quite risky because it has no significant domestic use to them, sarcastically saying "*What can we do?! Eat it?*" The project staff did start up some awareness sessions around alternative domestic uses for Soy bean towards the end of the project, but again it takes more time and should be dealt with creatively when introducing to the project beneficiaries. Until now, farmers and their wives do not see the value of Soy bean beyond industrial use and limited use with small quantities for animal husbandry.

Strategic Objective 4: Strengthening local governance among agricultural stakeholders

CARE provided a lot of training and capacity building for cooperatives and their boards of directors. The feedback on this intervention was very positive from the cooperatives. However, the Capacity Assessment Tools was not administered to expectations with the cooperatives to show how they applied the training they have received. It was not clear if the field coordinators (data collectors) were able to confirm that there have been democratic elections for example. It is important to know that most of the requirements of a strong cooperative are stipulated by the Egyptian law and regular auditing takes place with the cooperatives. Minia cooperatives were especially creative in serving their farmers and providing them with a variety of services to facilitate their agricultural process whether by providing inputs at competitive prices, or renting machinery or even providing Butane. In all cases, the local cooperatives are the closest entity to the farmers.

Cross Cutting issues

The project did not include specific interventions for gender equity and women empowerment, good governance or environmental sustainability, but some small interventions such as awareness sessions for domestic use of Soy beans have been reported

in some locations of the project. Two females joined the board in a cooperative in Benisuef as a result of attention to gender. Yet, more could have been done with better planning.

10. Impact and Sustainability

The main impact of this project is having introduced a new potential for Soy beans in the domestic market. It has now been introduced to the farmers, but there is more to be done to strengthen the value chain for Soy beans. Realizing the extent of savings, localizing the production of a crop like Soy bean can make for Egypt can be a very strong driver to continue the project and lobby for more stakeholder support, ensuring growers secure strong marketing channels. With the government plan for expanding fish farms Soy bean has strong potential. Coupled with this, the fact that oil companies are still importing Soy beans from Argentina and Brazil in significant, price determining, quantities signifies a continued need for growing Soy locally. The challenge now would be ensuring the Soy bean prices are competitive enough to be preferred over imported Soy beans.

There was little coverage through the data collection tools for sustainability measures. Nevertheless, interventions that were implemented with the cooperatives to build their capacity and that of the Extension Officers are considered a good measure to secure more lasting knowledge of Soy beans. The demand for growing Soy beans has to continue to keep the knowledge alive and by time, even without the project farmers will continue developing themselves by other means if demand continues for their Soy beans. As they said, the presence of a market is the main driving force for investing in Soy beans. Access to secure inputs may also continue through the cooperatives, but little would be expected to newer varieties unless there is a country related strategic direction for this, which may be sought through lobbying. To accelerate the above, more interventions to strengthen the marketing component of the Soy beans would be required.

11. Conclusion

First and foremost, it is very important to highlight that the amount of data collected and used to write this report did not enable the writer to provide sufficient depth and generalize results. Inaccurate baseline and monitoring data made the job even more difficult. These bottlenecks did reflect negatively on the quality of the report. For much of the data collected, clarification was sought from the Monitoring and Evaluation function and the project Field Coordinators as the transcripts lacked probing and were not accurately transcribed. Project staff attributed these issues to the fact that the data was collected over two attempts which put them in a very sensitive situation. Yet, the fact that they volunteered to collect the data to commit to deadlines is very courageous and commendable.

It was also noticeable that farmers used exaggerated language to describe their frustration with the marketing bottlenecks they have encountered in the second and third seasons. It needs to be clear that their frustration was due to the fact that they did not profit as much as they had expected rather than a loss. An important lesson learned here is the importance of managing expectations and clear communication with your stakeholders.

12. Lessons learned

The ultimate aim of this final evaluation is to measure progress achieved in the project against its objectives. This was to be done through a review of the project activities implemented throughout the project life and to provide input into the production of the new phase of the project. This section is designed to provide this input and ensure all the shortfalls of the phase under evaluation are avoided and all the successes are augmented and capitalized on.

