Examination of Environmental Foundations for Program Design

Environmental Compliance Review and Go Green Strategy Snapshot
Title II Food for Peace (FFP) Program *Strengthening and Accessing Livelihood Opportunities for Household Incomes* (SALOHI)

A Farmer Field School member and his son show off their healthy cassava by resting in the branches. Tsarakianje, Ikongo, Madagascar

Trip Report – Draft June 2013; Final August 2013

Table of Contents

Acronyms

AOR – Agreement Officer's Representative
BEO- Bureau Environmental Officer
BPR - Best Practice Review
CCF - Complex Crisis Fund
CFR - Code of Federal Regulations
COP - Chief of Party
CRS - Catholic Relief Service
DCHA - Bureau for Democracy, Conflict and Humanitarian Assistance
DPMP - Disaster Prevention and Mitigation Plans
DRR - disaster risk reduction
EMMP - Environmental Mitigation and Monitoring Plan
ESDM - Environmentally Sound Design and Management
ESF - Environmental Status Forms
ESR - Environmental Status Reports
FAO - Food and Agricultural Organization of the UN
FFA - Food for Assets
FFP - Food for Peace
FFS- - farmer field school
FFW - Food for Work
GGS - Go Green Strategy
IEE - Initial Environmental Examination
IMA - infrastructure management association
IPTT - indicator performance tracking table
LOE - level of effort
MAP - Madagascar Action Plan
M&E - Monitoring and Evaluation
MEO - Mission Environmental Officer
NA - not available
NRM - natural resource management
OTI - Office of Transition Initiatives
PCU - Program Coordination Unit
PREP - Pipeline Resource Estimate Proposal
SALOHI - Strengthening and Accessing Livelihood Opportunities for Household Incomes
SO – strategic objective
SOW - Scope of Work
TDY- temporary duty assignment
VSL - village savings and loan
WWF- World Wildlife Fund

Acknowledgements

This effort has taken considerable effort on the part of the USAID/Madagascar Mission, Food for Peace (FFP)/Agreement Officer's Representative (AOR), and SALOHI staff. We would like to thank the USAID Madagascar Mission for support in logistics and feedback on the scope of work for this TDY. Additionally, we would like to thank the FFP/AOR, Ms. Shahina Malik for her invitation and her strong support for this review. Finally, our efforts would not have been possible without the diligent and exemplary support from the SALOHI Chief of Party, Ms. Jennifer Peterson, and the SALOHI environmental specialist, Ms. Zoelimalala Ramanase (Zoely), for which we are grateful. We would also like to extend our deepest gratitude to the entire SALOHI staff for their willingness and welcoming attitude in this process. They have been forthcoming and transparent about both the successes and challenges of the program. It has been a pleasure working with the team, and we thank them for everything from pre-planning logistics to their thoughtful comments on this report.

1. Summary and Conclusions

On behalf of the Bureau Environmental Officer (BEO), this report details findings from a temporary duty assignment (TDY) in April 2013 by the Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA) Post-Crisis Environmental Advisor. The purpose of this TDY was to document the environmental compliance procedures of the Title II Food for Peace (FFP) *Strengthening and Accessing Livelihood Opportunities for Household Incomes* (SALOHI) program one-year after the mid-term review was completed. The other objective was to capture the structure and integration strategy of the SALOHI program for the environmental cross-cutting theme through the Go Green Strategy (GGS). The analysis yielded a path forward for development of a framework for integrating environment into food assistance programs. The implementation strategies and approach to addressing challenges observed during the SALOHI visit will help inform future strategies for improving environmental compliance effectiveness and efficiency of new programs.

The GGS is considered an exemplary model for integration of environmental sensitivities and sustainability; therefore, USAID Washington has documented the evolution of the GGS through the life cycle of the SALOHI program and captured the success stories and missed opportunities approximately one-year before the program closes. This information is expected to help inform forward programming and stand as a role model for other assistance programs.

This TDY consisted of interviews with USAID Washington DC and Mission staff on the history and current status of environmental compliance of the SALOHI program as a whole and the structure and performance of the GGS specifically. Over a two week period in Madagascar, the TDY staff member conducted interviews with the SALOHI management team and all partners in the SALOHI consortium. The Chief of Party (COP) and Environmental Specialist within SALOHI provided frequent insight and guidance during the visit. Three community site visits were also conducted in three different projects zone with three different consortia partners. The environmental specialist accompanied the USAID team on the field visits, and provided a broad view of the GGS across the entire consortia. At the same time, the program was reviewed for quality of implementation of environmental mitigation measures as directed by the Initial Environmental Examination (IEE) and Environmental Status Forms (ESFs).

In general, the SALOHI program is performing environmental compliance implementation and oversight at a high level. They have interacted frequently with the Mission for feedback on their programs and reporting structure. The program has developed the appropriate compliance documents (IEE, Environmental Status Reports [ESRs], and ESFs) and responded to requests for revisions.

In the field, the technicians and field agents are primarily responsible for ensuring that mitigation measures are in place. Reporting is transmitted to the environment

specialist who also conducts high-level oversight and validates programs in each zone on a bi-annual basis. Trainings and scorecards help field agents track monitoring responsibilities and refresh their knowledge of potential environmental impacts. For the most part, the implementation performance for IEE mitigation measures ranged from satisfactory to exemplary; however, there were a few cases where improvement could be made. SALOHI has collaborated with World Wildlife Fund (WWF) and the Madagascar National Parks on reforestation issues; however, the communities could benefit from more direct guidance from foresters on the selection of appropriate tree species for reforestation and slope stabilization. The communities had questions about which species to use for their reforestation program. Although SALOHI has consulted with respected foresters, the field technicians did not appear to be aware of the forester's recommendations as a resource. Currently, the most popular species in the program is acacia sp. (mangium), and to a lesser extent eucalyptus sp. and bamboo, all of which are potentially acceptable depending on the circumstance. However, these species must be carefully selected depending on the habitat and purpose. Other possible needs for corrective mitigative actions in SALOHI activities include flow controls in canals and control of erosion upstream of irrigation structures. It is important to note, however, that the environmental specialist visiting the sites identified needs for corrective action independently of this review. Therefore, there is a high level of confidence associated with the capacity of the environmental specialist to manage the needs of the program.

One of the primary goals of the TDY was to capture the design, structure, and implementation of the GGS in the SALOHI program and to identify how each of the partners within the consortium engaged in this cross-cutting theme. Five key areas were examined within the GGS including responsibilities throughout the organization, training of the SALOHI team and the beneficiaries, reporting structure, communications, and budgeting. These factors are important for understanding the intimate function of the GGS and also for identifying ways to transition the strategy to other programs. The most important messages from each of the key factors are:

- Responsibility: The success of the GGS is largely attributable to the support of the COP and the diligence of the environmental specialist housed within the upper level of the organization's staff. It is critical to have an environmental focal person to act as a champion and director of cross-cutting activities. Environmental program management takes a large amount of coordination and engagement that should not be underestimated.
- Training: In a program where every individual within the organization plays a role in implementation of cross-cutting themes, there must be adequate time for training and retraining to take place. The vast number of responsibilities placed upon field staff requires that they first have the baseline level of training needed to adequately protect the environment, but that they also must have an opportunity to revisit challenges with their colleagues. Bi-annual trainings at the field office level provide this engagement and reinforcement for staff in the field.

- Reporting: The use of scorecards is an important aspect of the GGS. The scorecards distill complicated information into a manageable format for field agents. They also function as a tool to communicate community progress to headquarters, and then collated data becomes a means for communicating progress back to field agents.
- Communications: The GGS is using a number of techniques to promote its message to beneficiaries and to help agents perform their work. One piece is GGS posters, which are in Malagasy local dialects, are focused one of seven specific project activities in the context of how the environment should be considered in each of them. The posters are used by field agents as a point of discussion when they visit communities. There are reminders and talking points for the agents on the back of each poster to help facilitate the discussions.
- Budget: Whether a separate budget for environmental strategies is necessary or whether the budget should be integrated is still a factor being debated, but it is clear that at least some additional funds and allocated level of effort (LOE) will need to be spent to wholly integrate the Go Green strategy (going beyond compliance) into the program for lines items including trainings, data entry, and the environmental specialist's salary. It is important that programs consider these needs early and budget appropriately for them.

Finally, this report captures the efforts of SALOHI moving into year 5 of the program as they promote and ensure sustainability. The report briefly revisits best practices and lessons learned during the past four years and discusses how to include these going forward in year five, and eventually into new programs. An important sustainability strategy used by SALOHI is the continuous, repeated reinforcement of key environmental messages and compliance concepts through multiple trainings and sensitization around the GGS concepts within their own organization and with beneficiaries. Also, the program has used a strategy first focused on early protection of natural resources (hillsides, water sources, forests, potential erosion points) before later implementing Food For Asset activities (generally irrigation systems and road construction). Using this timeline, the quality of natural resources is improved before the activity is started, which allows time for full engagement of the community. Another best practice approach for sustainability is the use of dinas - local bylaws or social contracts - to establish rules for infrastructure maintenance and environmental protection. The facts observed from the SALOHI visits, interpretations of observations, and recommendations are summarized in Table 1.

We look forward to updates and evaluations from SALOHI and the GGS strategy in the final year. This pioneering program is a model that we hope to replicate in other FFP programs and throughout DCHA. The assistance and dedication of the USAID Mission and the SALOHI staff and partners is greatly appreciated.

Table 1. Summary of SALOHI observations, interpretations based on the observations, and recommendations for future programming.

Topic	Observation	Interpretation	Recommendations for Future Programs
How is the GGS operationalized within SALOHI?			
Staff responsibilities	The GGS is structured to include the entire organization from the top down. Key components are support from the COP, leadership of a Champion, education across all the partners, and delegating responsibilities at each organizational level.	• A successful strategy has buy in from upper level management such as the COP and coordination units among the consortium. A groundswell of support from the field may also lead to creation of such a strategy; however, without budget, commitment to staffing, training, and monitoring, success of a cross-cutting program will be difficult. • All consortium members must be vested in order to make the strategy work. • The champion is largely responsible for setting the course of the strategy and assuring follow through at all levels.	• Appoint a Champion to lead and implement the program. Designate their role as GGS leader. • Allocate budget, time for training, and priority for coordination across units to implement the strategy the strategy successfully. • Engage the entire organization through sensitization training, education, and media campaigns.
Training	Environmental training is conducted on a yearly basis with SALOHI management staff. Biannual training takes place for technicians and agents in the field, and involves a/an: • Field assessment, • Abbreviated training from the original environmental course, • Opportunity to talk about specific challenges in the field.	• Training plays a critical role in the GGS. Training reinforces best practices, creates support and excitement around the activity, and establishes a baseline skill set for agents without an environmental background. • Training is an opportunity to educate staff on broad environmental concepts (annual training), but also to revisit difficult concepts or deal with real world scenarios as they arise (biannual training).	• Offer trainings to all levels of staff, particularly those engaged at the community level. • Provide frequent trainings and interactions with environmental specialists/coordinators.
Reporting	SALOHI uses a scorecard system to assist in the field monitoring and implementation of the GGS. Scorecards distill the basic mitigation measures of the EMMP into a 1-page	• The scorecard approach is similar to that of a checklist used in other FFP programs; however, it is unique by helping to distill the EMMP into a manageable document for non-specialists who act as the eyes and	• Involve different levels of the organization in development of scorecards to meet needs from implementability to reporting.

	format for each SO. These scorecards are being used by SALOHI as a means of monitoring community progress and reporting from the field. They also assist the field agents to manage the many responsibilities for implementation and oversight in the communities.	ears in the field. • The scorecard has been vetted at all levels of the organization, ranging from technical specialists to the field teams. This has reinforced the link between the need for the EMMP for reporting and the usefulness for monitoring in the field. • The scorecard can also be used to track the performance of a cross-cutting component of the SALOHI program based on improvement or total number of successful Go Green scores. • The scores are also used as a transparent means for awarding communities excelling in the program and promoting exchange of good practices between communities.	• Create a scorecard that is meaningful and easy to use, but be sure that is meets the strategic needs of the program.
Communication	The GGS uses a varied approach for communication with beneficiaries. The field agents are given posters that link environmental safeguards with other program activities. The posters were intended to be in local dialects but the translation did not take place. The posters did have prompts on the reverse side so field agents working with beneficiaries could follow talking points during the sensitization. Banners were also used in the community to promote the GGS competition and create excitement for the work. The criteria for scoring the competition were also displayed in communities, which overlapped with the governance cross-cutting theme.	• Posters and sensitization was used to highlight the interaction between the environment and healthy productive lives. Constant reinforcement was intended to change the thinking of beneficiaries. • Although the program had planned on translating the posters into local dialects, it is difficult to determine whether translation to local dialects would have made a difference in delivering the program. It is intended to make the messages more relatable.	• Integrate cross-cutting themes into programs by finding links with as many program activities as possible and promoting those with beneficiaries. • Make environment management a daily fixture by increasing visibility through active promotion using tools such as posters and banners.

Budget	SALOHI did not present a separate line item in the budget for the GGS. Budget costs were captured based on the time of the environmental specialists and expected monitoring costs.	• There is still debate on whether it is necessary to identify a separate budget for environmental management or to include the budget as a part of other activity costs. On one hand, it is reasonable to assume that if a budget does not exist for an activity, funding may be directed toward other activities. On the other hand, in a truly cross-cutting program, the activities pertaining to the environment are integrated at each level, and therefore, neither need nor may it be possible, to separate them.	• Budgets should at the minimum include the salary of compliance specialists, training, and materials for reporting and education.
How is SALOHI Performing in their Environmental Compliance?			
Roads/Bridges	Roads constructed by the program were generally constructed with appropriate and effective mitigation practices (e.g., cutbacks, reforestation, slope grading, erosion cover). IMAs were in place and had a reporting structure and repair schedule detailed in their IMA rules and often in the local dina. In a few cases, drainages were in need of repair and/or upgraded erosion control structures. In most cases, the canals were being maintained, reinforced, and backfilled as appropriate. All materials were locally sourced.	• Roads are generally being constructed at a high quality at the start of the program. Beneficiaries are being trained to only accept high standards for road construction and maintenance. These activities promote sustainability by demonstrating good techniques at the start of the activity and also promote strong infrastructure. • Sourcing of materials from the local area helps ensure that the roads can be maintained by the beneficiaries after turn over. The dina for maintenance and user laws also promote protection of their asset. • Significant work is required by the community to build this asset, so siting is critical to sustainability. In the case of the site visited in Vatomandry, the bridge is at potential risk for erosion due to another stream entering the channel nearby. An engineer should be consulted for the work as it nears completion to put erosion control measures in place.	• IMAs should continue to be supported and strengthened through project closeout. The IMAs activity should be started as early in the project as possible, but will likely have to overcome challenges with interest and buy-in because beneficiaries may not completely understand the benefit in participating until they see the IMA working. • Pay close attention to "riskier" infrastructure work such as the appropriate siting of bridges.

Dams	A single dam was visited during the TDY. This check dam for irrigation paddies was constructed with the oversight of an engineer. The dam had solid concrete construction, but the upstream areas had visible erosion. The impoundment behind the dam was becoming filled with sediment, although the dam was on a twice a year schedule for cleaning. Additionally, the dam site appeared to be an open defecation area.	• Based on the sedimentation rate behind the dam, it is a concern that the impoundment may fill up and become unmanageable for the IMA to clean appropriately. Erosion of the upstream banks must be mitigated so the dam continues to be usable. • The water may potentially be polluted from open defecation near the dam impoundment.	• Include upstream landowners/farmers in user groups. • Clean sediment from behind the dam more than twice a year. • Make reforestation and erosion control plans for upstream of the dam. • Discourage open defecation near water bodies and particularly near a community resource.
Irrigation	Rehabilitated irrigation canals were well maintained, but in a few cases required rehabilitation. Canals were generally clear of debris. Many communities had set cleaning schedules before the rainy season, but some cleaning schedules were on an as needed basis. Rubbish and debris from the canals are often thrown on the banks of the canal rather than discarded into an appropriate compost area or rubbish pit.	• Issues with canal management frequently exist because strong user groups are needed to collectively manage canals. Canal structures extend long distances through private lands and upstream users have significant impact on downstream users. • The "as needed" approach did not seem as effective as a scheduled approach for canal maintenance. As needed created room for committee members to delay maintenance. Additionally, the as needed approach doesn't coordinate timing of cleaning, so materials cleaned from upstream areas float down stream and may clog canals. There is a risk of unnoticed flow stoppages. • Some management committees assigned sections of canal for maintenance to an individual farmer. The delegation of responsibilities may be inequitable between farmers. Farmers with a canal sections with a steeper slope or higher water flow may have a much greater burden of maintenance than others. Because irrigation canals are a	• Include upstream users in management of water resources. • Time cleanings along the entire irrigation structure to prevent debris from washing downstream. • Mandate a cleaning and maintenance structure that is conducted on a scheduled, whole community basis with the entire association responsible for the entire length of canal.

		truly community asset, the assignment of individual sections doesn't utilize the community cooperation aspect of maintenance and these type of management associations are more likely to fail. • Debris disposal near the edge of the canal runs the risk of being washed back into the canal.	
Conservation Agriculture	Composting was being used as a mitigation measure for other activities and in support of conservation agriculture. For example, compost was used as fish feed for tilapia ponds or as natural fertilizer for planting of cassava. Based on beneficiary interviews, it was difficult to get larger volumes or high value commodities promoted by conservation ag to regional markets. Sale prices for high value commodities such as ginger were often negotiated well before harvesting. Farmers were engaged in FFS and invested in new technologies but many needed convincing before they were willing to expend additional effort to use the technology.	• The value of compost was an easy sell to the local community, and community members were actively engaged in promoting its use. Demonstration plots were useful in encouraging the community to use improved cassava techniques. • As production increases, there may be a need to focus on links to regional markets, especially for high value commodities such as ginger. The beneficiaries also may need additional training on business negotiation skills, as they seemed to be naïve at negotiating in larger market and predicting market prices.	• Continue to promote composting as a method to improve agricultural productivity. • Train beneficiaries on business skills for sales of high value commodities.
Aquaculture	Tilapia were harvested just before the visit and beneficiaries seemed to be happy with the outcome. The beneficiaries did not know how many fish were gathered from the pond and there was no discussion of selecting one size over another.	• Techniques that promote harvesting of adults and retention of fingerlings are necessary for maintaining stocks of tilapia.	• Include training on harvesting techniques into aquaculture demonstrations.

