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Effective Seed Storage in Timor-Leste (ESS) Funded by USAID, Office for Foreign Disaster Assistance - OFDA

Quarterly Report January 1 – April 30, 2015



*“This kind of garden is really good for an old man like me, as I don’t need to bow a lot to tend my vegetables.”
Abo Mario (72) a war veteran from Katrai-Leten, Ermera*

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Program Summary

Since August 2011, Mercy Corps and partners through the USAID/OFDA funded *Effective Seed Storage (ESS) in Timor-Leste* program have successfully developed a market system for a metal-based seed storage system that is customized and locally manufactured. The program is designed as an intervention that addresses seed system insecurity, and ultimately food insecurity, in Timor Leste. The program is an effort to mitigate post-harvest storage losses of farm-saved seeds and also helps maintain better quality seeds to reduce underlying risk factors of availability, accessibility and utilization of productive seeds. This is in line with priority action four of the Hyogo Framework for Action. Since the program's first inception phase, there has been successful replication in 10 out of 13 districts in the country through an initial expansion in February 2013. Starting from February 2014, the program incorporated a member-based financial institution model called Savings and Internal Lending Communities (SILC) to expand access to credit and promote a culture of savings among poor farming households.

While the seed storage system proved to effectively improve food self-sufficiency, SILC membership provides savings-led financial services to communities that have little or no access to formal financial services and contributes to strengthening resilience among vulnerable families. In April 2015, Mercy Corps, its partner, Catholic Relief Services (CRS), and five local NGOs, along with at least 22 private businesses, worked to leverage the success of the program by expanding the improved storage system and SILC activities to further 'off-grid' communities and started promoting keyhole gardening as a diversified production system, with a special focus on vegetable production. The expansion of SILC and seed storage activities are targeting underserved communities within the existing target and neighboring districts/sub-districts. The inclusion of keyhole garden systems will not only further increase food self-sufficiency, but it also serves as a nutrition sensitive agriculture component of ESS.

Performance Summary

Sector 1: Agriculture and Food Security		Objective: Increased food self-sufficiency through access to post-harvest storage system and promoting keyhole garden production system		
Beneficiaries Targeted	300,000 (IDPs: 0)	Overall budget (for all sectors): US\$4,522,499		
Beneficiaries Reached	301,396 (IDPs: 0)	Amount Spent (for all sectors): US\$3,465,157		
Geographic Area (s)	At least 10 out of 13 districts of Timor-Leste			
Sub-Sector 1: Seed System Security				
Sub-Sector 2: Improving Agricultural Production/Food Security				
<i>OFDA Indicator</i>	<i>Baseline</i>	<i>Target</i>	<i>Progress</i>	<i>Last update</i>
Projected increase in number of months of food self-sufficiency due to seed systems activities/agricultural input for beneficiary households	2.5 month ¹	>0	To be reported at the end of program ²	June 2015
Number of people benefiting from seed systems/agricultural input activities, by sex	0	300,000	301,396 ³ (46% female)	July 2016

¹ Recalculated from the baseline data during the Phase II Final Evaluation, especially to make adjustments from number of food security months into food self-sufficiency months.

² The Final Evaluation of Phase II reported that the surveyed respondents experienced an increase in number of months of food self-sufficiency by 2.1 months (84% increases from the baseline). The data for the Phase III beneficiaries will be collected during the survey at the end of program.

³ Calculated from total household accessed the storage system and/or accessed to promoted good practices (BCC) multiplied by average number of household members, during previous phases (5.7).

Additional Indicators (adjusted according to Phase III proposal)				
% of farmers reported increase of knowledge and practice in seed selection, drying and storage	0	80%	To be reported at the end of program ⁴	June 2015
Number of farmers with access to improved seed storage system	0	52,200	57,531	July 2016
Increase of Household Dietary Diversity Score (HDDS)	7 ⁵	9 ⁶	To be reported at the end of program	October 2015
Number of households with properly used keyhole garden	0	690	653	July 2016
Number of households replicating keyhole garden	0	690	74	July 2016

