Effective Seed Storage in Timor-Leste (ESS)

Funded by USAID, Office for Foreign Disaster Assistance - OFDA

Quarterly Report

April 1, 2015 – June 30, 2015

Insert: Keyhole Garden training at Tasitolu Basic School in Dili in June 23, 2015

Program Summary

An intervention that addresses seed system insecurity, and ultimately food insecurity, issues in the country is essential to mitigate post-harvest storage losses of farm-saved seed. It also helps maintain better quality seed to reduce underlying risk factors of availability, accessibility and utilization of quality seed. This is in line with priority action four of the Hyogo Framework for Action. 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 was also successfully replicated 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. Leveraging the success of the program, in April 2015, Mercy Corps, in partnership with Catholic Relief Services (CRS) and five local NGOs, expanded 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 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	263,971 IDPs: 0	Amount Spent (for all sectors): US$2,507,503		
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***				
OFDA Indicator	*Baseline*	*Target*	*Progress (To Date)*	*End of reporting period*
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	263,971[3] (47% female)	June 2015
Additional Indicators (adjusted according to Phase III proposal)				

[1] Recalculated from the baseline data during the Phase II Final Evaluation, especially to make adjustment 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.

% 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, by sex	0	52,200	45,649	June 2015
Increased of Household Dietary Diversity Score (HDDS)	Tbd[5]	Tbd[6]	To be reported at the end of program	June 2015
Number of households with properly used keyhole garden	0	690	0	June 2015
Number of households replicating keyhole garden	0	690	0	June 2015

Sector 2: Economic Recovery and Market Systems	**Objective:** Increased resilience through access to credit and promoting culture of savings			
Beneficiaries Targeted	4,840 (no IDPs) – including also target for the phase II *Note: the majority of these will likely overlap Sector 1 beneficiaries*			
Beneficiaries Reached	971			
Geographic Area (s)	Ainaro, Manufahi, and Baucau			
Sub- Sector: Microfinance				
OFDA Indicator	*Baseline*	*Target*	*Progress (to date)*	*End of reporting period*
Number of people, by sex, or MSEs newly receiving financial services due to USAID/OFDA support	0	4,840 (including also 1,000 of previous target)	971 (62% female)	June 2015
Percentage of financial service accounts/groups supported by USAID/OFDA that are functioning properly	0	100%	100% of reported SILC groups	June 2015
Total USD amount channeled into the program area through sub-sector activities	0	0	0	June 2015
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 971 SILC members	June 2015
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 period covers the preparation for phase III of ESS and includes the following activities: continued the Designing for Behavior Change (DBC) for behaviors related to drying practice, seed selection process, and

[4] On average, 74% of farmers 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 to be done once KHG beneficiaries are selected; approximately in September 2015
[6] Target to be determined after the baseline data is collected (see Footnote 4)

storage of seeds; continued SILC facilitation; kick started Phase III; arranged sub-grant agreement and additional staff recruitment; established keyhole garden training manual and mobilization tools as well as Training of Trainers (ToTs) for staff on new tools and manual. In addition, during this reporting period, OFDA Regional Advisor visited ESS program sites.

A. Phase III Kick Start

This quarter marked the kick start for phase III of ESS Program. The ESS program began in August 2011 to increase farmers' access to improved seed storage systems[7] while at the same time increasing their awareness and knowledge on proper post-harvest handling – especially seed selection and proper drying. Through its first modification in February 2013, ESS expanded program scale and outreach and now works with 17 local manufacturers as well as one importer/supplier that have been providing effective storage systems to 45,649 farmers across Timor-Leste. Despite the success of the program to reach a substantial number of districts, an internal analysis found that there are still underserved households, especially more 'off-grid' and vulnerable communities that can benefit from further program expansion. To date, ESS has served 202 rural communities (suco/villages) in the country and there are still an estimated 60 rural sucos that can be further targeted during Phase III.

Additional activities to facilitate the establishment of Savings and Internal Lending Communities (SILC) were incorporated into the program in February 2014 (within the original ESS extension to 11 February, 2015). SILC successfully increased financial numeracy and literacy of its members, essential for engaging them in a cash economy, while providing affordable and accessible savings, micro-insurance, and loan services. The savings, insurance and loan facilities of the SILCs allow members to meet their small, short-term financial needs for household cash-flow, income-generating activities, social obligations and emergencies, thus increasing members' financial security and resilience. By end Phase II, the program has worked with 46 SILC groups benefiting 777 members in three districts of Baucau, Ainaro and Manufahi. Expanding the success of SILC to other communities both in the existing target as well as other districts will ultimately fill the gaps of financial service needs for rural households further strengthening vulnerable households' resilience against shocks.