	Tilapia ponds were integrated into irrigation schemes, so there is a risk that extremely competitive species may enter natural streams and outcompete local fish. There was no direct evidence of this problem. Some farmers stated that they would be starting their own ponds.		
NRM/DRR	• Reforestation activities are being conducted primarily with eucalyptus and acacia, which are selected based on community need. • The communities were first required to implement mitigation measures protective of the environment before the asset construction was initiated. • Seedlings for reforestation were being grown in plastic bags, but SALOHI was going to initiate a community exchange with another management group to facilitate knowledge sharing on other means for producing natural "pots" for seedlings. The community planned on integrating fruit trees and selling the seedlings for additional income.	• The tree species selected, although non-native, were appropriate for the local community needs. If the community is in need of building materials, then species that grow quickly and have straight, strong trunks should be selected. In contrast, if fuelwood is needed, the species selected should be capable of growing multiple stems that can be cut without killing the entire plant.	• Select tree or shrub species for reforestation that are not invasive AND are most appropriate for the end needs of the user community. • Cross educate communities on practices that reduce cost and promote sustainability and rely on local techniques such as use of banana leaves for pots, spacing of plants to prevent insect infestation, and collection of seeds from wild plants.
Compliance Oversight	SALOHI has an environmental specialist in place to oversee reporting on environmental mitigation measures. SALOHI has also simplified the EMMP so field agents could report on the	• SALOHI has been diligent with training and preparing staff to implement the EMMP and carry on their monitoring duties. With their frequent trainings and attention to environment as a cross cutting theme, the program has been leading other FFP	• Work closely with the Mission staff to structure reporting in a way that facilitates oversight. • Continue to ensure that mitigation measures are in

	implementation on a biannual to monthly basis. Training, oversight, reporting, and field visits are in place for all project areas but the most difficult areas to access may not see as much service as those that are accessible. The program relies on the community agents for reporting in these areas.	programs. The environmental specialist detailed all deficiencies or potential deficiencies in mitigation and reporting independently of the USAID environmental specialist and rapidly made corrective actions. With the cooperation and work of the Mission SALOHI is meeting and in many cases, exceeding compliance expectations.	place for the remainder of the program.
How is SALOHI Promoting Sustainability in Year 5 and Beyond?			
FFW and FFA	Food for Work (FFW) and Food for Assets (FFA) were being used in a number of locations to build larger infrastructure. In interviews, beneficiaries stated that without the food contribution component, they would not be able to take the time away from their fields to contribute to the community asset.	• In looking forward to maintenance needs of the larger infrastructure activities, there may be a great time commitment should the project need significant repairs (e.g., washed out roads/undercut bridges). Without the FFW or FFA component, the beneficiaries may need outside assistance for repairs since it would require significant organization and time commitments away from fields.	• Continue to encourage exceptional maintenance practices with the beneficiaries, and from the beginning, construct to a high standard. • Assure that beneficiaries have the tools and education they need at the close of the program to conduct repairs on an ongoing basis. • Encourage scheduled maintenance by the community rather than as needed to prevent small issues from turning into significant problems.
Dina	Dina are community bylaws that function as a recognized social contract in Malagasy communities. The dina can cover any type of bylaw but SALOHI is using these in their governance and environmental work by adding aspects of IMA structure, rules for using community assets, and	• Although most communities have dina in place, not all of the dina have completely been adopted. SALOHI will continue to work with communities on acceptance of the dina. The use of an existing governance structure to support environmental sustainability is a strength of SALOHI. These bylaws, if accepted, will hopefully contribute to good environmental practices long into the future.	• Support community bylaws and find ways to encourage development through existing governance structures.

	payment for services into the dina. Dinas are encourage to be written and displayed on community center walls to promote transparency.	However, they must be carefully selected with full buy in from the community to be successful.	
IMAs	IMAs are an integral part of the SALOHI sustainability strategy since they will function as the main governance body over the infrastructure projects. IMA structure varied widely in the way they elect a leader, determine maintenance schedules, and for making corrective actions. Dina were also frequently used to strengthen governance of the IMAs.	• IMA establishment is notably a difficult task since communities may not be interested in participating until they see the project in place. • Implementation and support of IMAs can be complicated because they are built on community participation and decision making, so the structure can be varied. From the site visits, the IMAs that seemed to be most successful and active were those that have a few factors in common including: - Strong and engaged leadership - A clear structure for reporting deficiencies (violation of rules or needs for repair) - A scheduled, community effort to repairs	• Promote IMAs early in the program and work to strengthen. Possibly use cross-community learning to promote participation in the IMA if buy in is difficult. • Identify strong leadership and target them for participation in the IMA, although selection of the IMA president should still remain a member decision. • Encourage IMAs establish a reporting structure for problems that is vetted by the membership • Encourage whole member rather than individual responsibility for maintenance since these projects are often a community resource requiring large amounts of people and any one repair could be more responsibility than an individual can bare.
Community volunteer participation	Community beneficiaries are encouraged to participate in management associations and user groups. However, some beneficiaries begin to participate in so many groups that they cannot	• Loss of effectiveness due to dilution of time commitment is a serious concern when volunteers participate on multiple committees. Especially for volunteers, their attention can only be focused on a few specific tasks. Too many responsibilities	• Limit the number of committees that a single community member can participate in and/or limit their role as a leader in that group.

	continue to perform at a satisfactory level in every group. In these cases, their duty performance may suffer.	may lead to underperformance in some areas.	
Reinforcement	SALOHI is focusing on reinforcement of best practices with beneficiaries as a path to sustainability. They engage in frequent sensitization with the communities. They constantly discuss links between activities and their cross-cutting themes such as environment and governance with the beneficiaries.	• Reinforcement of sustainability values in formal training, daily discussions, or by example are an important piece for sustainability of the programs in the communities. SALOHI has undertaken the task of making environmental thinking a "reflex" which is necessary for true sustainability.	• Train and reinforce good practices with the communities throughout the entire program. • Focus on corrective actions when needed and use them as teaching moments.

2. Background and Methods

2.1 Purpose

The purpose of this TDY was to review the design and implementation of the SALOHI Go Green Strategy ("Nde'ho Maitso") and to capture best practices and lessons learned in environmental management. As detailed in the Scope of Work (SOW) in Appendix A, this review will be both forward looking in that it can be used to inform future programming, and retrospective, in that we will use the opportunity spent with partners to observe information needs and review the progress of corrective measures pertaining to the environment identified in the mid-term review, GGS Best Practice Review (BPR), and the yearly ESRs. On a larger scale, this review will be used as an informational gathering piece focused on capturing practices the SALOHI team used to develop the GGS, and to build a framework for translating environmental sensitivities into the design of other programs. This framework will then be implemented and evaluated in other FFP and DCHA programs under different operating contexts such as the Complex Crisis Fund (CCF) and Office of Transition Initiatives (OTI) (Figure 1).

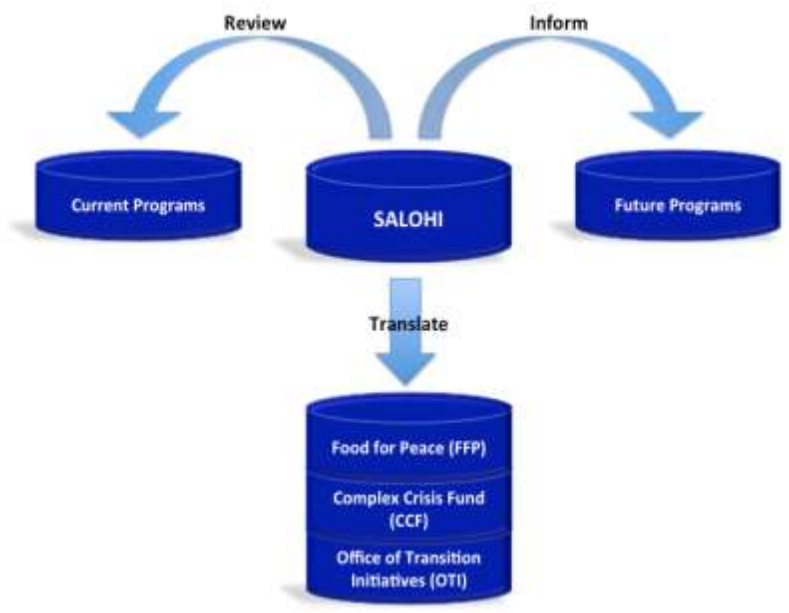

Figure 1. Structure for use of data collected during the SALOHI GGS review.

The **review** portion of the report focuses on aspects of the SALOHI environmental management process that is part of their compliance with 22 Code of Federal Regulations (22 CFR 216), also known as Regulation 216. Directive documents that

are part of Regulation 216 responsibilities include the IEE, the Environmental Mitigation and Monitoring Plan (EMMP), and yearly ESRs. This report reviews the performance of SALOHI's environmental compliance structure by:

1) Capturing the success of mitigation measures and evaluating monitoring strategies for SALOHI in the field. Recommending corrective action moving forward as part of a BPR-like process at the field implementation level.
2) Reporting on the program's actions taken since the mid-term review to ensure that implementation is addressing needs outlined in the mid-term review.
3) Highlighting needs for the end of the program and suggesting any corrective measures necessary. In particular, the report focuses on understanding the sustainability of roads and irrigation interventions and evaluating the feasibility of community road maintenance going forward and after close-out as a main component of sustainability.

This report will also seek to **inform** future FFP programs by capturing successes and challenges in the context of Madagascar and more broadly for FFP programming. By focusing on the challenges specifically in Madagascar, the most successful pieces of the SALOHI program may be adapted to new programs operating in similar contexts. The report:

1) Captures the environmental compliance structure of SALOHI, and how it is implemented through the GGS so portions may be adapted going forward.
2) Captures the challenges and best practices for applying environment as a cross-cutting theme into food assistance programs.
3) Evaluates activities to improve sustainability after program close-out.

Finally, the report focuses on **translating** the GGS to other programs by examining the SALOHI approach to staffing, management, training, budgeting, reporting, communication, and integration as critical factors for success of the GGS. The strategy will be described from the Catholic Relief Service (CRS) Country Program office level, within the organization structure of the broader consortium, and at each of the consortium partner's field offices. By better understanding the design and implementation of the GGS, we will gather information to direct future programming by:

1) Creating environmental recommendations for FFP programs at the early design stage so programs are environmentally sound and sustainable;
2) Compiling key steps or processes that are critical to planning and implementing environment as a cross-cutting theme.

2.2 Program Selection

The SALOHI program and the GGS were strategically selected as the subject of this review because they have emerged as leaders in environmental management and the integration of environment as an important cross-cutting theme in their program. With the cooperation of the Mission and SALOHI team, we felt that we could capture and build on SALOHI experiences to devise a framework that would be meaningful for other partners in designing similar programs. The timing of a review for this program was also ideal because SALOHI was reaching the final year of implementation, and the review received additional support from the FFP/AOR.

Figure 2. SALOHI and Go Green "Nde'ho Maitso!" logos.

Several additional factors were of interest in selecting SALOHI including:

- Frequent interactions and visits by the DCHA BEO for several years throughout the program life cycle. This TDY was an opportunity to follow-up on previous initiatives.
- The SALOHI Program conducting its own BPR, which is typically done at the Mission level. The BPR offered partner level insight into the performance of the GGS that USAID does not typically receive.
- The development of scorecards for measuring the GGS performance in the field. The DCHA BEO is interested in examining the tools being used by partners in the field to improve performance with a specific focus on whether field tools are reasonable or too onerous and if they measurably improve effectiveness. The goal is to adopt tools that are effective by making their use systematic, but tailoring them to specific needs in the field.
- The use of information/ education/ communication (IEC) tools and social behavior change (SBC) approaches as part of the GGS.
- The involvement of multiple consortium partners who had to come together to integrate environmental practices into their own structures. The SALOHI partners will help us better understand the challenges that may be faced by other organizations working in consortia to adopt the GGS structure .

2.3 Review Structure and Methods

The structure of this TDY is outlined in Appendix A (Detailed Scope of Work). Briefly, all environmental compliance documents as well as Mission BPRs were reviewed prior to departing so potential issues with mitigation and monitoring were identified before visiting field sites. Additionally, the mid-term report for the

SALOHI program and the GGS BPR were also reviewed so progress since the mid-term could be updated. Prior to departure, interviews were conducted with Washington DC based staff and the Mission to address their needs for outcomes of the TDY. In the field, the advisor met with the Environmental Specialist and the SALOHI COP and then travelled to 3 districts to meet with the program manager for each SALOHI partner. Field visits were made in three districts where the TDY used the scorecards to evaluate community progress, interviewed the beneficiaries, and reviewed activity progress.

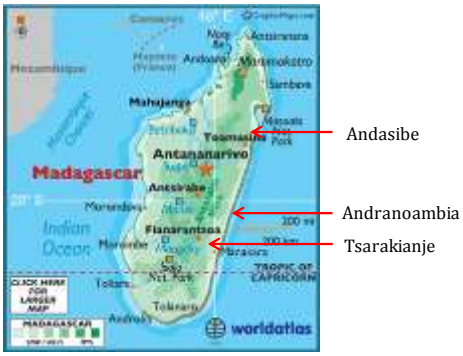

Figure 3. Approximate location of communities visited during the TDY.

<u>Detailed TDY Schedule and Meetings</u>

Saturday, April 13th

- Meet with the Ms. Jennifer Peterson (SALOHI COP) and Ms. Shahina Malik (FFP/AOR) for an in-briefing and to discuss the pre-planning and travel schedule as well as the overall scope and expectations for the TDY.

Sunday, April 14th

- Teleconference with Shahina Malik on the travel schedule and to discuss the SOW and priorities for the TDY.
- Travel to Vatomandry with CARE driver and Ms. Zoelimalala Ramanase "Zoely"(SALOHI Environmental Specialist)
- Meet with Zoely for a detailed review of the GGS.

Monday, April 15th

- Meet CARE staff and Mr. Haja Anselme Program Coordinator at CARE offices in Vatomandry to discuss the program and overview of planned site visits.
- Travel to field site with CARE staff including the program manager, field technician, and strategic objective (SO) technicians.
- Debrief with CARE staff and Zoely

Tuesday, April 16th

- Observe Environment Training with CARE staff and discuss visit with staff
- Meet with CARE Program Coordinator Mr. Haja Anselme
- Transit to Fenerive Est via CRS vehicle
- Dinner with CRS M&E specialist

Wednesday, April 17th

- Meet with Caritas (local CRS partner in Fenerive Est) Ms. Victorie Ralviby to discuss their organization and strategy.
- Working session with Zoely
- Conduct reinforcement training for Caritas staff

Thursday, April 18th

- Transit to field sites
- Field visit to Andasibe
- Debrief with Caritas staff

Sunday, April 21st

- Working day

Monday, April 22nd

- Transit to Fianarantsoa
- Beneficiary meeting with local social protection centers and women's business group
- Meeting with COP and CRS staff

Tuesday, April 23rd

- Transit to Ikongo
- Attend SALOHI program managers meeting to discuss the review process and to ask each SALOHI partner program manager for the challenges they have faced and their success implementing the GGS.

Wednesday, April 24th

- Transit to field sites in Ikongo
- Conduct field visits to SO1, SO2, and SO3 activities
- Conduct beneficiary interviews including natural resource management (NRM) committee, village savings and loan (VSLs), farmer field school (FFS), and an agribusiness group
- Transit to Ranomafana
- Interview with Zoely and Ms. Lara Dills (Country Representative)
- Working dinner

Thursday, April 25th

- Transit to Antananarivo

Friday, April 26th

- Mission de-brief with Ms. Aleathea Musah (See Appendix B for Debrief Notes)
- Meeting with Zoely

Friday, May 10th

- Meeting and debrief with Mr. Thomas Gibb

<u>Activities Reviewed</u>

SO1: Health and Nutrition

- Health Sensitization
- SAMBAIKA (pregnant/lactating women) and PD Hearth (malnourished children)
- Food Distribution (preventive rations for pregnant and lactating women and children 6 – 23 months of age)

SO2: Livelihoods

- Farmer Field Schools (FFS)

- Village Savings and Loans (VSLs)
- Agribusiness Associations
- Aquaculture
- Conservation Farming

SO3: Disaster Risk Reduction (DRR) and Resiliency (NRM)

- Reforestation
- Irrigation Canals
- Roads
- Water Management Structures (Dams)

Communities Visited

- Andranoambia, Ilaka Est, Vatomandry
- Andasibe, Andasibe, Vavatenina
- Tsarakianje, Ikongo, Ikongo

2.4 Site Visit Summary

Andranoambia, Vatomandry
Date: April 15th, 2013
Partner: CARE

This community is located ~8 km upstream from the nearest main road and to the south of Vatomandry in the eastern zone. After the last visit, the community received a yellow score for GGS implementation, which means there is opportunity for improvement. As part of a Food for Work (FFW) activity in 2011, the community built a 4 km road to service 7 fokotany (90 houses) (fokotany = community). There are also ongoing health and agriculture activities in the fokotany. The road is near completion except for two bridges under active construction that will link the road across the river (Figure 4). The president of the infrastructure management association (IMA) says that the community selected the road as an activity because it helped children get to schools, gave them access to rice from the town, and allowed them to trade their products as well as access medical care. The main crops in the area are banana, lychee, and maize. The primary shocks to the community are seasonal flooding which cuts off the village during the rainy season (since the path along the river is underwater and the river is too dangerous to travel).

Figure 4. Road into Andranoambia and access point from the river.

Figure 5. An example of deforestation from slash and burn farming techniques on the hillsides.

The beneficiaries spoke about other activities in the health sector such as keeping themselves and their surrounding area clean, washing dishes properly, and boiling water for drinking. CARE is also working with women's groups to sensitize them to exclusive breastfeeding (SAMBAIKA) and educate them on nutrition for their children (PD Hearth).

We discussed several other activities in the community including building latrines (not a SALOHI but a health partner activity) and improved agriculture to replace traditional agriculture practices, such as the use of compost with planting. They were using tavy methods (slash and burn) to grow rice because this is a traditional method used to plant upland rice on very sloped hillsides in this region (Figure 5). The community is still cutting rice fields along hillsides, but now collects the cuttings for composting rather than burning. In the words of one of the female IMA members, "Before they used to cut the forest, and now they are seeding it."

There have also been a few areas that the community has identified for reforestation. The tree nurseries are protected by small shades constructed with local material. The reforestation will also help stabilize the embankment near the road. The community chose eucalyptus for the planting. Eucalyptus is quite common in Madagascar and was introduced over 100 years ago but is not native. The community selected eucalyptus because it is strong, fast growing, and preferred for pirogues and houses. Acacia is used in other areas of the country but is not considered as strong.