Sector 2: Economic Recovery and Market Systems	Objective: Increased resilience through access to credit and promoting culture of savings			
Beneficiaries Targeted	4,840 ⁷ (no IDPs)			
Beneficiaries Reached	2,856			
Geographic Area (s)	Ainaro, Manufahi, and Baucau			
Sub-Sector: Microfinance				
<i>OFDA Indicator</i>	<i>Baseline</i>	<i>Target</i>	<i>Progress (to date)</i>	<i>Last update</i>
Number of people, by sex, or MSEs newly receiving financial services due to USAID/OFDA support	0	4,840	2,788 members – 49% women	July 2016
Percentage of financial service accounts/groups supported by USAID/OFDA that are functioning properly	0	100%	100% of reported SILC groups	July 2016
Total USD amount channeled into the program area through sub-sector activities	0	0	0	July 2016
Additional Indicators				
% of participating households that have sold assets in the last 6 months to purchase foods or other basic needs	31%	Reduced by 50% from the baseline	To be reported at the end of program	June 2015
% of participating household saving every month	2%	100%	100% of reported 2,856 SILC members	July 2016
Average amount of household income	\$114.61	Increased by 30% from the baseline	To be reported at the end of program	June 2015

Sector Summary (Activities)

This quarterly progress report covers project implementation from April through June 2016. During this reporting period, the program continued implementing activities related to improved seed storage systems, keyhole garden promotion, and providing capacity building to Saving and Internal Lending Community (SILC) groups. In addition, the ESS team assisted in a the Market & Seed System Assessment which is a follow-up assessment to the El Niño assessment reported in the previous Quarterly Report (January – March 2016).

Program Implementation Activities

⁴ On average 74% of farmers were reported adopting improved techniques by the Final Evaluation of Phase II. For the farmers supported during the Phase III, the progress will be included in the Final Evaluation at the end of program.

⁵ Baseline HDDS is average of all survey respondents.

⁶ Target based on upper percentage of all respondents' HDDS.

⁷ The majority of these will likely overlap Sector 1 beneficiaries

From April through June 2016, Mercy Corps and CRS continued to organize community meetings, register beneficiaries and increase community awareness for the ESS activities related to seed storage, keyhole gardening and SILC. In total, the ESS program, during the current phase, has reached communities in 78 least-developed sucos (villages) across Timor-Leste. During this quarter, the program reached its overall target number of beneficiaries (specifically reaching 301,396 of the target 300,000), thanks to the effective outreach approach by working with private sector (i.e. local seed manufacturers and retailers, and SILC private service providers) and partnering with other NGOs. However, we have not yet reached all of our targets for seed storage vouchers, SILC members and keyhole gardens, and as such these will remain priorities in the final phase of the program.

Improved Seed Storage (ISS)

Seed Storage Vouchers: During this reporting period, the program distributed additional 3,375 new seed storage voucher beneficiaries, bringing the total number of voucher recipients under the seed system storage component to 8,713 for the current phase. In order to improve the efficiency of the documentation process, trained field staff have started using tablets for beneficiary selection. As a result, a substantial additional number of beneficiaries were registered to receive seed vouchers.

Behavior Change Communication (BCC) Training for Seed Storage Component: Post-harvest-BCC training or refresher training was held in total 61 sucos this quarter by field staff and the Ministry of Agriculture and Fisheries (MAF) Suco Extension Officers for beneficiaries who received the seed storage vouchers. In addition to seed selection, drying and storage mechanisms, information related to El Nino was shared with the community during the training. During the report period, 5,150 silos⁸ were purchased by beneficiary households through the voucher system.

Capacity Building for Local Manufacturers: Together the program team and manufacturers identified the need to develop an association or network of manufacturers. This association would foster shared-learning, strengthening the manufacturers' position in the market system for efficiency (i.e. through joint procurement, transportation to reduce costs) and scale (ability to tap a bigger market opportunity that required scale such as government procurements for storages and other metal-based products), and to have a stronger say regarding government policy. In May 2016, 17 supported seed storage manufacturers and the Ministry of Commerce, Industry and Environment (MCIE) participated in a workshop coordinate by the ESS program to establish an association/cooperative of storage manufacturers. The workshop developed a process to identify potential members, developing statutes, the registration process and other relevant topics. An action plan was established following the workshop to form the association/cooperative; its implementation will be reported during next reporting period.