- Farmers were very bitter about their feeling of being abandoned in marketing their products. CARE may have raised their expectations in the first season without ensuring that Cargill will buy their crop, but there certainly has been lack of clarity and weak messaging about CARE versus Cargill commitment. Marketing challenges have come up in every section of the focus group discussions and interviews with stakeholders, even when they were mentioning positive things they are always rammed by the marketing issue.
- The struggles to market the Soybean in the second and third seasons may have very much been avoided if they were accounted for as risks and contingency plans were in place in case they occur. Any project should include a risk register highlighting all the likely challenges and issues that may face the project and discuss a list of measures that can be taken to avoid, minimize, or mitigate this risk. The risk register has to be updated regularly throughout the project to include issues like weather conditions, political changes, and other events that would affect the project negatively or positively if they materialize. This will help project management in being proactive and maximize the use of the project time and resources.
- There were some discussions around accuracy of baseline information with the project staff. It is very important that this is repaired in subsequent project phases. Lack of monitoring and tracking tools and data can undermine all the effort that is being exerted by the project team.
- It is not clear why a midterm review was not held for the project. Again, this was one measure that may have uncovered project issues early on enable project team to take the necessary corrective action. Qualitative research could have covered this purpose.
- Project outcomes reflected the complexity of integrating Base-of-the-Pyramid actors into high-value markets. The project required extensive effort from both sides of the value-chain, Cargill and smallholder farmers, given the difference in their models of operations. While smallholder farmers were required to understand high-value market dynamics, including commitment to quality standards and extension guidelines, Cargill was also required to understand the lack of awareness of smallholder farmers with regards to corporate operations and measures of quality. The project failed to find a middle ground, particularly that Cargill facility had to withhold operations when facing foreign currency reserve issues. The project was optimistic in creating a market linkage with Cargill as the sole buyer. Beneficiaries were saved during the last season of the project due to the unintended effect of price increases caused by the devaluation of the

Egyptian. Unfortunately, some farmers in the latter seasons of the project were left with feelings of frustration and anger, as they were not able to benefit from high revenues that were available during the first season. For future programming, Cargill should consider the role it can play in developing the soybean market in Egypt.

- The relationship was created between the cooperatives and Cargill through CARE on one hand and the cooperatives and the farmers on the other hand. In doing so, CARE was on the frontline bearing risks of any contracted breaches by Cargill. Some work has to be done to restore trust between CARE and its stakeholders. Farming contracts for Soy growers have to be introduced to secure their sales. These can be arranged between cooperatives and other buyers in the Egyptian markets.
- The ASC (ASDF) has not been introduced properly to the beneficiary cooperatives and Extension Officers. Misinterpretation of its roles was noticed through FGDs and very negative feedback was provided. It is for CARE and Cargill to decide whether the ASDF has a role in the other project phases or not. It may be less costly and less time consuming for CARE to eliminate its role and hand its duties to other stakeholders.

13.Recommendations

- All stakeholders see there is a lot of room for subsequent phases for the CARE/Cargill project particularly with some of the project strategic objectives requiring more time to be fulfilled. There is obviously a very powerful market in Egypt centered around oil as a strategic ingredient on every table as well as the national objective to increasing food security by developing the fish farming industry which heavily relies on Soy beans for fish fodder. These are all strong indicators for a very high potential for the Soy market in Egypt.
- The new phase of the project should have a strong marketing arm to drive and develop the whole Soy bean value chain in Egypt. This should be a blend of interventions and skills building to all project stakeholders. In fact, it is suggested that the project name in this phase would reflect this important intervention and imply commitment to the project beneficiaries.
- The training and capacity building component should remain in the new phase covering more topics starting with marketing and networking and providing more information about the Soy cultivation in Egypt enabling the farmers to explore means of making Soy beans more competitive. CARE should collaborate with the agricultural research center to find more seed varieties with stronger characteristics that support competitiveness. A service that is crucial to continue and expand is the provision of seasonal loans and payment facilities to small-scale farmers especially if they are connected to agricultural inputs. Cooperatives seem to require more training on strategic planning and management, marketing and awareness raising on multiple topics.
- It was not clear how the governorates of Minia, Benisuef and Beheira were selected as project locations, but more governorates with abundant small scale farming and a

flourishing fish farming and chicken farming industry could also be selected for expanding the project activities. If CARE already has a presence in these governorates, it will be much easier to access.