The field agents and technicians posed a question regarding the types of trees that should be used for reforestation. It was the field agents' understanding that they were not to use eucalyptus although this was the preference of the community. Eucalyptus extracts water very efficiently from the soil, but the wood is highly desirable for its strength and quick growth. The Mission and the BEO do not support the use of invasive species, but they do support justified selection of species based on the community needs. As a note, eucalyptus is not considered to be invasive. SALOHI has consulted with WWF and the Madagascar National Parks on appropriate species section. Additionally, they have relied on another reforestation assessment conducted by DAI funded by USAID. In this case, the area has sufficient rainfall, and although non-native, eucalyptus is part of the existing landscape. Additionally, the eucalyptus is one of the highest value trees to the community for use. While selecting native trees is preferable, they do not always meet the diverse purpose of the reforestation project. Planting of native species would not likely

result in meeting the wood requirements of the community in the near future. In comparison, this same issue arose in the south where they have planted the non-native acacia. This has been the tree of choice in the south for reforestation and wood production because of its hardiness in dry climates. Although the wood is also not as strong as eucalyptus, it can be used for building. SALOHI should continue to collaborate with the National tree nursery on seed and species selection for their program.

The Food and Agricultural Organization of the UN (FAO) document, "*Role of acacia species in the rural economy of dry Africa and the Near East*"[1] provides some specific recommendations for the selection of acacia species based on the intended purpose of the reforestation whether it is for firewood, construction materials or purely ecological restoration. Although a forester or natural resources expert should be consulted for their suggestions, the report notes the following considerations regarding selection based on the goal of reforestation.

Criteria to consider for firewood species:

1) Rapid growth with high volume production where the species sprout readily when cut.
2) Species with dense wood and low moisture. Species has few thorns and is easy to handle. Low potential to absorb moisture.
3) Slow burning and high calorific value. Neither spits or sparks and has low smoke production.

Criteria to consider for construction:

1) Rapid growth and straight stems of uniform size. Naturally pruning and rapidly self-healing.
2) Properties are amenable to processing via mechanical, physical, and seasoning methods. Resistant to insects, fungus, and rot.

<u>Specific Environmental Compliance Corrective Suggestions:</u>

- The bridge being built over the river is just upstream of where two streams join. At the time of the visit the flow was low, but it is highly probable that during higher flow, the adjoining stream could undermine the adjacent bank and could undercut the new bridge (Figure 6a). Erosion control structures such as posts or sandbags should be put in place during the dry season so when the wet season starts there is erosion protection in place. Likewise, the banks should be seeded with vegetation before the rains to control erosion (Figure 6b). The community members had planned on using bamboo, which is found in the hillsides, and although fast growing, it could potentially clog the stream and isn't generally encouraged. Members should frequently cut the bamboo to prevent overgrowth.

[1] http://www.fao.org/docrep/V5360E/v5360e06.htm

- Bamboo is also being planted at the location where drainages cross beneath the road so they can be found for maintenance. While this is a practice that is very useful and practical, the rapid growth of bamboo may actually cause the drains to become blocked. The community should diligently maintain the drains by cutting back the bamboo or by choosing a different species as a marker.
- An additional spot near on the road into the village has a steep hillside that is beginning to be cut away by erosion (Figure 6c). The banks of the canals alongside the road are becoming slightly undercut due to the slope. It is recommended that stones be positioned in the canal to slow but not restrict the flow of water.

a)

b)

c)

Figure 6. Recommended compliance improvements.

a) Location where erosion may cause undercutting of the bridge.
b) Slope under the bridge where bamboo will be planted.
c) Area of high potential erosion along the roadside.

<u>Andasibe, Fenerive Est</u>
Date: April 17th, 2013
Partner: Caritas (CRS Local Partner)

Anadasibe lies 4 hours down an increasingly rutted road in the eastern region of Madagascar. Caritas, the local CRS partner, has been working with the community since the beginning of the program in 2009. The field visit activities included in the review are aquaculture, irrigation systems, and health sensitization. Few of the infrastructure management association (IMA) members were available because another activity was taking place in a nearby community and most beneficiaries were attending that event. The main crops in the community are rice, yam, cassava, and maize.

Just outside the village are 4 km of irrigation canals rehabilitated by the project and now being maintained by the community. Upon inspection, the channels are flowing and are well maintained in some areas, but in others, there are some minor amounts of debris in the canal. Responsibility for the maintenance of the canal is divided among the farmers with the nearest farmer taking responsibility for the adjacent section of canal. Repairs are conducted on a bi-annual basis before each rice season. When repair is are needed, someone in the community will tell the President and the associated farmer will have to conduct the repairs. We were told by IMA members that repair only gets done when the responsible IMA member has time and available repair tools. In one case, there was a portion of canal with erosion on the canal bottom. The flow was particularly fast in this section, and the canal lacked the appropriate flow control measures (Figure 7). The canal had not yet been repaired because the farmer did not have rice bags to fill with soil and stabilize the banks nor did he currently have the time to clean the canal. Another issue with the canals is that if upstream users are clearing land or moving debris from their section, it often flows downstream affecting other users. The debris also is often thrown outside of the canal walls and there is a high likelihood that it will be washed back into the stream. Therefore, everyone must be engaged in maintenance so upstream users are not causing harm to downstream users due to bad practices.

Figure 7. High flow in an irrigation canal.

Figure 8. Tilapia ponds promoted by the Farmer Field Schools and the compost pile for nutrients.

This community also has a demonstration plot that is part of a Farmer Field School (FFS) for aquaculture (Figure 8). The beneficiaries were given training on raising tilapia in rice paddies. A deeper section was excavated at the end of the paddy. Frylings were added to the pond. FFS learned how to use compost sequestered toward one of the pond to provide nutrients for the fish. The previous day was the first day the fish were harvested from this batch, although no one knew how many fish it had yielded. Fingerlings were not visible in the pond but the farmers said they were there. When FFS groups are first introduced to new farming practices like SRI (intensive rice production) or aquaculture, beneficiaries are sometimes very hesitant to begin the activity. Many times it is because the new technology takes a few more steps or because it is unfamiliar. The GGS is supposed to help reinforce thinking

about the importance of the environment in agricultural livelihoods by helping beneficiaries link conservation methods to livelihoods. Another factor in uptake of a new technology seems to be proving that the technology can produce greater yields beyond the current experience of the farmer. However, with improved yields, the farmer at some point may need improved market linkages to sell crops; however, in the communities visited, farmers are still producing limited quantities that do not meet the needs of their own families.

During the visit, a community health worker, Imberlono Edmond, conducted a health sensitization using GGS communication tools (Figure 9). The GGS posters discussed appropriate food safety handling practices and the importance of clean water for the house. The target audience was a mother's group who gathered on the President's porch with their children. Many of the mothers had newborns and were breastfeeding as Imberlono spoke. The women were very engaged during the presentation, answering questions and offering their advice. Zoely asked follow-up questions to reinforce the GGS with the community. A few minutes after starting several men from the community and children passing by also listened in and contributed to the discussion.

<u>Specific Environmental Compliance Corrective Suggestions:</u>

- The canal is in need of some maintenance due to erosion and high flow. The particular area where the bank and channel bottom was most in need of repair were in the fastest flowing section. The IMA responsible for the irrigation canal may need to consider having a different structure for repair responsibilities. The farmer responsible for this area has the section with the greatest slope, and therefore, the burden of maintenance is likely to be higher. This section is likely to be a continual problem, so members should consider collectively maintaining this length of canal.
- The IMA wanted to use rice bags filled with sand to reinforce the banks, but did not have any available at the time. Although it seems that bags may always be

Figure 9. Imberlono conducting sensitization training with the community women's group.

available this was a reason that the beneficiaries presented for not completing repair work in a timely manner. The IMA may need to be retrained on methods of repair that do not rely on rice bags.

- Except in a few locations, the canal was generally clean and free-flowing; however, some trash and vegetative matter were visible in a few sections. Although community members removed it upon our arrival, they threw it on the banks along the canal. The trash is likely to wash back into the canal with the next rain. The community should be taught to remove trash and place it in an appropriate location.
- The aquaculture demonstration plots had just been established, and several FFS members said they planned on constructing their own. It was too early to tell if they would be successful. Fingerling stocks are expected to be easy to maintain since they reproduce quickly and can be transferred from one stock pond to another. This is critical for sustainability.

Tsarakianje, Ikongo
Date: April 24th, 2013
Partner: FITEA (CRS Local Partner)

The fokotany of Tsarakianje is located in the region of Ikongo in southeastern Madagascar. FITEA is the local partner implementing programs in the region. Portions of Ikongo are extremely isolated from the nearest large market in Fianarantsoa. Roads are in poor condition, and although a taxi-brousse does travel the road, it is infrequent (weekly). The roads become increasingly impassable during the wet season. Isolation and lack of market linkages are significant challenges facing this community; however, great opportunities exist for improvement of NRM and increases in food security as water is generally available in this region. Natural disasters are most commonly associated with cyclone damage and hail.

During the site visit, we met with beneficiaries and reviewed projects in the areas of DRR (disaster risk reduction/reforestation), PD Hearth programs (rehabilitation of malnourished children), infrastructure (dam), FFS, and VSLs (village savings and loans). Visits involved looking directly at activities (if applicable) and then interviewing community members and technicians or field agents from the community who managed and/or participated in the activity.


Figure 10. Area of hillside reforestation for the NRM management group.

First, we met with the NRM management committee and village elders. The primary activity of the NRM committee was a tree nursery for reforestation and DRR to protect a hillside that had be deforested for rice production. The community had established a tree nursery on a plot of land

donated by an NRM committee member. The plot of land had been selected because it was deemed to be the safest from predation or from theft. Seeds were provided separately by CRS and were not USAID funded, but the training on how to care for and raise the seedlings were part of a SALOHI activity. The seedlings were being grown in plastic sleeves in a raised bed and the rows were separated from each other (see Figure 15b). The community members were taught this by another community because it kept a certain type of pest from killing the plants. The plants were watered by community members and when it was time, they were taken to the hillside to plant. The area replanted could be seen from the village on a large hillside that was also the water source for the stream into the community (Figure 10a). Irrigation activities were also taking place in the community. The protection of the water source using the reforestation activity prior to improving the source for irrigation was considered a best practice since the environmental investment was made prior to the asset being given to the community. The problem areas for the NRM committee may be the sustainability of the project since currently, seeds were being purchased. Seeds must be collected so the community continues to have a source to continue the activity. The community would also like to extend beyond the use of acacia for reforestation to plant fruit trees for further income and also to use as seeds.

Next we spoke with the PD Hearth group (Figure 11), which had less direct focus on environmental impacts; however, the beneficiaries were taught about how they should keep the environment clean and use latrines so that they would have clean water and clean food for their children. They were also taught about the link to diarrheal disease due to contact with fecal matter. Based on interviews with the beneficiaries, this PD Hearth program was in need of intervention by the SALOHI staff to improve follow-up with mothers of malnourished children. SALOHI stated they would be undertaking corrective actions with this group.

Figure 11. Women raise their hands to show who had taken part in malnutrition screenings.

The next visit was with the FFS in the community. In this area, the farmers frequently grow cassava as one of the main staples of their diet. They also are growing and selling ginger to small buyers through pre-negotiated rates. The improved agriculture techniques being adopted by the community includes use of compost for planting, small plots that prevent compaction of soil, shaded and raised beds or in other cases, small depressions to retain water. This community has been particularly successful and was growing very large cassava (70-80 lbs) (see cover photo). CRS had taken the community and their cassava to Antananarivo with an exchange program to promote the work. The farmers growing ginger were also using compost techniques. The ginger farmers had identified buyers for their crop who would also help with transport options. A very critical issue with large scale

farming of ginger is that the nearest large market is located in Fianarantsoa, which is at least 6 hours away, so it is difficult to transport larger volumes of crops to the regional market. As productivity increase, there may be an opportunity to improve market linkages for high value commodities.

VSL participants were also interviewed. Three of the participants had used the VSL for a loan: one for schooling for his grandchildren; one to start a small grocery; and one to plant additional cassava. They had been charged 20% interest on their loan, which is an amount set by the members. This rate seems quite high, but the members said they had agreed on it and it was an amount that they could pay back and still make a small amount of profit. However, the farmer using improved techniques still did not grow enough to feed his family, but he did produce 5 x more cassava by using the improved agriculture techniques. Small groceries were a popular business with women. The margin is large for these activities, and it was a quick way to make additional money, but as the activity becomes more popular other diverse means for businesses may need encouragement.

The final site visited was a dam used to irrigate rice paddies. A Food for Assets (FFA) program was used to construct a concrete dam across a stream. The dam helped to regulate water flow to rice paddies downstream. During the high flow season, the water level will often flow over the dam but it slows the water. The management committee is vital to the operation of the dam since they must regulate flow and maintain the system. The fokotany has dina (local rules and regulations), which include the amount of tax to be collected for dam maintenance. The members of the committee who benefit directly from the dam must pay a bag of rice and 2000 AR twice a year at harvest time for the dam. The members seem heavily engaged in management of this structure, likely because of the impact on farm production.

Figure 12. Food for Assets project with siltation behind sill from upstream erosion.

Several issues may arise based on environmental management of the dame. The dam was constructed with the help of an engineer who is based in the nearby area. However, the dam has a significant amount of siltation behind the sill (Figure 12). The siltation is supposed to be cleaned twice a year according to the dina; however, it was not clear that this was going to be conducted adequately to keep the dam functioning because the IMA did not seem concerned about the level of siltation that was already present. Without maintenance, the dam will be at risk when siltation reaches the top of the dam.

There are several important issues that should be addressed by the IMA to assure sustainability of the dam. First, the management association does not include the upstream land owners or users. There is already a significant amount of erosion

evident with shrubs and trees being located in the waterway. We were told some of this was due to cleaning upstream, but it is also obvious that erosion of the banks is causing silt and plant material to enter the stream. The removal of vegetation or debris from channels is a serious problem and much of the debris removed from the canal is discarded alongside the channel and is washed back into the canal during the rains. Proper removal should be stressed. Also, if upstream users cannot be engaged, the dam will continue to suffer siltation, and if cleaning is not frequent enough, the dam will become useless. Additionally, the community must strive to solve issues with open defecation near the stream. Human feces were observed next to the stream just upstream from the dam, which has the potential to contaminate the water. The use of this area for defecation can have a serious impact on water quality and contaminate large tracts of land downstream.

Specific Environmental Compliance Corrective Suggestions:

- Members of the NRM committee should be taught how to collect seeds or propagate saplings so they do not need continuous seed inputs to make the reforestation project sustainable. Perhaps the early integration of fruit trees for sale may generate enough income to continue to purchase seeds.
- The NRM committee was using plastic sleeves for growing the saplings. Although they could reuse the bags several times, they create waste and may not be economically sustainable. There are other natural means for growing the seedlings. CRS plans to partner this community with another that has already learned to grow seedlings in bags made of natural materials.
- Siltation must be removed from behind the irrigation control structure on a regular interval, but upstream management of the banks must also take place to prevent erosion. The IMA should include the upstream farmers, and they should establish some incentives to prevent erosion and appropriate clearing of brush. The dam will be difficult to maintain if upstream users are degrading the watershed.
- Sanitation programs should continue to address open defecation. The GGS strategy may need to reinforce aspects of environmental health related to defecation near waterways.

3. SALOHI Environmental Compliance

Overall, the SALOHI program has a very high level of environmental compliance and monitoring for all of their projects in the zones visited. They have been coordinating with the Mission Environmental Officer (MEO) on reporting responsibilities and oversight of their compliance activities. ESRs have been transmitted to the BEO on a yearly basis along with the Pipeline Resource Estimate Proposal (PREP).

The environmental specialist is responsible for environmental compliance and the GGS, and is also involved at the field level with environmental compliance and

oversight of SALOHI activities. She visits each of the 6 project zones twice a year to review programs and conduct environmental trainings for staff. Field staff are responsible on a monthly basis for reporting the environmental condition of the projects through the use of the scorecards specifically designed by the program. The results are used to communicate deficiencies to the headquarters as well as track progress.

A summary of the status of environmental compliance for the program is identified below for the overall program and for specific mitigation activities observed during field visits described in Section 2.4. When needed, corrections to mitigation activities are also noted.

Overview of Compliance Status

- All appropriate documents for environmental compliance reporting are in place and completed in a timely manner. The BEO was unaware that SALOHI was completing ESFs and has received copies of those documents from the MEO for comparison against the ESRs.
- Mitigation of environmental impacts is carried out at the field level by field agents and technicians, and at the management level by the environmental consultant. Necessary mitigation requirements are being addressed at each level of the program.
- There are a few cases where improvements to mitigation measures are needed. These have been noted in the site visits detailed above and also have been communicated to the field staff and program managers during field visit debriefs. It should be noted that the environmental specialist for SALOHI had also independently identified the same problem areas, so there is a high level of confidence that her reviews are setting a high standard for compliance within the program.
- SALOHI has included "green" indicators as part of their indicator performance tracking table (IPTT). These indicators are tracked annually, and will be included as part of the final evaluation. The BEO would be interested in a report out on any annual G indicators in the ESR if applicable.

Irrigation Canals

The following mitigation measures were observed to be in practice at SALOHI activity sites during the field visit.

- Reinforced canal banks in high flow or prone areas with rice bags backfilled with sand. In some cases, communities were also using local techniques such as cutting consolidated blocks of soil from nearby areas or lining the channel with sticks and backfilling with soil (Figure 13). This also applies to drainages along roads.

- Clearance of siltation on a regular basis from canal channels. Usually cleaning schedules were determined by the management association and many times were identified in the dina. Canals were generally very clean, the water in the canal was free of turbidity, and the sides of the canal were well maintained. Protection measures were in place to keep animals from the canals in the form of fines for animals allowed to roam in the canals and cross at points prone to erosion.

Figure 13. Use of wood from the local area used to stabilize a drainage canal.

- Opening of flood gates during high flow to prevent erosion of the banks.
- Removal of brush upstream and downstream to allow for flow. Brush should be removed from nearby the canal so it does not have the potential of falling back into the canal.
- Maintenance of the bank vegetation (i.e., cutting, trimming) to prevent materials from clogging the stream.
- Stabilization of embankments after construction by planting vegetation. This was a critical need identified for maintenance of the canals. The management associations should seek to involve the upstream user to achieve goals in water quality and decrease tension of water use as well as work to stabilize banks.
- In high flow environments, there is a high potential for the erosion of the canal bed without flow control measures. In one case (i.e., Andasibe), this damage was significant enough to potentially require assistance; however, the management association stated it would soon be repaired by the farmer responsible for their section.

Health Programs

- SALOHI conducted latrine sensitization as part of SO1, but in some cases latrines were sited near water sources. Sensitization should include a component about how to site the latrine properly.