Savings and Internal Lending Communities (SILC)

By end of June 2016, 142 SILC groups were formed in the target communities and SILC membership reached 2,788 households with a total cumulative savings of \$49,754 with \$22,940 in loans. In order to both scale up the program's capabilities to meet the demand for SILC support, and to ensure greater sustainability of the SILC outreach and support system, this quarter the program initiated a Private Service Provider (PSP) initiative. PSPs are local business development services (BDS) providers who specialize in providing support to both existing SILC groups, as well as groups that want to form SILCs. PSPs do this on a fee-for-service basis. In June, the team conducted a successful PSP training for field agents who met strict criteria and have passed the recruitment process. This process includes completing a number of interviews and focus groups discussions with the groups he or she will supervise.

⁸ This figure is bigger than the voucher recipients distributed this quarter, meaning that there are vouchers that were distributed during previous quarter that were then redeemed during this quarter.

Keyhole Garden (KHG)

Keyhole Garden FFS: Mercy Corps and partners conducted Keyhole Garden Farmer Field Schools (FFS) in the targeted communities. By end of the quarter, 692 households built keyhole gardens, with a total of 74 additional households replicating their gardens. In addition, a total number of 42 keyhole gardens were placed in public places such as schools and community centers as model gardens for broader audiences. During this quarter, garden replication started to occur, which we believe is a result of the good examples provided by community promoters. This is largely due to the improvements partners have made in implementation strategy and because communities are seeing the garden's benefits during the El Nino season. In the next period, the program will conduct refresher trainings for those who have planted their keyhole gardens focusing on natural pest and disease control. The team has also identified local stores interested in selling vegetable seeds to ensure the sustainability and broader adoption of the technique by other farmers.

Soil Testing: In order to collect evidence supporting the effectiveness of KHG in term of soil nutrients, Mercy Corps, in partnership with the Soil Department of the Ministry of Agriculture and Fisheries, has conducted soil testing in four municipalities (Bobonaro, Manufahi, Baucau and Lautem). The activity started in June and will continue until 30 August 2016. The objectives of the activity are

- Conduct soil testing in three sucos in each municipality. The soil testing will be carried out in the KHGs and other farms (as control). Testing will include the following: (i) Soil physical compositions; (ii) % of Nitrogen, Phosphorus, and Potassium (NPK) contents; (iii) % Porosity; (iv) pH; and (v) Moisture content.
- Provide training to ESS staff on how to conduct simple soil tests using a simple soil nutrient testing kit.

The soil testing included comparisons between KHGs and control areas (soil from farming land nearby the sample keyhole gardens). This activity will continue (CRS target districts will be tested) into the next reporting period. The results of the analysis are expected to be available next quarter and will be used to further promote the farming technique to other audiences, especially the MAF extension officers.

Farmer Field Day (FFD): The team facilitated a farmer field day (FFD) event to showcase the KHGs of the early adopter households. This event, conducted in June 2016, showcased to local community members and local leaders the performance of KHGs and how they benefit families. The first two FFDs were conducted in Lautem (CRS) and in Manufahi (Mercy Corps).



Farmer Field Day in Iliomar, Lautem

Post El Nino Market and Seed Assessment

As reported during previous Quarterly Report, the majority of Timorese farmers were impacted by the 2015/16 El Niño, especially during the main cropping season of September 2015 – April/May 2016. The Humanitarian Partnership Agreement (HPA) assessment reported that 67% of farmer households have had to replant, while the MAF assessment revealed that 9% (an estimated 11,000 drought-affected households) intended to replant more maize and rice in the April/May 2016 season, but could not due to a lack of seeds. With the reported crop failures and the potential of La Niña, it is projected that farmers will experience further difficulty during the main August/September 2016 planting season of staple crops, especially due to the potential reduction of available seeds at the household level. A combination of crop failures and food insecurity has jeopardized the country's seed system security.

To understand the impact of the drought on seed system security, in May and June 2016, CRS, Mercy Corps and CARE conducted a follow-on study on seed system security and a market assessment to determine whether cash/voucher food assistance and/or seed assistance would be an appropriate response. The

assessment was conducted in Baucau, Lautem, Viqueque, Manufahi, Covalima and Bobonaro municipalities – areas indicated by the MAF assessment as badly impacted municipalities.

The assessment found that the markets during the drought are functioning normally and beneficiaries continue to have access to markets where food is available and the quality of the available food is equivalent to what would be distributed through a food distribution program. Therefore, this type of programming is not recommended.