The inclusion of keyhole gardening into ESS activities will further contribute to achieving the program's goal of increasing food self-sufficiency and resilience of poor and vulnerable farming households in rural Timor-Leste. Keyhole gardening is a sustainable, climate-smart means to diversify household food production and consumption of nutritious foods, where farmers will reproduce and preserve vegetable farm seeds (linked to customized seed storage) ensuring sustainable access to seeds and thus production of nutritious vegetables. The inclusion of keyhole garden production systems will not only further increase food self-sufficiency but also serve as nutrition sensitive agriculture component of ESS.

During this reporting period, all sub grant agreements between Mercy Corps and other NGO partners (CRS and OHM) have also been extended accordingly. In addition, CRS has also extended agreements with its three local NGO partners. In April 2015, a meeting was held between Mercy Corps, CRS and OHM to establish detailed work as well as M&E plans. CRS then conducted similar workshop with its partners in Baucau. The program also recruited additional staff especially for inclusion of keyhole gardening activity. By end of June, most additional key staff were on board.

B. Improved Seed Storage Activity

Since April 2015, Mercy Corps started to discuss the plan to use electronic vouchers (e-voucher) for Phase III with Transversal, a Mercy Corps' pre-selected e-voucher app developer. Mercy Corps has worked with Transversal for e-vouchers in several countries, including Nepal and Haiti. The contract with Transversal for ESS was finalized in June and the app is expected to be deployed by September 2015.

[7] Refers to developed metal based solution (silo drum) and/or GrainPro bags.

As reported during the previous quarter, the program staff conducted barrier analyses towards three relevant behaviors related to (i) seed storage, (ii) seed selection, and (iii) seed drying, by interviewing both groups of 'doers' (those who practices recommended behavior) and 'non-doers' (those we don't). These analyses were part of designing for behavior activities to help the program to document learning to improve the quality of program implementation for this phase. In April, led by Mercy Corps Senior M&E Officer, the team conducted an internal workshop with enumerators to analyze the findings. The table below summarizes the identified key determinants and recommended actions for program implementation.

The promoted behaviors	Key determinants	Recommended actions
Seed storage: Targeted men and women in maize producer households keep the dried grain and seeds separately in clean and airtight storage units, in dry conditions and off the ground of the storage space	***Perceived self-efficacy*** Proper seed storage is not a difficult practice ***Perceived access*** Improved seed storage system is not widely available ***Perceived positive consequence*** Proper storage reduces the likelihood of weevil attack ***Reminder*** It is difficult to remember that seeds should be separated from grains	To update the training guide: to simplify the key steps in storage practice and to include a message that good airtight storage minimize weevil attack Continue to work with local manufacturers to increase availability of silos and if needed to provide discounted voucher for poor farmers Use SMS reminder during the harvest period on the need to store seeds and grain in proper way
Seed Selection: Targeted men & women in maize production households carry out seed selection of a similar variety of maize - to be dried and stored separately from grain/food, by selecting only seeds from the middle part of big, clean cobs with no obvious physical damage and/or indication of pest activity	***Perceived positive consequences*** Good seeds are key for good planting ***Perceived negative consequences*** Without proper seeds selection the likelihood of not having good seeds during next planting season is very high ***Perceived access*** Not always having big cobs. No access to tarpaulin or other layer to dry seeds ***Perceived severity*** Food insecurity is a serious problem ***Perceived action efficacy*** Seed selection contributes to ensuring access to seeds for next planting season therefore needed for food security	To update the training guide with the following: - Select the biggest available cobs - Include economic benefits of investing in doing proper drying (i.e. cost/benefit analysis of the use of tarpaulin) During the HH visits, field officers discuss with beneficiaries the positive and negative consequences of doing or not doing seed selection To include in the BCC material a statement: 'food security started with seed security and seed security started with seed selection.'
Seed Drying: Targeted men and women in maize producer households sun-dry their harvested maize grains/seeds immediately after being harvested; under bright sunlight and on a clean surface; with the maximum depth of the maize not more than ankle bone; for at least 3 days	***Perceived positive consequence*** Properly dried seeds will ensure availability of seeds during next planting season. Properly dried seed ensure good production ***Perceived access*** No tarpaulin or other drying bases ***Reminder*** It is difficult to remember that seeds should be dried properly ***Perceived risk*** Family members may have food security	Revisit the training guide: to reinforce the following: - Drying seeds will ensure availability of quality seeds for next planting season - Good production of maize will only possible if high quality seeds which is dried are used - To include simple cost/benefit analysis of the use of tarpaulin and other alternatives Work with local stores to increase availability of tarpaulin Use SMS reminder during the harvest