Roads

- Use of stones or rocks at points where the slope causes water to flow too fast. This measure will prevent erosion and destabilization of the bank.
- Preventing the use of the road by farm animals through enforcement by management associations or dina. Farm animals can destroy the road and should be limited to specific crossings.
- Use of local materials for water diversions under roads at regular intervals. Local materials included hollowed bamboo.

- Planting of material to identify where drains are so that they can be easily identified and inspected during maintenance. As noted previously, the types of plants selected for marking drains should carefully consider and maintained so they do not block drainages from uncontrolled growth.
- Reforest hillsides where drains exist so drainage during high flow does not contribute to erosion of slope sides.
- Vegetation of the sides and banks of drainage canals to prevent erosion.

Figure 14. New road in Vatomandry zone constructed with local resources.

- Cut back roadside with terraces to prevent slides.
- Addition of barriers or constrictions on foot traffic only paths to discourage vehicular traffic.
- Revegetation of hillsides cut for slope stabilization. Some bridges were being constructed by a FFW program. They are taking the appropriate action to level the slope of the road and revegetate the denuded embankment; however, bamboo was selected for slope stabilization. The potential for other native species should be investigated.
- Siting of the infrastructure was appropriate given the topography; however, precautions should be taken to prevent erosion and destabilization of the banks, particularly in anticipation of high flow during rainy seasons.
- Roads were well designed with a focus on the capabilities for the community to maintain its functionality. The roads were constructed completely with local materials and were constructed appropriate mitigation measures such as sloping cutting, stabilization with grasses, and flow control measures (Figure 14). By the end of the program, the program needs to ensure that the community has the necessary tools for repair, such as hoes, and that dina to restrict zebu

a)

b)

Figure 15. a) Shade structure to protect new saplings from the sun. b) Saplings being grown in plastic bags, which will be replaced with natural materials to improve sustainability.

from the path are enforced in the community.

Aquaculture

- Use of compostable materials (i.e., food scraps) as nutrient additive for fish farms (see Figure 8). Composting was combined with aquaculture as a food source for tilapia. This is an example of good integration of environmental mitigation with program activities.
- Manage the amount of compost to prevent over nutrification and prevent the use of any composted material with animal or human waste.
- Harvest the fish at an appropriate level and appropriate time to maintain the carrying capacity of the fish populations.
- Prevent release of fish into adjacent natural surface waters.

NRM

- Use of shades for plants made of naturally materials to prevent evaporation from the soil (Figure 15a).
- Use of native plants for reforestation when possible but also consider the long needs of the community.
- Use of natural materials such as banana leaves for seedling nurseries instead of plastic bags (Figure 15b).
- Promotion of composting instead of fertilizer.

Agriculture

- Promotion of compost and natural fertilizer rather than chemical fertilizer.
- Use of local methods of pest control rather than pesticides. For example, when plants are appropriately spaced, pests do not tend to infest them as readily.
- Promotion of improved technologies and agroforestry rather than slash and burn in addition to sensitization on the damage of slash and burn agriculture.
- Promote small plots for household agriculture to allow for watering of individual plants without compacting soil (Figure 16).

Figure 16. Use of conservation agriculture.

4. Go Green Strategy

The GGS within the SALOHI program is an organizational policy that seeks to integrate environmental thinking into every aspect of the program. The strategy is based on the uniqueness of the Malagasy environment and the critical role that the environment plays in the achieving SALOHI program goals. The goal of this report is to capture the history, structure, and implementation of the GGS within SALOHI with the hope that it can act as a model and be translated to other Title II and DCHA programs. First, we will discuss the SALOHI organizational structure, and then we will profile the GGS itself.

Figure 17. A recycled vegetable oil can turned into a trash receptacle in a GGS community.

<u>Birth of Go Green Strategy</u>

Early in the program, the COP and Environmental Specialist for CRS identified that there was a need to integrate the environment more holistically into SALOHI. They believed that taking environmental compliance a step beyond mitigation and monitoring required by the IEE would support program goals and would help achieve program sustainability. CRS wanted "to go beyond compliance" to prevent a regression back to bad environmental practices even upon program close-out, and a better integrated environmental system was a way to do that. This vision of making the entire SALOHI program one that encourages an "environmental reflex" was born.

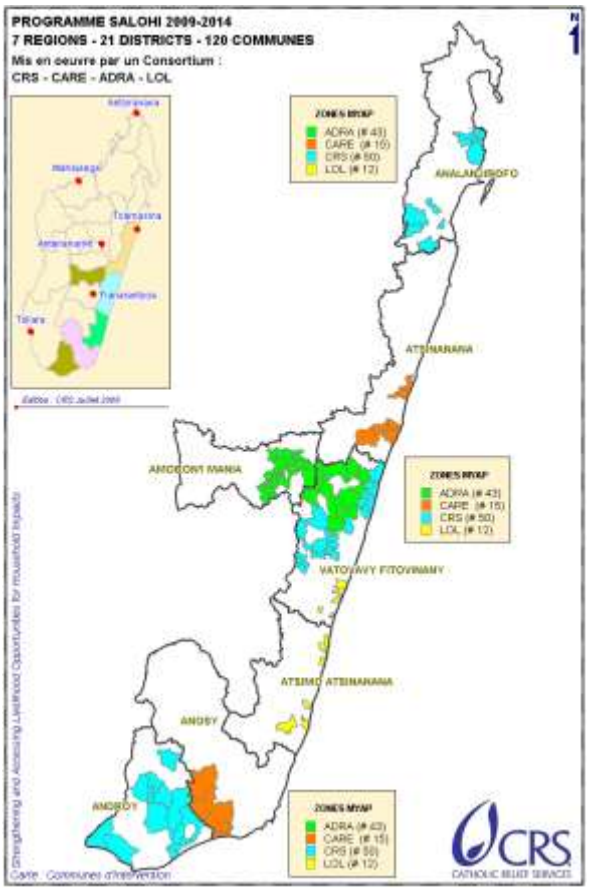

Figure 19. Map of SALOHI target areas.
Source: CRS

The GGS came from an evolving need as program implementation progressed. In 2009 when SALOHI began, staff were trained in environmental compliance requirements primarily related to infrastructure activities since those have the most obvious threats to the environment. The IEE and EMMP were completed before the program was approved, but ESFs needed to be developed for each infrastructure activity to comply with Mission reporting requirements. CRS could have just hired the environmental consultant to draft the ESF, but they instead began planning a more integrative approach across the entire program. The COP was especially convinced that in order to integrate environment and make it truly cross-cutting, as was planned in the results framework, that the environmental reflex must be reinforced through multiple trainings with the staff. With this managerial-level commitment, the groundwork was set for making the environment truly integrated.

In October of 2010, the initial framework for the GGS was developed, and CRS moved forward with developing materials to support the strategy. In early 2011, the ENCAP training on environmental design and management was conducted for the FFP partners. While providing a foundation, CRS felt that a single training wasn't sufficient for carrying out their vision of environmental integration for the GGS. When the environmental specialist presented the concept of the EMMP and encouraged its use in the field to the staff, it was not easily adopted because for the most part, the staff had a difficult time making a direct link between the document and their everyday work. Seeing this need after the workshop, CRS continued to develop Go Green!

4.1. SALOHI Organizational Structure

SALOHI is a consortium (CRS, ADRA, CARE, and LOL) with each partner having their own independent organizational structure as well as being integrated at a higher level into the consortium. Therefore, we will briefly discuss on how SALOHI is organized as a reference for later discussions on how the GGS is implemented within the broader SALOHI program and at the partner level in the field. The organization structure also has implications for environmental oversight, which will also be discussed.

The seven primary target areas of SALOHI are located in four geographic zones (i.e., the central highlands, the southeast, the dry south and the east zone) with each member generally overseeing a specific target area (see Figure 18). SALOHI is structured so that partners are responsible for all three SOs in their target area, although some overlap does occur for occur with partners on activities like health and agribusiness. The intent of making each partner responsible for all SOs was to facilitate the holistic, cross-cutting nature of the program as well as respond to the realities of the poor infrastructure and connectivity in Madagascar. Due to constraints including long travel times and the isolation of communities, an approach where all three SOs are implemented by the partners in their area is more feasible than delineating responsibility along lines of expertise. However, of course, this presents challenges when partners must tackle objectives that may be outside

of their expertise. The program has sought to address these potential gaps in experience by bringing in more local partners, conducting training, and knowledge sharing.

The SOs for the program are:

SO1: Improving health and nutrition of pregnant and lactating women and children under 5 (HEALTH)

SO2: Improving livelihoods (AG)

SO3: Strengthening community resilience and capacity to withstand shocks (NRM/DRR)

Outside of each partner organization, there are also higher level management groups including Technical, Administrative, Program Management, and Admin/Finance Working Groups, and a Program Coordination Unit (PCU) to help SALOHI function as one cohesive and collaborative unit (Figure 20). These groups operate to:

1) Communicate experiences from the each partner to the larger consortium as well as provide an avenue for gaining technical guidance
2) Provide a basis for decision making as a group
3) Assist with continuity across partner programs
4) Facilitate integration and information sharing

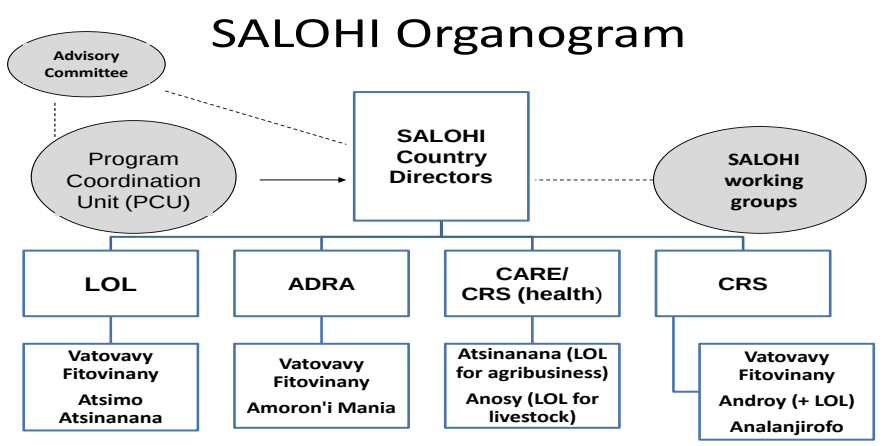

Figure 20. SALOHI structure and partner target area responsibilities (Source CRS).

Working Groups – SALOHI working groups were established to focus technical work and management around key themes and topics, involving all consortium partners.

Working groups usually include higher level partner staff (i.e., technicians and managers) to discuss challenges and solutions to implement the program.

Program Coordination Unit (PCU) - The PCU is comprised of coordination staff designated by broad programmatic expertise. The PCU operates at the consortium level on issues that impact the entirety of the SALOHI program. The PCU includes staff from all partner organizations and focuses on key aspects and oversight of the SALOHI program as a single unit on issues such as technical, M&E, administrative, commodity management, and monetization.

Monitoring and Evaluation (M&E) – The M&E coordinator for SALOHI works from the CRS office in Antananarivo on the PCU. Each consortium member also has their own M&E coordinator, and then regional coordinators and field staff also assist with data collection. Partner M&E coordinators send data to the SALOHI M&E coordinator who compiles it for annual and quarterly reports. He then returns data to the field staff so they know how well they are progressing.

4.2 Context of Madagascar

Madagascar is a truly unique environment, but it is one under constant pressure. Madagascar is at the intersection of multiple and repeated shocks and those vary dramatically between different regions. In the past 4 years, no fewer than 6 cyclones have struck the coast, resulting in widespread flooding and destruction of crops. In addition, the western coast is currently facing a locust crisis partially brought on by the flooding. This outbreak could severely impact the already poor food security in the country. The south is primarily affected by drought and lack of natural resource services that are necessary to support livestock (i.e., zebu) or agriculture. In the east, communities are affected by floods and cyclones as well as isolation from trading routes and health care facilities.

Food security is further impacted by generally unsustainable traditional agricultural practices of slash and burn. The pressure to meet the growing demand for charcoal, particularly in the city, is resulting in deforestation of large tracts of native forest. Deforestation is also perpetuated by the illegal trade of precious wood, particularly in Mananara and south of Antananarivo. Encompassing these issues of natural disaster and poor agricultural practices is isolation of communities due non-existent infrastructure and a central government formed during a coup d'état that is doing very little to propose solutions to these deep rooted issues.

At the national level, some strides have been made with federal environmental management and regulation. The former government invested in the idea of conservation as a pathway to development, but the commitment to national parks has changed. The extractive industries such as mining of gems, metals (nickel), and timber have more recently been major drivers of development. There is a requirement that new large-scale extraction projects have an environmental assessment under the *Charte d' Environment GOM* (Loi N 90-033 [21/12/90]

modified by N 97-012 [05/06/97]) and *La Consideration de Environment* to facilitate the integration environmental degradation into planning and reparation payments. Some of these assessments have led to removal and resettlement of people onto other lands, so mining activities could continue.

Madagascar is divided into 22 régions, 119 districts, 1 579 communes, 17 485 fokontany and 121 679 localities (hamlets). Each administrative unit has a titular head, some of which are elected (commune mayors) and some of who are appointed (Chef de Region, Chef de District and Chef de Fokontan). There are 10-15 fokotany in each commune, and several hamlets in each Foktonay. The structure is as follows:

National > Regions > Districts > Communes > Fokotany > Hamlet

The GOM has an action plan for development (the Madagascar Action Plan or MAP), which outlines the government's overall goals and also informs regional and communal development plans. The MAP includes eight specific objectives, some of which overlap with SALOHI objectives and are integrated into the Disaster Prevention and Mitigation Plans (DPMP) and Fokotany and Commune Development Plan. These documents are submitted to and approved by local authorities and assist with community planning.

4.3 Evolution of the Go Green Strategy

The SALOHI program is a unique example of the integration of environmental protection measures into all aspects of a food security program. The GGS works across all program strategic objectives (SOs) to strengthen environmental reflexes even when an activity does not include an obvious environmental component. Examples of where the environment was integrated into activities lacking an obvious environmental component include discussing with VSLs the impact of their new businesses on the environment and incorporation of this assessment into VSL dinas (LIVELIHOODS); the integration of composting and loading rates into fish ponds to improve yield (AGRICULTURE); and protection of water sources through reforestation to prevent diarrheal disease (HEALTH). Some activities inherently include environmental management as part of the activity like conservation agriculture and NRM, but the GGS makes connections between beneficiaries' daily lives and environmental management through successive reinforcement and sensitization. Within this section we will discuss the vision for the GGS, the design, and the means by which it was integrated in the SALOHI program well after program design had been completed and activities had begun in the field.

Reflex

A: *the process that culminates in a reflex and comprises reception, transmission, and reaction*

B: *the power of acting or responding with adequate speed*

C: *a way of thinking or behaving*

Source: Merriam Webster Online

4.3.1 What is the Go Green Strategy?

The foundational concept of the GGS was to develop an "environmental reflex" in staff and in beneficiaries. The reflex concept is designed around creating an automatic and

inherent link between beneficiaries' daily lives and the environment. Once a reflex has been established and in-grained, it will serve to promote sustainability of the program overall and will ensure that environmental consequences are considered in all activities. The hope is that the GGS will also translate to activities that are outside of those being promoted or directly supported by SALOHI.

The Environmental Specialist, Zoelimalala Ramanase (Zoely), devised a broad strategy to create this reflex by integrating environmental practices into multiple sectors, reinforcing it through repetition and training, evaluating progress, and then adapting as necessary. The four critical periods are described as the functioning period, the trial period, the consolidation period, and the institutionalization period. The flow diagram in Figure 21 outlines the learning approach for the GGS within the context of the program timeline (Source SALOHI Mid-Term). The integration and promotion of the GGS into the SALOHI structure will be discussed in the next section, which will be followed by practical implementation details at the beneficiary level.

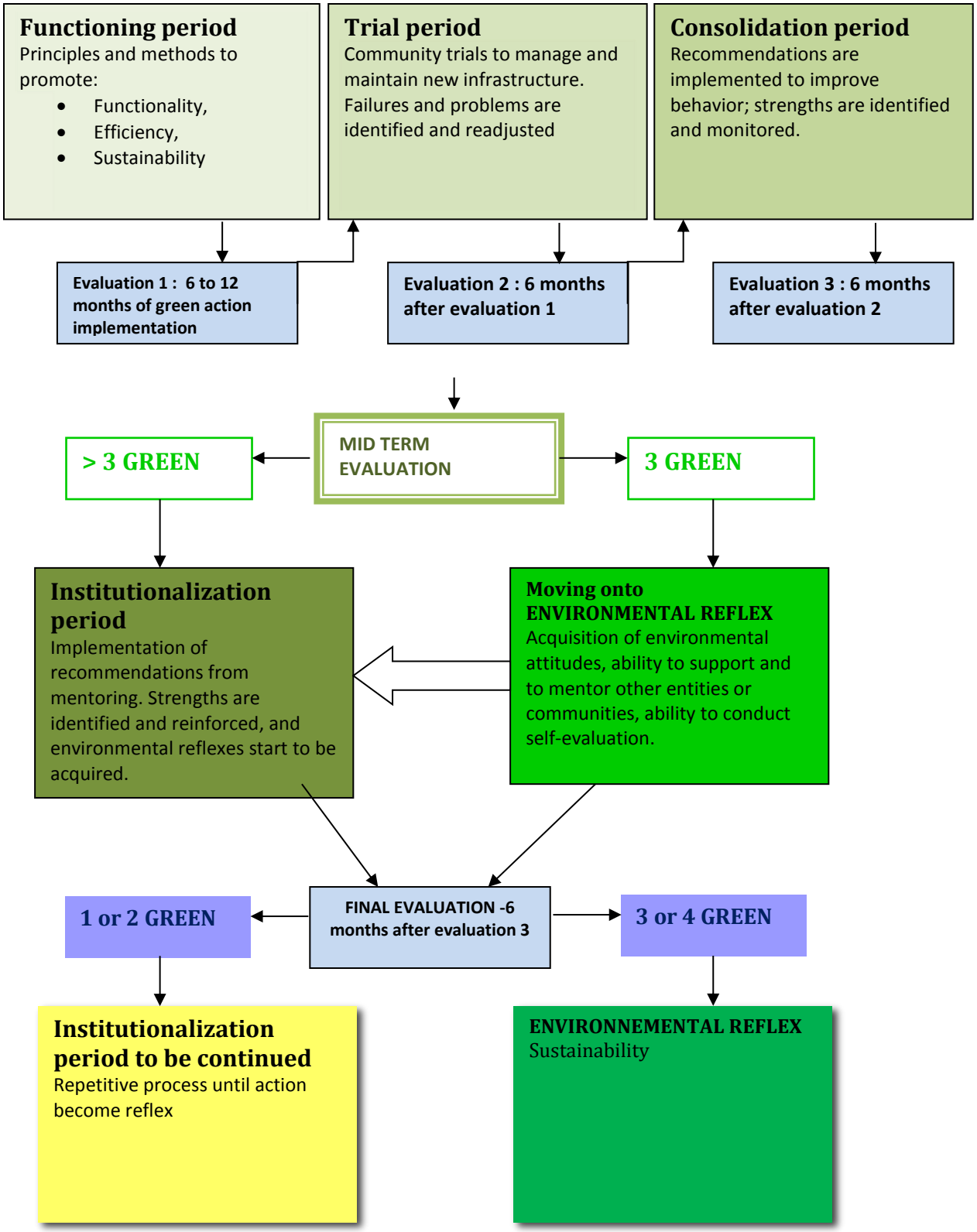

Figure 21. Go Green Strategy Conceptual Framework (Source SALOHI Mid-Term)

During the functioning period, the community is trained on aspects of environmental protection. They are trained both during activities as well as through sensitization to concepts of environmental protection and by linking the environment to program objectives. For instance, mothers participating in the PD Hearth program discuss the importance of clean food and water for preventing diarrheal disease. Beyond talking about why they should use clean water, they also talk about how they can make their drinking water sources cleaner by not defecating near streams and rivers.