However, with multiple plantings and subsequent crop failure reported, households have depleted all available farm-saved seed and are unable to replenish their stock. Fortunately, in all communities surveyed, farmers can still obtain seed either from their neighbors or the market if they have the resources to buy/trade for this seed. With adequate seed available locally, but purchasing power diminished due to households' needs to purchase both food and seed, a seed voucher distribution initiative is necessary.

The assessment found that the main limitation to purchasing seeds on the market is cash. The ESS team is currently requesting support for OFDA to carry out voucher and seed fair programming to target the most vulnerable households to better prepare for the 2016/17 main cropping season.

Monitoring and Evaluation (M&E)

In March 2016, Mercy Corps continued to build the capacity of CRS and partners through refresher training on mobile data collection, especially to collect beneficiary information and other relevant monitoring information. As reported previously, Mercy Corps and partners have started to utilize mobile data collection technology and streamline it with the use of electronic vouchers, both to increase the ease in data collection and to improve the quality of data and information collected. Following the training, the M&E team provided field coaching to each field staff ensuring that data collection is done properly.

From April to June 2016, field staff continued to carry out program implementation activities while monitoring the project beneficiaries using the mobile data collection technology. The team will continue to review the challenges and progress related to using technology by gathering feedbacks from the field to improve the design of the data collection process and to provide necessary supports.

Coordination Meetings

District-Level MAF Harmonization Meeting: The project continued to actively participate in municipal-level MAF Quarterly Harmonization Meetings. During the meeting, the program team shared achievements to date and the workplan for the next quarter. Participating in these meetings allows for joint learning and strengthened coordination and partnership with MAF and other relevant stakeholders.

ESS Quarterly Partners Coordination Meeting: In April 2016, Mercy Corps and CRS held a quarterly coordination meeting in Baucau to review and gather information on best practices, lessons learned, challenges and to develop an action plan on how to address those challenges that arose during the implementation. During this coordination meeting, a project site visit was also conducted.

Coordination Meeting with Supported Manufacturers: CRS organized a review meeting with all silo manufacturers operating in CRS target areas. The meeting was crucial in order to share the target number of silos that need to be produced and distributed for the remaining months of the ESS program in the CRS target areas. It was also used as an opportunity to gather information regarding to challenges faced by the

manufacturers in term of procuring/transporting materials, production and delivery to beneficiaries. A joint action plan was developed to ensure that seed storage vouchers were distributed and utilized by the target vulnerable households.

Exchange Visits for Field Agents and PSP Launching: In June 2016, Mercy Corps and CRS organized a successful exchange visit to Lautem municipality for field agents from other municipalities (the visiting agents will also be given an opportunity to visit to Manufahi in July 2016). During this visit, the program launched the SILC Private Sector Providers (PSPs) –individual service providers, who will provide capacity building service for SILC groups. The launch aimed to promote PSP services to the community and to provide examples for potential Field Agents who are expected to ‘graduate’ to PSPs later on.



PSP Launching in Iliomar, Lautem

Quotes from the field



Celina Rita Maria

“A couple of year ago, I was using the traditional system for storing seed such as hanging on the fire place or on the trees or in the sacks. After I attended the training and using a silo, I am practicing what I have heard in the training. I am very content with the silo because it can protect my seeds from the rat and weevil that usually destroy many of my seeds and now I will not have to purchase seeds in the market when planting time comes. With the silo, I feel that I can guarantee that my seeds will be safe for the next planting time.”

Celina Rita Maria is one the farmers in Ahic Village, Sub-District Lacluta, District Viqueque. She is 52 years old and is the head of household with four family members.

“I was very satisfied with my first keyhole garden, so then I wanted to try a different model, a bigger but rectangular model. I put four [composter] baskets to ensure that the soil is moist enough for vegetable to grow well. Now I am not so sure if can call this a kantreiru xavi matan [keyhole garden] anymore, but this will help my family to produce enough vegetables.”

Julito da Costa, 27 years old, is a self-proclaimed local youth leader in Betano, Manufahi. He is living with his mother and his five brothers.



Julito da Costa (blue shirt) and his rectangular KHG

“This method [SILC] is secure, easy to control, accessible, and has a low interest rate. It is also showing us how to build trust in a team as well as unity and transparency.”

Mr. Patricio da Costa is 50 years-old and head of household for six family members. He is an active member of a SILC group in his community. He resides in the village of Leuro, Sub-District of Lospalos, Lautem.