- Cargill would benefit greatly from continuing to be involved in the project. For starters, it would secure local Soy beans, hopefully with suitable quality, to support its oil industry. But also, to align with its already strong CSR agenda worldwide. To clear the waters, it is important that some communication takes place with project stakeholders to explain what has lead it to the decision not to purchase Soy beans from the farmers in the last two years and address, through the project, measures that can help avoid this situation from happening in the future.
- Generally, the more players that can support the development of the Soy bean value chain, the better. CARE can map all potential organizations whether NGOs or commercial businesses that may be interested in involving themselves at least in specific project interventions. This will give the Soy bean project the national recognition it deserves and pool together strengths from every player involved in the project.

14. Annexes

1. List of documents reviewed

Document
Inception report
Bid Analysis report
Technical Offer – Kadem El Kheir (Jan 2017)
Field Action plan
12, 24, 30 month progress report
Theory of change
Project baseline study
Monitoring and Evaluation Plan
CARE Strategic plan (or summary)
Initial project proposal to Cargill
Research Instruments
Cargill criteria for accepted seeds (Standards)

2. Final project evaluation proposal

Technical Proposal

Submitted to:

CARE International in Egypt

Submitted by

Fathia Hussein
Socioeconomic Researcher

For

Final Evaluation
of

Origination and Development of Soy Bean Smallholders Farmers

5 July 2017

1. Introduction and background

CARE has been operating in Egypt since 1954. Its programs aim at helping impoverished communities meet their basic needs, improve their social positions and cope with their challenging environments in ways that are sustainable and empowering. Underpinning all of CARE's work is a commitment to strengthening local civil society, promoting human rights and addressing the underlying causes of poverty and injustice, such as poor governance, gender inequity, economic and social exclusion and conflict. CARE places special emphasis on investing in women and girls because its experience shows that their involvement invariably brings long-term benefits to families and communities. CARE Egypt focuses on four main programs: Women Rights, Governance and Civic Engagement, Education and Agriculture and Natural Resources.

In xxxx CARE started a cooperation with Cargill with the purpose of "supporting communities through increasing agricultural linkages". The overall goal of the project was to improve socio-economic conditions for rural communities through increasing local production of 6,000 MT of Soy beans throughout the project life while developing an effective and sustainable social enterprise model: "The Agricultural Service Centers (ASC)". Throughout the project 3-year duration, the project targeted the production of 2000 MT and worked with 1000 households annually.

By xxx date, the end of January 2017 the 3rd phase of the project came to an end. With the project stakeholders considering a project extension, a final evaluation of the first phase becomes essential. A consultant was hired in xxx to carry out the final evaluation. After xxx, the consultant had to drop out of the assignment for personal reasons. By then, the methodology of the final evaluation had already been developed and approved by CARE USA.

The Final Evaluation of the project just completed the data collection stage. It is understood that the transcription is underway. CARE has requested the assistance of Fathia Hussein to complete this assignment by analyzing the data and writing the Final Project Evaluation Report.

2. Objectives

The Final Evaluation for the project "Origination and Development of the Soy bean small holder farmers in Egypt" will measure progress achieved in the project against its objectives.

This will be done through fulfilling these objectives:

- Review the project activities implemented in the project's life to assess the progress of the project throughout its three-year duration
- Provide input into the production of the new phase of the project.