During the trial period, the community has completed the activity or has been trained in carrying on activities. This period is an opportunity for the community to test their internal capacity for conducting the activity without outside guidance. It also gives SALOHI implementers a chance to evaluate sustainability of the activity in a scenario similar to close out. However, field agents and technicians can be called back for interventions should they arise. The trial period is an opportunity to determine which program aspects are working and have been integrated into the community and which need to be adapted or reinforced.

The final consolidation period is wholly focused on sustainability of the activities and the institutionalization of environmental reflexes. During the trial period, weakness or strengths are identified and these are leveraged to ensure that activities are wholly functioning without external support. Program beneficiaries should be able to entirely manage activities. Strategies to promote sustainability during the consolidation period are discussed later.

4.3.2 How is the GGS Implemented within SALOHI?

During initial strategizing sessions, Zoely from CRS laid out the environmental reflex strategy in 2011, and was officially launched with training on the EMMP in February 2011. The mid-term review updated the progress of the implementation of the GGS. According to Zoely, The overall motto of the GGS is that "by protecting what we have today we can ensure that it is here tomorrow". Several key concepts were identified by CRS to support the successful integration of the GGS into existing SALOHI structures. Each of these concepts is critical for the overall program and is addressed in greater detail in the following sections.

1) **Appoint a Champion**: For an initiative to thrive, it must be headed by a high level champion who is driven to promote the program throughout the organization. The champion in this case is an independent consultant hired to work for four months each year over the lifetime of the project to serve in the role of environmental specialist.

   A champion is critical to move forward any initiative. They are the face of the initiative and are willing to push through impasses to keep the initiative on the forefront of the organization's agenda.

In the case of developing and implementing a strategy within an existing program, there are several important points from the SALOHI program that should be highlighted.

- The Champion must be integrated into the program at a high level so they have some level of visible authority over the program and team members.
- The Champion must have both a technical command of the subject matter (i.e. environment) and also be persuasive enough to engage the staff across the entire organization from the field level to the COP.
- In many cases, it may be best to have a Champion that is a host country national and has intimate knowledge of local customs and can communicate in local dialects. This will assist in direct communication across the entire organization and at the beneficiary level.
- The Champion must be given an adequate amount of time to conduct their duties, which will range from development of the strategy, ways to implement the strategy, and field observation.

2) **Disseminate the Idea**: Cross cutting issues require that everyone in the organization understand the goals and eventually what their role entails. A plan for dissemination was devised by CRS to gain early feedback and buy in from upper level staff. Responsibilities within the strategy are discussed in Section 4.4.1, and methods for dispersing the strategy in the organization are discussed in Section 4.4.2 on training.

3) **Conduct Holistic Thinking:** CRS devised ways to make the GGS holistic with a plan on how to address integration into non-traditional sectors, such as health. See Section 4.4.4 for more information on how communications plays a key role in the holistic thinking.

4) **Training and Buy in of Staff**: CRS and SALOHI partners found ways to reinforce the GGS through trainings and through consultations at each level of the organization (Section 4.4.2). Annual trainings were conducted in 2010 and 2011, and the program also conducted bi-annual training at the partner level with field agents and technical staff in each zone. These trainings reinforce prime concepts and give teams a space for discussing challenges and receiving direct technical assistance. SALOHI felt that the most effective trainings were the annual trainings followed up by field agent training.

5) **Evaluation and Reporting**: CRS put in a strategy to monitor the progress of the GGS through a scorecard system (Section 4.4.3). The scorecards were used annually (before the July environmental training), but to promote institutionalization and to identify green communities, scorecards were used over 6 months in 2012 and 2013. A standardized scorecard was particularly important in this program because field agents from all partners would be

responsible for collecting data. Scorecards for each SO helped to track environmental mitigation and for uptake of the strategy. The results from the scorecard are used to track the progress of communities, assure accountability, and communicate results back to the field agents.

Additionally, broader evaluations will take place every semester (at least 4) to evaluate the community's progress. The recommendations are given to staff so they can adapt their approach with the community, ensure the community has mastered the action, and to eventually achieve behavior change.

6) **Collectively Update the EMMP and Reinforce skills**: The scorecards and field agent engagement are then used to determine whether the EMMP requires updating. If mitigation measures are not being performed or are not preventing environmental impacts, the EMMP can be revisited and revised. The new strategy will then be rolled out and reinforced in the community. At this point, the main messages for the local authorities have been developed and these can continue to be reinforced in support of overall activity sustainability.

4.4 Go Green Strategy Design, Methods, and Implementation

The GGS was implemented by SALOHI through a number of targeted steps to evaluate the successes and challenges and then adjust as necessary. The design and structure of the GGS is discussed in the context of the responsibilities, training, reporting, communication, and budget.

4.4.1 Responsibilities

Cross cutting themes require that every person in the implementing partner's organization have a role and ownership in the environment to some level. This is in fact one of the strongest factors in promoting sustainability. Each member of the team has an assigned responsibility as part of the GGS. Common responsibilities and roles within the SALOHI consortium are identified in Table 2.

Table 2. Roles and Responsibilities within SALOHI for the Go Green Strategy

Role	Level	Responsibilities
Champion	SALOHI	• Oversight of all environmental duties • GGS policy development and program design • Development of IEE and EMMP and revision as necessary • Training staff on environment and GGS • M&E oversight to assure implementation and achieving goals • Reporting to USAID – ESF, ESR
PCU	SALOHI (within discipline e.g., M&E, ag)	• Provide technical input on environmental strategy relevant to program goals and field realities • Recommend methods for strategy integration across all SOs • Integrate into final reporting and M&E program

Working Groups	SALOHI (within SO)	• Serve as a sounding board for policy implementation • Link field level issues in GGS implementation to the overall policy • Assist in the development of tools at the consortium partner level • Act as a role model for environmental reflexes • Discuss specific technical issues within each SO with implementing the GGS • Provide suggestions for improving efficiency and effectiveness
Program Manager	Partner	• Act as the partner champion • Stress the importance of the GGS with staff • Provide oversight of field staff • Coordinate and budget mitigation activities • Implement the IEE and EMMP and report on needs to the Champion • Allocate time for staff to engage in GGS trainings biannually
Technicians	Partner (within discipline)	• Provide technical input on a specific discipline • Act as a mentor to field agents • Engage beneficiaries • Oversee mitigation measures according to the IEE and EMMP, particularly in technical areas of infrastructure, NRM, and agriculture • Promote GGS competition with communities
Field Agents	Partner (all SOs)	• Sensitize beneficiaries • Act as a role model for the environmental reflex within the communities • Serve as point of first contact with the beneficiaries • Visit communities monthly to evaluate GGS progress • Promote GGS competition • Complete monthly scorecards in each community and transmit back to the Champion

4.4.2 Training

To reinforce the environmental reflex throughout the consortium, SALOHI goes further than the training of trainers method typically used in disseminating knowledge among staff. The training regime, which is repetitive and iterative, plays an important role in the GGS to facilitate the development of the environmental reflex. The assistance of the Mission early on in the program also was an impetus for development of the strategy. This has taken very strong support from the COP to assure that staff have time and funding for environmental training and reporting.

Training is a key piece of design and implementation of the GGS within SALOHI's organizational structure. The SALOHI staff training is discussed in the timeline below. Training at the level of the beneficiaries is discussed in the communications section (Section 4.4.4).

- In September 2009, the DCHA BEO presented information during the Kickoff M&E Workshop on how to "green" performance indicators, and SALOHI included environment as a cross-cutting theme into their M&E systems.

- The SALOHI program staff was initially trained in environmental compliance procedures and reporting requirements during the July 2010 USAID Environmentally Sound Design and Management (ESDM) week-long course in Antananarivo. The environmental specialist for SALOHI saw the value of the EMMP for integrating environment into the program, but CRS felt they needed more training and guidance on how to do it, particularly while working through with a consortium of partners.

Figure 21. GGS Exchange Workshop participants
Source : SALOHI BPR Report (CRS 2012)

- The ESDM training inspired the COP and Champion to "Go Beyond Compliance" to develop the GGS strategy. SALOHI requested a follow-up training on the EMMP through ENCAP in February 2011 where they could continue the GGS development and to work more on how to integrate it into all program activities. The GGS was developed as part of the follow-up EMMP workshop with a focus first on infrastructure projects since infrastructure is the most obvious entry point for environmental protection.

- The GGS was developed and rolled out to the program staff by Zoely at 3 SALOHI staff meetings. These staff meetings included consortium program staff, so that program level managers within each partner could be trained on the GGS and provide feedback on feasibility.

- The GGS was then rolled out to the Working Groups that included staff down to the technician level and focused on how the GGS could be integrated into each of the SOs.

- After the strategy began, biannual trainings were conducted by the environmental specialist to assure that the policy is in place and that the field level personnel feel comfortable in their roles. Trainings also offer an opportunity for the staff to reflect on the program, receive immediate feedback from the environmental expert on issues in the field, and refresh their knowledge on environmental management.

- The final piece of the training component is the monthly interactions of the environmental specialist with the field agents through the scorecard reporting system. The scorecards discussed in Section 4.4.3 record and track

the progress of communities in implementing the GGS. Scorecards also provide a means for the environmental specialist to immediately address issues by recommending corrective actions or instituting additional training of field agents on particular topics.

Summary Message: There is a need for a high level authoritative figure internal to the organization that is responsible for regular interactions and trainings with the staff. This assures consistency and conveys a "message from the top" that environment is important. Training at regular intervals also creates a space for the organization to have a conversation about environment and to troubleshoot issues that are technical or policy oriented. After the initial training, refresher trainings should be conducted at a manageable local or regional context. The scope of the trainings may be dictated by the logistics of assembling the attendees, or in cases where the ambient environment was drastically different, between operating locations.

4.4.3 Reporting

The environmental compliance and GGS meet the reporting requirements for USAID as well as sets additional requirements for SALOHI alone. The program has developed a few new strategies for reporting due to the large area in which programs operate. Additionally, as with many programs, the types of activities have changed over the course of implementation, and therefore, reporting methods were also revised.

<u>Environmental Compliance Reporting</u>
Specific standards for environmental compliance evaluation and reporting is mandated in ADS 204 and applies to this and all FFP programs; however, there are some strategic changes in reporting for SALOHI compared to other FFP programs. It should be noted that DCHA and the Africa Bureau both have slightly different reporting structures, which have melded somewhat with this program to produce a hybrid reporting structure. The IEE was submitted in 2009 when the program was awarded and acts as the master document for environmental management. The EMMP that accompanies the IEE was based on the SOs and activities proposed at the start of the program, but at the time had no specific details on the locations or environmental conditions.

To update the EMMP, SALOHI submitted an ESF for infrastructure and irrigation activities separately to illustrate more specifically the environmental impacts, mitigation measures, and general areas where activities would take place relative to each ecological zone where the program was operating. This document is used frequently by the Mission to provide oversight of activities, but is not generally used by DCHA. After several revisions, the ESFs were accepted, but it was at significant monetary and time cost to the partner. The ESF is a detailed oversight document, which is useful for monitoring the program through the Mission. However, it does not seem to meet the needs of the SALOHI field crews for implementation of

necessary mitigation and monitoring measures. SALOHI has developed other tools or scorecards that are more practical at the field level for internal reporting.

The final piece of the environmental compliance reporting is the ESR submitted to the BEO each year. The ESR reports on the negative determination with condition activities from the previous implementation year and makes refinements to the IEE as necessary based on the planned activities for the following year. This is both a forward looking and reflective document where I would argue changes to the EMMP with additional details on the impacts of activities could be discussed without requiring the additional documentation of the ESF. This is a reporting issue that should be addressed for future programs between Africa Bureau, DCHA, and the Mission.

Scorecards

The scorecards are a field checklist used by field agents to record the progress of communities in implementing the GGS (Figure 22). The scorecards provide important information on the implementation of mitigation activities and assist with monitoring and reporting during the ESR and ERR on an annual basis. Scorecards for each SO are presented in Appendix C.


Village:
Commune:
District:
Region:
ONG:
Date:
Reporter:

FIELD CHECKLIST FOR SO1 ACTIVITIES WHEN LOOKING AROUND IN A VILLAGE OR HOUSEHOLD VISIT	YES	NO	
Use of water resources			
Personal cleanliness of adult and kids at village level?			
Cooking utensils cleanliness at household level?			
Are people in the habit of purifying water? If yes what method ?			
Use of soil resources			
Do people have kitchen gardens nearby their household?			
Use of Natural resources and their surrounding environment			
Is there garbage pits per household or per village? If not, where do people throw their garbage ?			
Do people use latrines? If not where do they defecate?			
Are households and yards clean?			
Is there a village reforestation plot or village tree nursery for fuel purposes?			
Cultural aspect that are supporting people health			
Are there taboos that are against health activities promoted by SALOHI?			
Are there traditional practices that support family health?			

RECOMMENDATIONS

Related to Environmental protection	-
Related to Cultural aspects that could be learned to promote family health	-

Figure 22. Examples of the GGS Scorecards for SO1.

The scorecards also facilitate implementation of the EMMP by acting as a communication tool between the environmental specialist and the field agents. Field agents have numerous and challenging responsibilities when they visit the community, so very detailed instructions on mitigation measures make implementation difficult. Although primary oversight and reporting lies with the environmental specialist, that person can only logistically visit a small number of sites throughout the year. Field agents are therefore the environmental specialist's local representatives. Although the field agents received training on the monitoring requirements in the EMMP, SALOHI wanted a more frequent measure of how well the GGS itself was progressing.

SALOHI began using a scorecard for evaluating the environmental soundness of the communities beginning with the infrastructure tasks. They hoped that these scorecards would provide more detailed and regular information for the ESR and

ERR. The scorecards were designed to capture the important mitigation measures in the EMMP in a single, logical, and simple sheet that could be filled out when the field agent returned from the field. The EMMP was distilled into simple binary (yes/no) questions of the scorecard. The scorecard also was broken into categories to address soil, water, NRM, and cultural issues based on priorities in the EMMP. The successes of the implementation measures were rated on a cumulative scoring system that evaluated functionality, efficiency, and sustainability.

The first versions of the scorecards were developed along with the visual tools (Section 4.4.4) for the July 2012 environmental workshop. The workshop was used to revise the scorecard and visual tools for the needs of the consortium partners starting with program staff. Then, the scorecards were presented to the working groups for each SO for comment and revised according to technical standards of their discipline. In August 2012, scorecards were presented to the field monitors to refine the content. They were then trained on how to promote the GGS with the beneficiaries through role-playing. The environmental specialist then followed up with each of the field agents in the field. In November 2012, the field agents used the scorecards for the first time.

The scorecards are simple enough to be memorized before arriving in the community and mentally noting the community score. By not completing the scorecard while in the field, the field agents are forced to think holistically in the context of the community and environmental integration. Scorecards written in the local dialect are however placed on a community board in each fokotany so the process of evaluation is transparent. When the field agent returns from the field, they complete the scorecard and then give it to the administrative assistant at the regional office who enters the data into an excel spreadsheet and sends the entire spreadsheet to the environmental specialist. The environmental specialist quality checks the data and then communicates the results and needs back to the field agents and technicians.

There were challenges in implementing the strategy at the start and even after several months of investing in the scorecard approach. The scorecard that was first developed was too complicated for the field agents, but the agents became very engaged in improving it for use in the field. This was essential to ensuring that the scorecard had the greatest chance to be used. Also, there was a significant amount of pushback from the field when using the scorecard because they thought it was too difficult, but strong direction and a mandate from the COP and specialist helped focus the team on implementation. Eventually, the scorecard use became ingrained in the daily habits of the field agents.

<u>GGS Competition</u>

In order to promote the GGS, SALOHI started a competition between the fokotany. Over the course of 6 months, each fokotany competes for a seedling or tool package based on their cumulative score from the scorecards. The competition as promoted in each fokotany and the criteria for judgment were posted in each community so

the competition was fair and transparent. The communities are labeled as red when they needed significant improvement, yellow when they needed some improvement, and green when they were a successful Go Green community. After 6 months, the community with the highest cumulative score would be awarded the prize. Before awards were made, representatives, usually chiefs, from each community would give their approval that the winning community, based on the scorecards, is deserved. This vetting assured local buy-in and transparency. At the time of the TDY, the competition was in its 3rd month. The scorecard results were being reviewed, and the environmental specialist was helping the field agents identify which communities should receive additional reinforcement. The winning communities were selected in June 2013. SALOHI has proposed that winning communities should take part in an exchange to share best practices with each other.

4.4.4 Communications

The GGS requires that the beneficiaries and team develop an environmental reflex that then helps guide their actions. The environmental specialist can only visit the partners twice a year and may never visit some communities, so the field agents must reinforce the strategy. It was therefore important to develop sensitization tools, including posters and banners, for the field agents to use. The posters helped integrate the SO objectives while discussing the environment. These posters could also be used during meetings or FFW activities to reinforce the strategy (Figure 23).

Figure 23. One example of the GGS Sensitization Tools. This introduces the GGS to the beneficiaries.