	problem if no seeds available for next planting season ***Perceived action efficacy*** Drying seeds properly will help them to mitigate from hunger	period to remind them on drying practice To include in the BCC material a statement: 'food security started with seed security and seed security started with seed drying.'

C. Savings and Internal Lending Communities (SILC) Activity

Mercy Corps and CRS continued to provide technical assistance to nine Field Agents to form and to provide capacity building to SILC members in four target districts. From April to June 2015, eight SILC groups were formed by the Field Agents, with an additional 194 new members joining SILC, bringing the total number of farmers involved in the SILC activities to 971 members – 62% female.

In May 2015, the program conducted a two-day training for the SILC-Private Service Provider (PSP) certification process for CRS and Mercy Corps staff members. The objectives of this training were to train the staff on the PSP exam process and methodology. During the training, individual interviews and focus group discussions were conducted with SILC group members to discuss and agree on the process and methodology as per SILC Global Standards.

Interviews with Field Agents and Focus Groups Discussions (FGD) with SILC group members were also conducted. Based on the outcome of the interviews and FGD, as well as other factors in the next quarter, CRS and Mercy Corps will decide which Field Agents will become Private Service Providers. For Phase III ESS implementation, the field staff advertised the Field Agent position as well as conducted community socialization. The selection process and training for the successful Field Agent will be conducted the next quarter.

D. Keyhole Gardens (KHG) Activity

A Training of Trainers for the KHG farmer field school facilitation was conducted for Mercy Corps and partner OHM in Dili in June 2015. During this training, four different KHG models were established at a public school to provide first hand experiences for staff on the promoted gardens. Two staff from IOM (United Nations Organization for Migration– also an OFDA grantee in Timor-Leste who introduced keyhole gardens two years ago as part of their Disaster Risk Reduction (DRR) Program) were involved as resource persons for the training. This activity was aired by a national TV station, TVTL, during the primetime evening news. The training for CRS and their local partners was conducted during the following week in Baucau.

E. Visit by OFDA Regional Advisor and Mercy Corps Regional Director

During the last week of June 2015, Harlan Hale from USAID/OFDA Regional Advisor visited Timor-Leste to see different sites of OFDA funded projects in the country, including ESS. Anna Chilczuk, Mercy Corps South and East Asia Regional Director, joined Harlan to visit ESS sites in Manufahi district. During this visit, they met with supported blacksmiths and farmers who have been using the promoted seed storage, as well as SILC groups. Harlan and Anna also g visited other Mercy Corps project sites including the Conservation Agriculture project (this is also an OFDA funded project, but Mercy Corps acts as a sub-grantee to the UN Food and Agriculture Organization) and inland fish aquaculture program (called COMPAC-TL) funded by the Royal Norwegian Embassy.

F. From the Field

SILC group member Lucia da Silva is saving money to send her children to school. Lucia da Silva was very excited about being involved in a SILC group for nine months. She is a member of the Moris Foun group in Larifanu in the village of Libagua. Through her participation in the group, she has learned how to save money in a transparent, responsible, and motivating way. Lucia feels very proud and happy for this great opportunity, in part, due to the low risk of her savings being mismanaged.

Currently, Lucia has saved $45 USD and would like to get a loan for a small business once she determines which products are easy to sell in the local market.

Lucia is 49 years old and has six children. As a mother she is always thinking about her children's future. "I want to highlight that by being involved in this group, I am saving money for my children for their needs and school fees including basic needs for my family. This is a very good opportunity as it is very nearby and I can access money easily without complicated papers and transport expenses," she concluded.