3. Scope of work

With the data collection already in progress, the consultant will be responsible for developing the analysis of findings and writing the final report. The following research questions are being covered by the research instruments:

1) Title: CARE-Cargill partnership and Agricultural Service Centers in Egyptian Soy Bean Production

- a. Research question: How have the ASC and the private sector improved market opportunities and assured product quality for Soybean farmers in Egypt?

- b. Methodology: Case Study Include: Background, what they do, how they do it, benefits to the farmers, challenges, etc. Specifics on how they assisted the farmers with marketing and how they assured quality of the product.
- c. Impact:
 - i. Was ASC able to make a difference of Soybeans to be sold at market?
 - ii. % of seeds sold to Cargill & % sold to local market
 - iii. Revenue generated from Soybeans

2) Cooperatives:

- a. Research Question: How have the Cooperatives improved their governance capacity?
- b. Methodology: Capacity Assessment Tool To be administered to cooperative board members – analysis is to be a comparison to the baseline
- c. Impact:
 - i. Have the cooperatives demonstrated accountability?
 - ii. Do they have a functioning financial system in place?
 - iii. Have there been changes in the proportion of women in the cooperative boards?
 - iv. Are there democratic elections of board member such that members change regularly?

3) Farmers:

- a. Research Question: How has the project influenced food and livelihood security of the farmers and their families?
- b. Methodology: Focus group discussions (FGD) 6 FGDs of farmers each one related to one of the 6 cooperatives.
 - i. FGD instrument will have questions on the following topics:
 1. Area of Soy bean cultivation
 - a. Including motivations and barriers to expanding Soybean
 2. Relationship with cooperative & ASC
 - a. Including marketing
 3. Capacity building
 - a. Planting and improving crop quality awareness sessions
 - b. Farmer Field Schools
 - c. Extension
 4. Access to various resources
 - a. Credit
 - b. Farm inputs: land, seeds, tools, machines, agro-chemicals
 5. Assets
 - a. How has the project influenced your ability to acquire more assets?
 - i. Which assets?

6. Has the project helped you better provide for your family?
 - a. How?
 - b. Food Security?

c. Impact:

- i. Why has the use of land for cultivation of Soybeans increased?
- ii. How has capacity building affected your quality/quantity of production?
- iii. How have access to assets increased?
- iv. How have the Cooperative and the ASC influenced the ability of farmers to market? a quality product?
- v. Are farmers better able to provide for their families?

4. Methodology

a. Desktop Review

The aim of the desktop review is to give an in-depth understanding of the project plans, activities, challenges and issues from inception to date. The desktop review will cover the project baseline study, mid term review, project logical framework, monitoring and evaluation plan, progress reports in addition to monitoring documentation. It will also include a relevant strategic plan for CARE Egypt and for the funding organization (Cargill) under which the project falls, in addition to major presentations, documentation of major meetings and a list of all protocols and agreements with the relevant ministries to work with the ASCs. Since research instruments have already been developed, they will also be covered in the desktop review. The extent of the desktop review will depend on the documents made available by the project team in CARE.

The desktop review, depending on the size of the documents handed over, would take between 3-4 working days. Due to time pressure, it is proposed that it takes place simultaneously with the data collection and transcription.

b. Research instruments

The research instruments have been developed through the previous consultancy to cover the previously listed research questions. Research instruments have been developed for Focus Group Discussion, case studies and capacity assessment tools. It is assumed that the research questions and tools have been developed based on a review of key project documents and a strong understanding of agricultural projects. It is also assumed that the research tools have already been tested prior to data collection. In any case, the Initiative Manager is expected to handover the research tools, the field work plan and list of research respondents to be part of the document review process.

c. Sampling

The Initiative Manager is expected to provide the consultant with details on the sampling method for the research respondents particularly for those selected for the Focus Group Discussions. The criteria for selecting candidates for the case studies is also expected to be provided.

d. Data collection

The data will be collected by the project team through focus group discussions, case studies and capacity assessment tools to be administered with project beneficiaries and other stakeholders as specified in the terms of reference of the previous consultant's proposal.