The posters deliver short environmental messages every month to the beneficiaries through the field agents (Appendix D). Each poster has a message around a central theme and use very simple language and pictures to demonstrate the message. One poster is used to introduce the Go Green Strategy and the others focus on roads, biodiversity, conservation agriculture, irrigation, household waste, and soil. The posters were originally planned to be in the local dialect, but translation to the local dialect was eventually abandoned because the agents who knew the dialect did not find the time to complete the task. Other methods of promotion included hanging banners in the communities and welcome signs. Imberlono Edmond, a field agent in Andasibe, Vavatenina suggested that the best way to influence community members is to live by the ideals of the GGS in the community. He also uses community members to help him present the sensitizations with the posters. This approach is a way to have fun and use peer-to-peer learning to reinforce learning.

4.4.5 Budget

The DCHA BEO is currently developing a budgeting guidance to assist PVOs with budgeting for environmental compliance needed in their programs. With allocation of budget to the necessary environmental mitigation measures, it is hoped that partners will be further encouraged to carry out their mitigation responsibilities with the knowledge that there is a budget behind the activities.

The separation of a budget for environmental mitigation activities is an interesting dilemma in the case of SALOHI because the program has worked to truly integrate environment into all of their activities; therefore, it can be a difficult task to pull out the exact cost of implementing the environmental compliance piece of the program. Budgeting as a separate line item also poses challenges in a cross cutting programs because it may undermine the cross cutting nature of the GGS by stove-piping environment into a single area. However, the SALOHI program does allow us to look further into some components of an integrated program, such as the cost and LOE for the environmental specialist; costs associated with the posters outlining the strategy; the expense of training; and the staff hours allocated. These are important factors for understanding how the partner's develop budgets for these cross-cutting activities, which will inform expectations for future endeavors similar to the GGS. In fact, SALOHI also plans on conducting an assessment at the end of the program to better capture the costs and outcome of the GGS on program performance. The BEO has a high level of interest in the outcome of this type of assessment.

The components of the SALOHI budget for the GGS that could be pulled out of the larger budget are discussed below by line item. The costs do not reflect tools or supplies for completing the mitigation measures or budget for completing mandatory reporting requirements for drafting the IEE, ESF, or ESR. It should also be noted that FFP partners have line item flexibility, and so this report is only meant to be an example of the estimated costs associated for a program similar to the GGS. The components of the budget for the GGS are presented in Table 3 with sensitive issues like salary reported as LOE rather than a dollar amount. The information was not available in all cases and is therefore noted as not available (NA).

Table 3. Estimated annual costs for implementing the Go Green Strategy.

Item	Category	Cost or LOE	Details
Environmental Specialist	Salary	480 person hours	~5 days/mo x 12 mo for oversight, support, and training
	Travel	5 days/mo	Meals and hotel; partner provides driver and car for zone visits each month
Training	Annual Workshop	320 person hours + travel costs	Cost should include LOE, meals, hotels (40 people x 2 days)
	Beneficiary Sensitization by Field Agents	7,092 person hours	Monthly sensitization training x 591 fokotany x 1 hr/training

	Bi-Annual Field Agent Training	2,160 person hours	6 zones x 30 people x 3 hrs x 2 per year
Administrative	Salary	1,773 person hours	Communication of scorecard results to headquarter (0.5 hr/scorecard x 591 fokotany x 6 mo)
Posters	Printing	~$2,000	7 posters x 600 fokotany/5 yrs to obtain annual cost
GGS Awards	Prizes (e.g., 100 fruit trees)	NA	Costs are not funded by the FFP award, but are expended from separate partner budgets

4.5 Progress since the Mid-Term w/ the Go Green Strategy

In the mid-term report, several key activities were identified for moving the GGS forward to fully integrate the environmental reflex into all of the SALOHI programming. Below are the recommendations made by the mid-term report and updates since the mid-term report issued in July 2012 by SALOHI:

- Recommendation: Improve environmental integration of the GGS by training all staff working within each SO on the GGS. The staff have been trained on the application of the GGS to infrastructure activities, but not in other less obvious connections with activities such as VSLs, PD Hearth, and conservation agriculture.

  Update: All SO field agents and technicians have received training on the GGS and are also receiving refresher training bi-annually. The technicians and agents are using posters and committee member discussions to sensitize the community to integrate environment into their daily lives.

- Recommendation: Promote the environmental reflex at the community level and monitor the progress of the communities at adopting the GGS. Develop, refine, and disseminate scorecards to the field agents to monitor the GGS.

  Update: The SALOHI environment consultant developed the scorecards for environmental monitoring and for scoring the status of the GGS uptake in the communities. In November, the consultant reviewed and revised the scorecards with the help of the SO Working Groups, which includes all consortium partners. The scorecards were then vetted and revised as necessary with the field agents in all zones. The finalized version was then distributed in January and has been implemented by all agents as part of the monthly monitoring. The field agents have been using and reporting the scorecards for the past 6 months. The adoption rate by the field agents is high. The data collected will be used in reporting at project closeout.

- Recommendation: Conduct monitoring and evaluation of GGS by promoting a contest between communities and award nominal prizes to the best performers.

Update: To promote and improve participation in the GGS by the communities, SALOHI is conducting a competition between the districts in each commune with an award of fruit trees to the community performing the best at strategy implementation. The communities are judged based on the level of compliance collected through the scorecards with the contest lasting 6 months. After the best performing fokotany in each district are selected, three officials from the commune will verify the results and 100 fruit trees will be awarded. The competition was completed in June and the highest rated communities were selected as winners. The influence of the program on promoting the strategy will be evaluated during the final evaluation.

Figure 23. A banner promoting the GGS competition in a fokotany near Ikongo.

4.6 Best Practice Stories

Leveraging Relationships

An important aspect of program sustainability is to assure that the management or authority structure is in place after the program closes. Because CRS is working with the Catholic Church, they can work through this authority to reinforce themes in the community and to assist with oversight in the programs absence.

One excellent example is the engagement of the diocese in the Fianarantsoa region to help promote the GGS. Two years ago, the archbishop in Fianarantsoa declared that the diocese would work toward becoming a "Green Diocese". Each year the archbishop sets a challenge for the bishops under his authority. Usually this lasts only a year, but the Green Diocese theme has been carried on for the past two years. SALOHI representatives met with the archbishop and bishops to discuss how they could contribute to the Green Diocese theme. SALOHI used this opportunity to educate the priests in the diocese about the environment by having technicians write pieces for the diocese newsletter about environmentally friendly practices that each community priest could support. This newsletter is monthly, and helps reinforce the objectives of the GGS. Since an important part of SALOHI is to work through local FITEA and Caritas partners, SALOHI also met and worked directly with the priests to make specific plans for each community. Many priests even took on their own initiatives such as collecting seeds of native plants to form nurseries.

Figure 24. Another Go Green banner on the school in a community church.

Utilizing Existing Structures

Another institutional structure that SALOHI is leveraging to support environmental sustainability are local dinas. Dinas are local bylaws for a community that act as a social contract meant to manage potential conflict. Because they are part of the culture and are at some level legally recognized, they can assist in socially sensitive program design and assurance of sustainability. The dina can be used to address issues ranging from the governance structure to shared use of resources. The dina describes the issue, rules to be followed, and consequences for non-compliance, all within the local context.

Figure 25. The SALOHI environmental specialist reviewing the fokotany dina in the communal building.

Dina for the fokotany are being promoted by SALOHI to assure maintenance and sustainability of the activities. All the communities have not wholly adopted the dina yet but communities are making progress on adoption. Dinas have been used to establish fees for infrastructure maintenance and to support adoption of best practices for community assets. Several examples from the field include:

- Zebu cannot be grazed or transported on the new road built as part of the SALOHI program. They are allowed to cross only at specific points.
- Zebu or pigs must only cross into the paddies at points where concrete bridges exist. If zebu or pigs are found in the canals or crossing at other points, the farmer must pay 5,000 AR to the management association.
- Two times a year, members of the water management committee must pay 2,000 AR and 1 bag of rice. This money is then for maintenance of the system.

Management Association Design

The IMAs are elected boards that help plan for shocks for the community and decide which activities are most useful. SALOHI conducts their program so the IMAs have an opportunity to function autonomously and then SALOHI conducts a check-up to evaluate the sustainability. The fokotany in Andranoambia was trained last year (2012) and they were allowed to maintain the road for a year to see how they well the IMA functioned and determine if the community was taking ownership. When the CARE team returned a year later, they found that the IMA was strong and doing a satisfactory job with maintenance. If the maintenance were unsuccessful during this period, SALOHI technicians would work with the community to reinforce good practices and correct bad ones. By using this method of training, allowing time for ownership to develop, and then returning to reinforce practices, they are attempting to improve the IMA at closeout.

In the case of the Andranoambia IMA, they requested that a road be built because they are located 8 km from the nearest road. The community can travel by stream to access medicine, the market to sell crops, and to go to school, but during the rainy season the river may be too high and dangerous to travel. The first portion of the road links the community to the river and helps children go to school and to access the river, so it is considered very important to the community. The IMA is responsible for identifying any maintenance issues with the road. They are currently loaned tools but will later own the tools for fixing the road. If there is an issue with the road, they notify the field agent/monitor that they need assistance. The only time that this type of request should be made is when there are extreme events affecting the road. For instance, if a large portion of the road is washed out in floods, they may need to request additional support from the program.

One challenge that was discussed regarding road IMAs is that they can be difficult to implement as a road has more diffuse or uncertain benefits than something directly affecting agricultural production like irrigation structures. This may be a reason that communities were more likely to engage in irrigation schemes rather than road activities. Additionally, the length of road that is needed to make complete market linkages is often a much greater distance than communities could not possibly have the capacity to construct or maintain. Therefore, road construction may only be practical in the most specific of circumstances until the local and national government have improved overall infrastructure and access in the region.

Figure 26. Meeting of the management associations in Tsarakianje.

There are also other management associations responsible for activities under other SOs, such as the health program and NRM. We met with both the head of the NRM and IMA in Tsarakianje (Figure 26). The IMA president's stated that the FFW aspect of the programs is important specifically for infrastructure because the community could not take time away from their fields if they were not receiving food. If there are large disruptions for the infrastructure or if major shocks took place, the community would not likely have the man power to make the repairs. It is hoped that small corrections, made continually, will mitigate the impact of shocks.

<u>Recommendations:</u>

Early engagement and establishment of the management associations may be the best mode to promote sustainability of the activities and infrastructure. However, this may not be practical in the field as many communities will not have strong buy in until they have seen some of the results of the program. The beneficiaries were asked voluntarily to join the IMAs, but many were skeptical until they saw some of the practices work. It seemed that the presence of an advocate and strong leader who promotes the value of the work is very important in receiving the support of the entire community and one of the drivers of success. The IMA president was elected by a majority vote in the fokotany we visited. Other communities may elect the IMA president by asking for volunteers.

As part of the GGS, the IMAs are important for promotion and reinforcement of the environmental reflex in all program activities; therefore, being truly cross cutting. In the rehabilitation or construction of water management schemes, protecting the water source is very important to assure supply and quantity. The prevention measures in place first also assure that they meet their mitigation requirements before the high value project in begun.

4.7 Lessons Learned

Below we capture lessons learned beyond those noted in the discussion above. These apply to both the design of the GGS as well as implementation of the SALOHI as a whole.

- Targeting: The program discovered that in their sensitization for conservation agriculture and abandonment of the use of tavy that they should be sure to approach the wealthier land owners as well. The land owners were often hiring the poorer beneficiaries to conduct the tavy on their lands rather than doing it themselves. Therefore, the poorer beneficiaries had less of an impact in stopping tavy because they were not making the decision on how the farming was to be conducted.
- Structure of the field agent roles: Depending on the partner, the field agent has different roles. In some case, an agent may be assigned to one SO. This may be simpler for the agent because they can focus on evaluating their one SO and being sure it is linked to the environment. Other partners give the field agents all SOs to oversee as well as environment, but this may give the agent too many tasks. However, the agent may do a better job at integrating cross-cutting ideas. Whether or not to have field agents for each SO or one for all SOs, is a trade off between the reality of travel, giving the agents manageable caseloads, and performing at a high level.
- Use of scorecards: Scorecards can be effective for monitoring the environmental impacts closely; however, they must be simple enough to be used by the field agent yet capture the data necessary. Scorecards should be developed with an inclusive process with both higher level management as well as field agents otherwise they risk being cumbersome.

- Reliance on FFW: As identified in the mid-term review, the communities still seem dependent on food aid to conduct large portions of the work. If additional work must be conducted beyond routine maintenance, it is unlikely that the management associations will be able to manage because they cannot take this much time away from their crops. It is hoped that routine maintenance will be enough to keep the road in working order.

5. Sustainability in Year 5

Going into year 5, the entire SALOHI program will have a strategic focus on sustainability. The Go Green Strategy is part of this focus by helping build habits for environmental sustainability and contributing to overall program sustainability. Activities being conducted to improve sustainability and suggestions for improvement are provided below.

- Inclusive management: Water management associations should include both upstream and downstream users to ensure sustainability. Although not the immediate recipient of the asset, the upstream users have a large impact on water quality, quantity, and need for repairs. This disconnect between upstream and downstream users was observed during a field visit to Tsarakianje near Ikongo. The community had built an irrigation control system that included downstream users as part of the IMA. The IMA members were required to help fund maintenance through a tax. Although this fund was established, siltation was already visible behind the dam and the upstream areas were significantly eroded. Without participation of the land owners in the upstream areas, erosion from their land could significantly shorten the life of the water control structure due to siltation filling the basin. Activities to integrate upstream users into the program, for example through reforestation of the banks, should be integrated in the project design.
- Communications: The field agents will leave posters in the communities about the GGS and how to practice it in everyday life. The visual reminder using simplistic pictures and text will help reinforce the environmental reflex.
- Reinforcement: To promote and improve participation in the GGS by the communities, SALOHI has conducted a competition between the districts in each commune to identify the community that is most "green" with an award of fruit trees to the best performer. This contest, which ended in June, was designed to help reinforce the values of the strategy prior to closeout and provides a means for SALOHI to actively monitor uptake of the strategy.
- Local governance: Dina of the fokotany are being utilized to assure maintenance and sustainability of the activities and instill and environmental reflex. The new dina have not been wholly adopted yet by all the

communities, but these governance structures seem to be useful for improving sustainability of the activities by providing a source of revenue to conduct repairs, identifying reporting structures for problems, keeping track of maintenance schedules, and laying out simple, yet effective, rules for protecting the asset.

- Use of local resources: Local resources are used when at all possible to ensure sustainability. The local community must have easy access to the tools and resources they need so they can take ownership and carry out repairs. For example, road surfaces were constructed only from materials that came from nearby and the community was taught how to process these materials to maintain the road surface (e.g., gravel).
- Construct to high standards: High quality construction and repair is the standard for all infrastructure activities. CARE was very adamant that this is one of their standard approaches. These high standards are important for reinforcing good practices, demonstrating proper techniques to beneficiaries, and stressing environmental mitigation measures that must accompany the new asset so it continues to function properly. It is the hope that high quality at the start of an activity will help meet sustainability goals.
- Identifying strong leadership in the community: IMAs and other management groups work best when there is an advocate in the community who is a strong leader and invests heavily in their role. This may be one of the greatest indicators of whether a project will be sustainable. However, it should also be noted that some issues arise when volunteers or community workers take on too many roles, even if they are an excellent advocate. The amount of time and energy that can be invested by any one individual is limited, and therefore, the number of activities a person is allowed to be responsible for implementing should be limited. An example of an over utilized community worker was observed in Tsarakianje where a very enthusiastic health worker was serving on at least 4 other committees. The health committee has was working on was suffering based on interviews with the program's mothers. This PD Hearth program was apparently not conducting follow-up visits with the mothers of malnourished children. It appeared that the health worker perhaps was too busy with other committees to be sure that these visits were taking place.
- Strengthening IMAs before conducting asset work: Early in SALOHI, IMAs were in many cases formed and engaged after the asset was in place. This offers little incentive for the IMAs since they already the desired asset in place Additionally, strengthening of the IMAs to assure self-reliance and to provide adequate training may take much longer than it does to actually build the asset. It is recommended that IMAs are identified and formed early. It should be acknowledged that there might be significant challenges with early engagement since many potential committee members may not have the foresight to see the assets' benefits and may only volunteer for the committee after the benefits have been realized. IMAs may not be as

successful if maintenance is an individual rather than a community responsibility.

6. Summary Recommendations for Forward Programming

Below are recommendations for future programs based on observations from the SALOHI program success and challenges.

- Strong partner leadership: The support of a strong leader dedicated to the additional effort of integrated programming is necessary for success in these cross-cutting programs.
- Finding a champion: The dedication of at least one individual to act as champion for the environment is needed so that the focus is not lost and there is a coherent design for integration.
- Integration: The use of an integrated approach to environmental compliance into all SOs results in a reinforcement of an environmental reflex within the implementing partner and the beneficiaries. This multi-sector approach to environment has resulted in programming that is environmentally sensitive and is an example of a program that has truly embraced the concept behind cross-cutting issues.
- Reinforcement: The GGS uses a method of reinforcement through multiple trainings, site visits, and discussion with the beneficiaries to assure that the environmental reflex has a strong hold in the fokotany. Reinforcement is integral to success.
- Use of local governance: Leveraging the traditional contract, dina, for improving sustainability seems to be a socially sensitive approach that will likely succeed.
- Use of local sources; Local resources are used whenever possible to ensure sustainability. If the local community does not have the resources, they cannot be expected to fulfill their maintenance responsibility. Infrastructure inputs should be sourced locally when possible.
- Focus early on protection: Conservation practices for DRR and NRM activities are conducted prior to the construction or rehabilitation of water infrastructure in order to assure that there is a consistent and quality source of water. This can include by reforestation of the upper watershed or protection of source zones of water. When possible, conducting the mitigation activity before the actual asset is built is an excellent way to promote environmental values and project ownership.
- Model of functionality, learning period, and the anchor period: The activities in the program have frequently used a method of training a community, overseeing activity implementation, conducting reinforcement training and then leaving the community for up to a year to allow them practice at managing the activity. Then SALOHI again begins working with the

community to determine if they have adopted the necessary practices to ensure sustainability. This allows time for correction and additional reinforcement to ensure that the communities will carry on after closeout. However, this practice may lead to problems going unnoticed and becoming much worse during the learning period.

- Utilizing existing support structure: The use of supporting institutional mechanisms has been very useful for reinforcement of program objects. CRS in Ikongo is working through the diocese that support the GGS. They have been using communications from the dioceses such as a newsletter to promote the GGS. The newsletter informs the local priests about technical aspects of environmental management. The priests will help reinforce the standards and training from within the communities after program closeout.
- Peer training: When one community has been especially strong at adopting a new technique SALOHI will partner them with another community, inside or outside the program, to help improve transfer. For instance, the FFS in Ikongo currently using plastic bags for potting of seedlings will be partnered with another community that is using natural and local sourced materials such as banana leaves for the seedling nursery. These peer-to-peer trainings should continue to be used to promote knowledge transfer.
- Community involvement: Through the DPMP, SALOHI involved the community in activity selection, design, and construction so the community members felt ownership in the activity and will hopefully maintain the asset. Community involvement is an important aspect of any socially sensitive assistance program.

7. Conclusions

The Mission and SALOHI staff have been extremely generous in sharing their lessons learned and best practices during this TDY. We hope to continue to be engaged in the SALOHI program and the GGS as it finishes its final year. We look forward to updates on the outcome of the GGS competition, and in particular, evaluations conducted by SALOHI on performance and outcomes of the GGS. It is our high hope that we will be able to transition the important approaches pioneered by SALOHI to influence other DCHA programs.

Appendix A. Detailed Scope of Work

April 9, 2013

Draft Scope of Work
Examination of Environmental Foundations for Program Design

Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), Office of Program, Policy and Management (PPM)

To: Cathy Bowes, Program Director (USAID Madagascar); Shahina Malik (FFP/Washington); Aleathea Musah (HPN/Madagascar)
From: Arianne Neigh Post-Crisis Environmental Specialist and Erika Clesceri, Bureau Environmental Officer (BEO)

Team Composition

This TDY will involve one USAID Washington, DC staff member, Arianne Neigh (AAAS Fellow) from the Office of Program, Policy and Management (PPM) in the Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA).

Purpose and Overview

To review the design and implementation of the SALOHI Go Green Strategy ("Nde'ho Maitso") to capture best practices and lessons learned in environmental management. This review will be both forward looking in that it can be used to inform future programming, and retrospective, in that we will use the opportunity with the partner to observe the needs and review the progress of corrective measures pertaining to the environment identified in the mid-term review, Go Green Strategy Best Practice Review (BPR), and the yearly Environmental Status Reports (ESRs). On a larger scale, this review will be used as an informational gathering piece focused on capturing the practices of CRS developed for the Go Green Strategy to build a framework for translating environmental sensitivities into the design of other programs. This framework will then be implemented and evaluated in other Food for Peace (FFP) and DCHA programs under different operating contexts such as the Complex Crisis Fund (CCF) and Office of Transition Initiatives (OTI) (Figure 1).

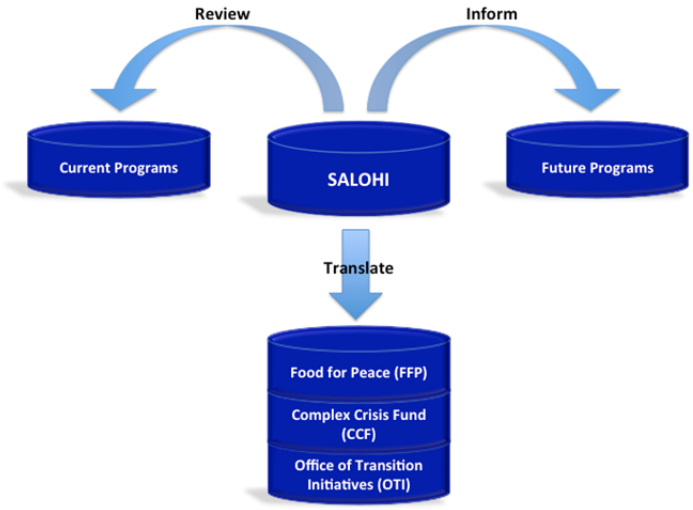

Figure 1. Knowledge building structure for the TDY.

We will focus on the foundations of the Go Green Strategy at the partner country headquarters, district, commune, and to a lesser extent, the community level. The major components of the review will involve understanding CRS' approach to staffing, management, training, budgeting, communication, reporting and integration as critical factors in the success of the Go Green Strategy (Figure 2). By better understanding the design and implementation of the Go Green Strategy, we will gather information to direct future programming by:

a) Creating environmental recommendations for FFP programs so they are environmentally sound and sustainable;
b) Identifying /selecting Green indicators for FFP programs
c) Compiling key steps /process tools for planning/implementing environmental monitoring and reporting.

Figure 2. Foundations contributing to the Go Green Strategy.

Background

The Initial Environmental Examination (IEE) developed at the start of a program per 22 CFR 216 and ADS 204 is the guiding document pertaining to the necessary environmental examination and mitigation of potential impacts for USAID programming. Although this document guides the environmental management process, there are other policies and procedures that need to be in place to ensure that environmental impacts are efficiently and effectively managed throughout the life of project, and that lessons learned are incorporated back into program design. Due to changes in program design, conditions on the ground, and priorities of the program, the design and implementation of the environmental management may need to be revisited. In multiple programs, the implementation of mitigation measures and monitoring of those measures is an area of the programming process that could be improved. There are, however, some programs that have emerged as leaders in environmental management by achieving much greater levels of success in carrying out their required environmental compliance. CRS has integrated environmental awareness into the SALOHI program using the Go Green strategy to improve the effectiveness and efficiency of their environmental compliance while building on capacity of their beneficiaries for achieving environmental sustainability.

The SALOHI program through the Go Green strategy is implementing an innovative environmental strategy that can be evaluated and potentially applied to other programs as a best practice approach.

> *"SALOHI represents a program that has evolved some of the most 'internalized' and mainstreamed environmentally-conscious practices of any partner I've run across. This is the result of deliberate focus on this outcome over a period of several years, with strong leadership, including from the CoP, the MEO & a dedicated environmental quality manager at the level of the lead IP, CRS, and its 'Go Green' Strategy*."
>
> – Walter Knausenberger, Acting REA USAID Southern Africa

We envision that this TDY will first inform us on the Mission and field program components or "foundations" that make real and defined differences in successful environmental management and integration. This will facilitate the construction of a framework (top-down review) and recommendations starting with program award to assist other programs in adoption of the foundation structure (bottom-up design). The structure will be critical for identification of improvements in new and existing programs.

Broad TDY Objectives

The TDY framework will assist in broad TDY goal of developing a process for integrating and translating the "environmental reflex" promoted by the Go Green Strategy into other programs while at the same time reviewing the current program success and using it to inform framework development and future programming.

To do this, the TDY will focus on:

- Go Green Strategy success, challenges, and outcomes within the context of the SALOHI program (Inform)
- Environmental communication strategies (Inform)
- Strategies and corrective actions SALOHI will implement going forward for issues identified in the mid-term and BPR (Review)
- EMMP implementation, corrective actions, and reporting at the mid-term of the program (Review)
- Use of green indicators in the IPTT and lessons learned/outcomes of the indicators at the mid-term (Review)
- Appropriateness and strategy for developing a framework for life of project review of an environmental program (Translate)
- Potential to transferring "Go Green"-like programming to other FFP countries (Translate)

Methodology and Tasks

Our intent is to investigate programs that we believe exemplify "positive deviance" in their environmental management process in that they have proactively designed and implemented technical, managerial, and operational processes throughout their program that fully integrate environment. We will examine and identify the practices and

organizational aspects of the SALOHI program that facilitates good environmental management in development programs. **This TDY will be based around the factors comprising the foundation of sound implementation, monitoring, and sustainability of environmental measures including staffing, management, training, budgeting, communication, reporting and integration as critical components of the SALOHI program's organization culture (see Figure 2).** The structured focus areas will also be flexible to allow for co-learning between DC, the Mission, and the PVO. Information sharing and analysis will take place through the entire program cycle from a top-down and bottom-up view (Figure 3).

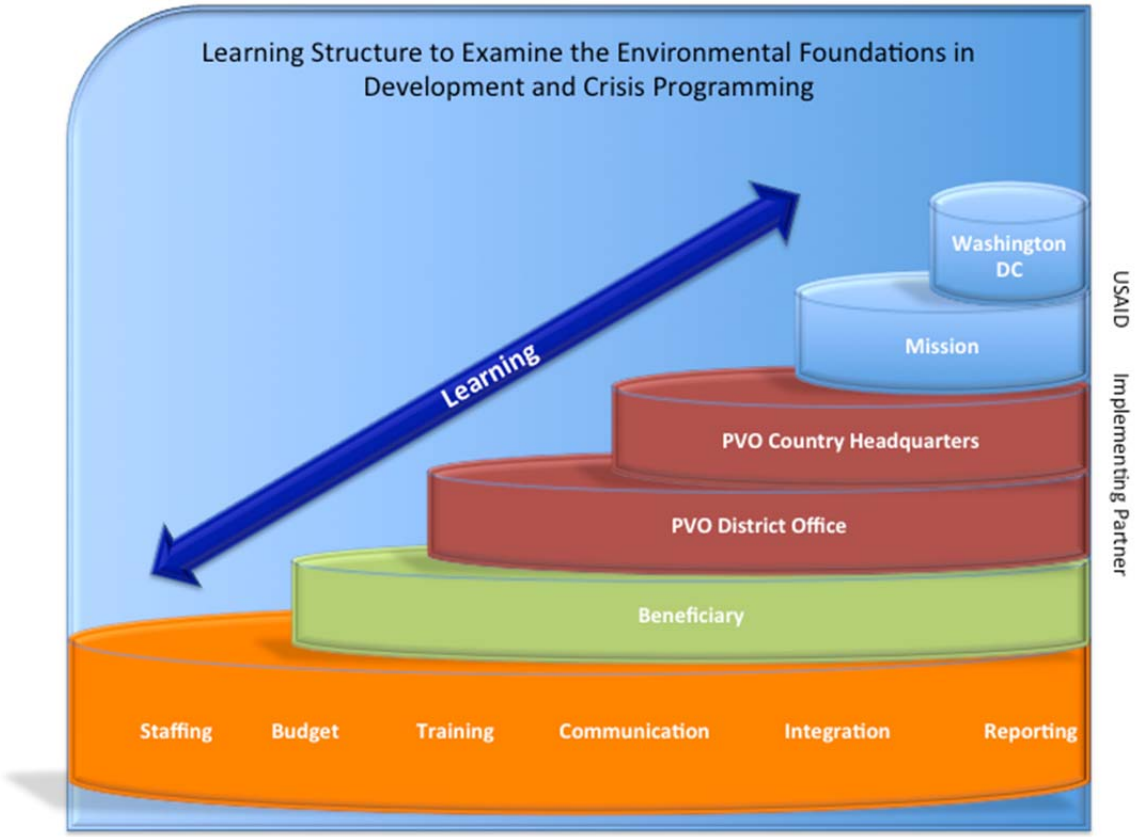

Figure 3. Structure for Environmental Foundations Review

<u>Task 1 Program Review and Collection of Background Information</u>

Before travel, pertinent project documents for SALOHI will be reviewed and interviews with relevant stakeholders will be conducted to identify high level needs and to assure familiarity with the program as well as assess best practices in program review practices.

Documents for Pre-TDY Review:

- SALOHI Proposal Materials and PREPs
- SALOHI IEE, ETD and Yearly ESRs
- SALOHI Mid-Term Review Report

- SALOHI Go Green Strategy BPR Presentation
- SALOHI Environment Screening Forms /Environmental Review Reports for sector activities (roads, irrigation systems and reforestation).
- Madagascar BPR
- Africa Bureau BPR Process Document
- Tania Tam TDY Trip Report on WASH sector communication
- OTI PPR Process Document
- Somalia, Cote d'Ivoire, Zimbabwe evaluation structures and reviews
- USAID Evaluation Policy

List of HQ Meetings:

- Shahina Malik (FFP AOR) to discuss work plan and timing
- Mission call to discuss TDY feasibility and scope with Cathy Bowes and Shahina Malik– April 3
- Chris La Fargue (OTI) for informational overview – March 28
- Thomas Gibb – TBD
- Walter Knausenberger (AFR) to discuss BPR and scope – April 5
- Brian Hirsch to discuss BPR – October
- Tania Tam to discuss WASH communications TDY – September
- Chris Maness (OTI) to discuss OTI PPR process
- Susan Pologruto and Jennifer Laasko (DCHA PPM) to discuss the CCF mid-term review process

<u>Task 2 Mission Consultations</u>

In addition to security and in-briefing, we would also like to meet with Mission staff to brief on the TDY and gather input into the SALOHI program's success and aspects of foundations for successful environmental reflex. Mission staff that we would like to consult during the TDY will include Tiana Razafimahatratra (MEO and M&E Specialist); Shahina Malik (FFP AOR); Cathy Bowes (Program Director Madagascar); as well as other Mission staff to be identified later.

Sample questions include:

- How frequently does the Mission staff interact with SALOHI country headquarters staff and field staff?
- From your perspective, what has been the greatest challenges and success in implementing the Go Green Strategy?
- Are there areas of the strategy that you think would translate to other programs in Madagascar? Other countries?
- What is one highlight from the donor perspective of the SALOHI program?
- How frequently is the MEO able to visit project sites? What are the challenges with environmental oversight?

- With challenges to getting into the field to observe programs, have you established innovative ways of monitoring programs that could be applied elsewhere (e.g., reporting structure, mobile communications, etc.)?

Task 3 Partner Consultations

Meet with CRS COP, CRS team members and consortium partners (e.g., CARE, Land O' Lakes Foundation, and ADRA) located in Antananarivo to review TDY scope and objectives. We will do an in-depth examination of the SALOHI program organizational structure by discussing staffing, communications, training, budgeting, reporting. We will also discuss motivations for implementing the Go Green Strategy and whether the outcomes have been satisfactory from the partner's perspective as well as share lessons learned and best practices of the program implementation, monitoring and exit strategy.

Sample questions include:

- What was the motivation for designing the Go Green Strategy?
- How did you instill a sense of environmental stewardship in your staff?
- What types of managerial or organization alterations were made to accompany the strategy?
- What were some costs associated with implementation of the strategy?
- Have you conducted any cost-benefit analysis for the strategy?
- What was the greatest achievement of the program?
- What did you do to stand up the program? Hiring, training, etc.?

Task 4 Field Observations

Visit field sites with CRS Environment Specialist to understand on the ground implementation of the program. The Environmental Specialists is currently scheduled to visit program sites April 15th-19th. The sites visits will be used as an opportunity to:

1) Interview partner program staff at the communal and community level about the Go Green Strategy to capture the perspective of the implementers.
2) Ground-truth the scoring system for the Go Green Strategy presented in the BPR and investigate adaptations of the scorecard for other programs
3) Observe EMMP implementation and environmental compliance of the program to identify mechanisms for implementation and reporting structure as well as internal staff responsibilities for the EMMP
4) Validate the reporting in the ESR for implementation of the EMMP and corrective actions at the field level
5) Observe and discuss activities using IMAs and determine how to engage the communities to improve sustainability and encourage ownership of infrastructure projects after activity completion.

6) Evaluate how environmental stewardship is communicated to beneficiaries and make a plan for the transfer of environmental stewardship to the greater community in this unique environment
7) Investigate the sustainability of the programs and make recommendations for improving sustainability over the remaining performance period.

Task 5 Greening Indicator Follow-up

Additionally, SALOHI program was one of the first programs engaged in the "greening" process for their program performance M&E conducted by the BEO. The goal was to embed environmental stewardship into the M&E process so we can monitor the program achievements that are accomplished in an environmentally sustainable manner. This TDY would evaluate the utility of these performance indicators from the perspective of the PVO as a follow-up to the assistance offered in 2009. Guidance is being developed on the greening of indicators. SALOHI was one of the first programs with green indicators; therefore, we would like to evaluate the overall utility of the indicators for the PVOs to further inform guidance development.

Justification of TDY Timing and Draft Agenda

The Go Green strategy was integrated into the SALOHI program prior to the mid-term review, but it was too early to capture all the success of the program since only a few activities had been implemented. Now the program has had 12 months past the mid-term and 18 months since the Go Green program started so now is an appropriate time to capture lessons learned, document the strategy, and make early observations regarding the strategies success. Also, the timing will allow us to evaluate actions taken since the mid-term review and assure that mitigation measures are being implemented appropriately for the remainder of the program activities.

Draft Agenda*: 2 working days in Mission
1 day with COP and HQ CRS staff
Travel to Regional Offices and visit staff (2 sites @ ~3 days per site)
1 working day at Mission
1 day Mission and CRS HQ debrief

*Finalized schedule is still being developed based on partner availability. See attached detailed agenda for preliminary details.

Program Timeline

A mid-term review was completed by the Madagascar in Jan/Feb 2012 and the reports were issued in July 2012. In addition, a BPR was conducted by Africa Bureau in coordination with the mid-term review and the report was completed August 2012. The BPR reviewed environmental compliance procedures across the life of the projects in the Mission's portfolio and the capacity and process established in the Mission to carry out

environmental compliance and oversight. It did not audit the field side of the program to evaluate the partner's capacity and processes for EMMP implementation, overall partner strategies for environmental management both internally and mandated by USAID, environmental communication and training at the partner level, or M&E systems for measuring environmentally focused tasks from a performance perspective.

Historical Program Timeline (Selected Dates):

Program Award – March 2009
IEE – April 2009
Funding Start – July 2009
FY10 ESR – September 2009
Environmental Compliance Workshop – Feb 2011
Development of Go Green Strategy– Feb 2011
WASH assessment – August 2011
Mid-term Review – Jan/Feb 2012
FY12 ESR – Jan 2012
BPR for Mission and SALOHI– June 2012
Mid-term Report – July 2012
BPR Report – August 2012

Translation to CCF and OTI Programs

This is the many of the lessons learned and structure can be translated to other programs. It is the intent to learn from this structure and then evaluate its applicability and feasibility for implementation in other types of programs including those being conducted under tight time constraints and those in conflict prone or non-permissive environments. It is believed that the basic structure will be applicable to these programs with some modification. Once the foundations for exemplary environmental management are outlined, we will develop a framework and also instructional guidance on how both new and existing programs can improve the environmental sensitivities.

Two programs from OTI and CCF will also be selected for review and vetting of the framework structure and guidance for building environmental foundations. It is proposed that these review of these programs will help to identify the unique challenges of post-crisis, transition, and stabilization programming. Table 1 provides a comparison of programs that will serve as data points.

Table 1. Comparison of Programs Selected for Environmental Foundations Development

Program Country	Funding Source	Program Status	Implementer
Madagascar	FFP	1 Yr Remaining	CRS

Kyrgy Republic	OTI/CCF	Close-out	IRG
Burma	OTI	Start-up	DAI
Sierra Leone	FFP	1 Yr Remaining	ACDI VOCA

OTI and CCF Kyrgy Republic – This program has been suggested as a program with successful implementation of environmental foundations by the Regional Environmental Officer. By sharing their path to success, and testing the framework on a program with a known outcome at the end of field activities, it will help vet the framework prior to finalization. It is expected that lessons learned will also be captured for adjustment of the structure to these types of non-development programs.