The Initiative Manager will manage data transcription and hand over a hard and soft copy of the data collected, transcribed and written in MS Word format in Arabic language to the consultant to begin the analysis and report writing. The consultant will have a two-hour meeting with the transcriber/s ahead of the transcription process, to agree on the organization of transcriptions and the expected format. Failure to address issues with transcription early on may affect the quality of the analysis and reporting.

It is assumed that the data collection would be completed by 13 July 2017 and the transcripts would be handed over as they become completed as of 23 July 2017.

Since there will be minimal involvement for the consultant with the data collection, it is suggested that a meeting takes place after the completion of the data collection to discuss the data collection plan and how the implementation took place in the field. This meeting will be important to address interesting findings and challenges that may not have been captured by the data collection tools.

e. Analysis of Findings

Initially, the analysis will cover sets of data produced by each research instrument individually. The data will be coded and labelled into detailed themes pertaining to the research questions and any interesting/emerging themes. There will be particular focus on interesting vocabulary and quotes as well as adding details on interesting findings. Clarity will be sought around deviations from common themes to ensure appropriate explanation is provided.

The themes will then be narrowed down, combined or sub-grouped across data from different research instruments to produce broader themes. The analysis is expected to present relevant patterns that respond to the research questions.

f. Reporting

The report writing will take place as soon as the project documents are shared. Time allowing, the initial findings will be shared with the project staff for their feedback and input as soon as they are produced by the consultant. If the time is limited, the consultant will work directly with the Project Manager to ensure all information gaps in the report are addressed.

The report will include the following sections:

- 1) Executive Summary
- 2) Introduction and background

- 3) Project description
- 4) Evaluation purpose and objectives
- 5) Evaluation methodology
- 6) Study Limitations
- 7) Findings and Analysis
- 8) Recommendations
- 9) Conclusions and lessons learned
- 10) Annexes

5. Implementation Schedule

The proposed schedule is based on calendar days, but the assignment is expected to be completed in 13 working days. A total of 1 day will be devoted for meeting with Initiative Manager, Project staff, data collectors and transcribers. For efficiency purposes, all these meetings can be organized in one full working day. The schedule also includes 3 working days for the desktop review, 3 days for analysis of findings, 5 days for report writing and 1 day for addressing comments. The Initiatives Manager will be updated, and approval will be sought, for any expected deviations from the days that will be consumed in the implementation schedule beforehand, and a timesheet will also be provided.

Time schedule/ Task (2017)	Jul 9-13 th	Jul 16-20 th	Jul 23 – 27 th	Jul 30-31 st
Data collection				
Transcription				
Kick off meeting *				
Desktop review				
Data analysis				
Report writing (Draft)				
Final report **				

*(project staff / data collectors/ transcribers)

** The schedule is very tight. Any delays in fulfilling commitments from the client side will affect the project schedule. This includes handing over project documentation, handing over transcripts and quality of transcripts and feedback on the report.

6. Researcher

Fathia Hussein has a total of 20 years' experience working mainly in the development field. She started her career working as a Project Officer in an agricultural NGO (Egyptian Seed Association) and then moved to work with EQI as a socioeconomic researcher and senior training specialist. She worked as a Monitoring and Evaluation Specialist in CARE Egypt for the New Schools Program between 2005 and 2008. Before becoming a freelance consultant, she worked as a Social Performance Manager for BG Egypt for 9 years where she designed and implemented BG Social Investment Strategy as well as ensured compliance of the business with the IFC social performance standard. Throughout her service in BG, she won 2 chairman awards of excellence for her work with BG Egypt. Fathia earned a Masters of International Business Administration in the year 2000 with a thesis addressing organizational development in NGOs. She is currently working on a an MSC

Sustainable Development at the American University in Cairo on part time basis. Fathia is now a freelance consultant working mainly through Environics and METAS energy.

7. Payment terms

The consultant expects payment to be made according to two milestones:

70% to be based on submission of draft report

30% to be based on submission and acceptance of Final Report