OTI and CCF Burma – The Burma program is in the initial phases with country staff being put in place. The IEE has already been developed. By engaging the staff early, we can use the framework structure as guidance for building in environmental foundations at the beginning of the program with partners. This will serve as a point of comparison to other CCF and OTI programs to help understand if early engagement is important in improving the effectiveness and efficiency of environmental management.

FFP Sierra Leone – The Sierra Leone program began in FY09, but they have not instituted a holistic environmental strategy similar to the Go Green Strategy. The review of this program will allow for comparison of needs and structures between two FFP programs. The framework designed during this TDY with the Go Green Strategy will be vetted to see if it is broadly applicable to other FFP programs.

Products

The product of this TDY will be a framework for designing environmental management in a performance focused, tailored way. Additionally, the framework's structure beginning at the field tools level will also assist us in developing a scoring system for partners to track their EMMP implementation. SALOHI has already conducted a program level BPR that we would like to evaluate and integrate into this larger framework as well as investigating their scorecard approach. This TDY is also expected to yield lessons learned and best practices that can be developed into separate documents for dissemination and use in forward programming. This information can be presented in a format to be used in the Madagascar Mission's "Success Stories" section of their website.

Details of expected products are given below:

1) **Review**: A review of corrective actions since the mid-term review and documentation of the success of implementation of environmental safeguards for the CRS program. The Mission and the DCHA Bureau Environmental Officer

(BEO) will gain information on the performance of the environmental compliance of the program from a field perspective.

2) **Assess**: Determine the successes and challenges of "green" indicators that were promoted by the BEO during SALOHI program design to capture the programs environmental safeguard performance. The assessment will help inform the BEO about the utility of this assistance.
3) **Lessons Learned**: Success stories and lessons learned on how to improve the effectiveness and efficiency of implementing environmental safeguards and promoting an "environmental reflex" in interdisciplinary non-environmental programs with a specific focus on the challenges of working in Madagascar. These products could be used to help with forward programming at the Mission level.
4) **Highlight**: Social media content to promote the work of the Mission and partners with a message developed around the idea of "Saving lives while protecting the environment." The success of the Go Green Strategy is a perfect topic for USAID tweets and blog posts being developed in celebration of Earth Day. We will be working with the communication team on development of these stories. The stories can be linked to the Mission's social media to promote your work broadly through the agency as well as in the public online space.
5) **Transfer**: A framework for other food aid/humanitarian assistance programs to integrate environmental reflexes into program management. The framework will be developed based on the design and implementation of the Go Green strategy. This framework will be guidance for DCHA crisis programs including CCF and OTI as well as other FFP programs.

Annex 1 Detailed Draft Agenda

The agenda presented here is tentative as there is still no confirmation of CRS' trip details from April 15-19th. The agenda will need to be revisited based on those details.

April 11 – Depart DC
April 13 – Arrive in Tana
April 14-16 – Travel with Zoely and CARE to Vatomandry to review sites and meet with partners
April 16th – 19th - Field site visits with Zoely to CRS sites in Fenerive
April 20-21st –Working days
April 22- Earth Day activities and Mission meetings
April 23-26th –Ikongo meetings with partners staff
April 28th-30th – Working days, follow-on meetings (tentative)
May 1 – Depart Tana (tentative) Possible extension depending on Mission needs

Appendix B. Mission Debrief

Madagascar Mission Debrief **April 26, 2013**

SALOHI Program Environmental Compliance Assessment

Arianne Neigh, Post-Crisis Environmental Advisor, DCHA/PPM

Objectives Summary

The primary objectives of the TDY were to:

1. Review environmental compliance and EMMP implementation for the SALOHI FFP program;
2. Review status of corrective actions post mid-term for environmental compliance of SALOHI and Go Green strategies;
3. Compile Go Green Strategy best practices and lessons learned to help inform forward programming; and
4. Evaluate sustainability from an environmental perspective for SALOHI after close-out

Activities Reviewed:

SO1: Health and Nutrition
- Health Sensitization
- Mother's Group

SO2: Livelihoods
- FFS
- VSLs
- Agribusiness Association
- Aquaculture
- Conservation Farming

SO3: DRR and Resiliency (NRM)
- Reforestation
- Irrigation Canals
- Roads
- Water Management Structures (Dams)

Site Visits:

Andranoambia, Vatomandry
Andasibe, Vavatenina
Tserakianje, Ikongo

Environmental Compliance and EMMP Review

Overall, the SALOHI program has a very high level of environmental compliance and monitoring for all of their projects in the zones visited. The mitigation measures and monitoring structure of the SALOHI program were stringent and complete with staff responsible for compliance from the field to headquarters level.

- All appropriate documents for environmental compliance reporting are in place and completed in a timely manner. The BEO was unaware that SALOHI was completing an ESF and would like to have copies of those documents for comparison against the ESRs.
- The next ESR will be due in September to cover the previous year's activities although there will be no PREP submitted.
- The partners are carrying out necessary mitigation measures and any corrections needed are quickly identified and completed.

Mid-Term Review Progress Report

In the mid-term report, several key activities were necessary for moving the Go Green Strategy forward. Below are the recommendations and updates since the mid-term report issue in July 2012 by SALOHI:

- Improve environmental integration – train all SOs on Go Green
  Update: All SO field agents and technicians have received training on the Go Green Strategy. Refresher training is conducted bi-annually.
- Promote reflex at the community level – develop, refine, and disseminate checklists for environmental strategy
  Update: The checklists for environmental monitoring and for scoring the status of the Go Green Strategy were developed and disseminated by the SALOHI environmental consultant to the field staff. All field staff are using the checklists on a monthly basis for reporting on environmental compliance and performance of the Go Green implementation.
- Conduct monitoring and evaluation of Go Green – implement contest
  Update: To promote and improve participation in the Go Green Strategy by the communities, SALOHI is conducting a competition between fokotanies. The communities are judged based on the level of "greenness" as measured by the checklists. The contest will last a total of 6 months. The contest will award high performing fokotanies and try to encourage the underperforming ones to participate in the Go Green Strategy. The influence of the program on promoting the strategy will be evaluated during the final evaluation.

Go Green Best Practices

Best practices are summarized below and will be highlighted in greater detail in the final report. They include:

- Integration: Address environment as a cross cutting issue by integrating it into all SOs.
- Reinforcement: Use reinforcement of environmental concepts through multiple trainings, site visits, and discussion with the beneficiaries to assure that the environmental reflex has a strong hold in the fokotany.
- Focus early on protection: Begin conservation activities for DRR and NRM activities prior to the construction or rehabilitation of water infrastructure in order to assure first that the asset is protected and of consistent quality and quantity.
- Constructing infrastructure to high standards: Build to high engineering standards using local techniques to ensure that the infrastructure is built strong in the first

place. This also sets a good example for how the work should be done during the training period for the fokotany.

- Utilizing existing support structure: Use supporting mechanisms to reinforce program objects. CRS in Ikongo is working gaining buy-in and building a support structure after closeout by working with the local diocese. They have begun to educate the priests by addressing technical issues by contributing to a monthly newsletter issued by the diocese.
- Peer training: Partner fokotany who are especially successful with a new technology with another fokotany to facilitate transfer of the technology. For instance, the FFS in Ikongo using plastic bags for potting of seedlings will be partnered with another community that is using natural and local sourced materials such as banana leaves for the seedling nursery.
- Community involvement: Involve the community in aspects of activity selection, design, and construction so they feel ownership in the activity and will maintain the asset.

Lessons Learned

SALOHI has also documented lessons learned. Selections from the final report are presented below.

- Appropriately target groups: The program discovered that in their sensitization for conservation agriculture and abandonment of the use of tavy that they should be sure to approach the wealthier landowners as well. The landowners were often hiring the poorer beneficiaries to conduct slash and burn on their lands rather than doing it themselves. Therefore, the poorer beneficiaries had less of an impact in stopping slash and burn because they were not making the decision on how the farming was to be conducted.
- Being wearying of the workload of field agents: Partners structure the field agents' duties differently as either cross-cutting across all SOs or individually for a single SO. Integrating additional cross-cutting issues into the duties of a field agent may be more practical when they are assigned to a single SO; however, there may be comprises in time spent in each fokotany due to travel times There is a trade off between the reality of travel, giving the agents manageable caseloads, and performing at a high level.
- Simplify tools at the field level: Checklists can be effective for monitoring the environmental impacts closely; however, they must be simple enough to be used by the field agent yet capture the data necessary. Checklists should be developed with both higher level management as well as field agents maintaining the checklists.
- Identify several methods for repair of systems: In at least one case, the irrigation channel needed to be stabilized; however, the management association was waiting for a rice shipment so they could backfill the bags with sand and stabilize the channel. Providing bags that were in excess from the other community would be useful or training the community in locally sourced approaches to stabilization should be conducted.

Sustainability Review

Going into year 5, the entire SALOHI program will have a strategic focus on sustainability. The Go Green Strategy is part of this strategic focus by helping build habits for environmental sustainability, which helps lead to overall program sustainability, particularly with activities based in NRM and DRR as well as conservation agriculture. Activities being conducted to improve sustainability and suggestions for improvement are provided below.

- Inclusive management: Water management associations should include both upstream and downstream users to ensure sustainability because upstream users have a large impact on water quality, quantity, and need for repairs.
- Communications: The field agents will leave posters in the communities to reinforce the environmental reflex. This will assist in integration of the environmental reflex into their daily lives.
- Reinforcement: To promote and improve participation in the Go Green Strategy by the communities, SALOHI is conducting a competition between the districts in each commune for the Go Green Strategy with an award of fruit trees to the community performing the best. This contest will reinforce the values of the strategy prior to closeout.
- Local Governance: Dina of the fokotany are being utilized to assure maintenance and sustainability of the activities and instill and environmental reflex. The new Dina have not been wholly adopted yet but all the communities, but these governance structures will be useful in sustainability of the activities.
- Use of local sources: Local resources are used in all cases possible to ensure sustainability. The local community must have easy access to the tools and resources they need so they can take ownership and carry out repairs.
- Construct to high standards: High quality construction and repair at the beginning is important for environmental compliance and for demonstrating techniques to beneficiaries. High quality to start will help meet sustainability goals.
- Identifying strong leadership: IMAs and other management groups work best when there is an advocate in the community who is a strong leader and invests heavily in their role. This may be one of the greatest indicators of whether a project will be sustainable
- Reliance on FFW: For large-scale activities in SO3, the communities are dependent on food aid to conduct the work because otherwise, they cannot afford the time away from their fields. If shocks such as cyclones instill large amounts of damage on the infrastructure, it is unlikely that the management associations will be able to manage the repairs. It is hoped that small corrections, made continually, will mitigate the impact of shocks.

Appendix C. Scorecards

Village:				
Commune:				
District:				
Region:		**ONG:**		
Date:	**Reporter:**			
FIELD CHECKLIST FOR SO1 ACTIVITIES WHEN LOOKING AROUND IN A VILLAGE OR HOUSEHOLD VISIT			**YES**	**NO**
Use of water resources				
Personal cleanliness of adult and kids at village level?				
Cooking utensils cleanliness at household level?				
Are people in the habit of purifying water? if yes what method ?				
Use of soil resources				
Do people have kitchen gardens nearby their household?				
Use of Natural resources and their surrounding environment				
Is there garbage pits per household or per village? if not, where do people throw their garbage ?				
Do people use latrines? If not where do they defecate?				
Are households and yards clean?				
Is there a village reforestation plot or village tree nursery for fuel purposes?				
Cultural aspect that are supporting people health				
Are there taboos that are against health activities promoted by SALOHI?				
Are there traditional practices that support family health?				

RECOMMENDATIONS

Related to Environmental protection	-
Related to Cultural aspects that could be learned to promote family health	-

CHECK LIST INTEGRATING ENVIRONMENTAL ASPECT INTO LIVELIHOOD ACTIVITIES (FFS/VSL/AGB)

Group name :	Village:	Commune:
Date of setting:	Steps :	Membership : M : F :
Field agent responsible :	Name of Group Leader :	Date:

QUESTIONS TO BE PREPARED	YES	NO	SUGGESTION
USE OF SOIL RESOURCES			
Training about Environmentally friendly agriculture techniques are promoted (DRS, AF, HLLM, CA, CF,SCV, IPM...) and outreached			
USE OF WATER RESOURCES			
Concrete inter-relation between agricultural plots and SALOHI irrigation system infrastructures			
USE OF NATURAL RESOURCES AND SUROUNDING ENVIRONMENT			
Consideration of environmental aspect within SO2 Groups bylaw or Dina (Give up slash and burn practices; firewall, reforestation, tree nursery, …)			
Cleanliness of commercialization place or product storage, reuse of garbage into compost			
SOCIAL AND CULTURAL ASPECT THAT IS SUPPORTING AGRICULTURAL PRODUCTION			
Promotion of integration of socio-economic and cultural aspect in any plan developed within SO2 activities (business plan, agricultural plan, …)			
Awareness and sensitization about the importance of Environmental aspects and Nde'ho Maitso in all revenue generating activities			
Promotion of Environmental friendly techniques for agribusiness activities			
Public recognition of Group that hadgood results in integrating environmental aspects and good environmental management into their activities during "journéé intégrée" or any other event			

RECOMMENDATIONS

Use of soil resources	
Use of water resources	
Natural resources management and surrounding environmental use	
Socio-economic and Cultural aspect	

Reporter :

CHECK LIST FOR SO3 ACTIVITIES FOR SALOHI PROGRAM

ONG :		**CRS partners :**	
Village :		**Commune :**	
District :		**Region :**	
Reporter :		**Date :**	
Infrastructure if applyed			

WHAT DO YOU SEE AT THE FIELD	YES	NO	SUGGESTION
SOIL DEPLETION MEASURES			
Are soil erosion measures visible nearby and at the micro-bassin surrounding the infrastructures rehabilitated or constructed ?			
WATER AND WIND (in the south) CONTROL			
Are measures against water-washing and wind-washing visible nearby and at the micro-bassin surrounding the infrastructure rehabilitated or constructed?			
NATURAL RESOURCES MANAGEMENT AND USE OF SURROUNDING ENVIRONMENT			
Is the natural resources management plan done in participative way, and is it done to support local community to face shocks and / or to protect infrastructure?			
Is there a Dina related to natural resources management?			
SOCIO-ECONOLIC AND CULTURAL ASPECT CONSIDERED			
Is there a traditional habit that can be promoted to protect natural resources ?			
Did the management committee receive training about Nde'ho maitso and or natural resources management?			
Do infrastructure users understand their roles and responsibilities in regards tothe infrastructure (give example)?			
Does maintenance planning exist and is it being implemented ?			

RECOMMANDATION

Natural resources management and surrounding environment use	-
Socio-Economic and Cultural aspect	-

Appendix D. GGS Sensitization Tools

Nde'ho Maitso !

USAID
DU PEUPLE AMERICAIN

- Arovako ny nofon-tany tsy ho kaohan'ny riaka

- Kojaiko ny rano hadio lalandava

- Tandrovako ny zavaboaary tsy ho levona

- Toaviko ny fiaraha-monina, ny toekarena sy ny kolotsaina

Tsara antoka ny anio
Ho mafy orina ny ampitso...

Nde'ho Maitso !

USAID DU PEUPLE AMERICAIN

AROVAKO NY NOFON-TANY TSY HO KAOHAN'NY RIAKA

Fambolena hazo eny amin'ny faritra avo sy eny an-tampon-tanety

Fambolena hazo madinika na bozaka mitàna nofon-tany amin'ireo faritra ahiana hihotsaka

Fomba telo no azo hiarovana ny nofon-tany

Fanarenana ny nofon-tany efa nokaohan'ny riaka amin'ny fomba mandàla ny tontolo iainana

Tsara antoka ny anio Ho mafy orina ny ampitso...

Nde'ho Maitso !

USAID
DU PEUPLE AMERICAIN

AROVAKO NY ZAVA-BOAARY TSY HO LEVONA

Fadiana ny doro-tanety sy ny doro ala ary ny tavy

Tandrovana ny loharano sy ny renirano rano tsy ho voaloto

Fomba telo no azo hiarovana ny zava-boaary

Tsongaina ireo hazo vaventy azo tapahina ampiasaina amin'ny fiainana andavan'andro sy ireo filàna iombonana

Tsara antoka ny anio Ho mafy orina ny ampitso...

Nde'ho Maitso !

USAID DU PEUPLE AMERICAIN

FAMOKARANA MANDALA NY TONTOLO IAINANA

Tsara antoka ny anio Ho mafy orina ny ampitso...

Mampiasà zezika compost

Ampiasao ny teknika ala-vadim-boly

Manaova voly rakotra

Nde'ho Maitso !

USAID
DU PEUPLE AMERICAIN

LALANA MANARA-PENITRA

Tsy avela hanagon-drano ny làlana ary savaina tsara ny lalan'ny rano eny amin'ny sisin-dàlana

Ny làlana miakatra sy mandalo fiolanana dia asiana vato mba tsy ho mora hiotsaka raha sendra riaka

Voleo bozaka na ahitra mitàna nofon-tany ny sisin-dàlana hiarovana amin'ny riaka

Aoka handray andraikitra ny komity mpitantana sy ireo mpahazo tombotsoa amin'ny fikojakojana ny làlana

Tsara antoka ny anio
Ho mafy orina ny
ampitso...

Nde'ho Maitso !

USAID DU PEUPLE AMERICAIN

LAKAN-DRANO SY BARAZY MANARA-PENITRA

Atao manara-penitra ny mari-drefy fitongilan'ny lakan-drano mba hampikoriana azy ara-dalàna

Volena bozaka na ahitra mitàna nofon-tany ny sisin'ny lakan-drano hiarovana amin'ny atsanga sy ny riaka

Aoka handray andraikitra ny komity mpitantana sy ireo mpahazo tombotsoa amin'ny fikojakojana ny lakan-drano

Atao mafy orina ny dina hitandrovana ny fiaraha-monina ary hampateza ny foto-drafitr'asa

Foto-drafitr'asa nokaliana...
Fanjarian-tsakafo any aoriana

Nde'ho Maitso !

USAID DU PEUPLE AMERICAIN

FONENANA LAVITRY NY ARETINA SY NY MOSARY

Manaova fambolena madinika eo an-tokotany, tsy ho lavitra anao izay ilaina amin'ny sakafon'ny mpianakavy

Mambole hazo fihinam-boa manodidina ny fonenana ho vitamina ho an'ny mpianakavy

Manaova lava-pako ao ambadiky ny trano fonenana, azo avadika ho zezika koa izany!

Tsara fiompiana madinika, ho fiandry raha sendra loza, manampy ny zezika hamokarana rahateo!

Manasà tanana isaky ny avy mivoaka na avy manolo zaza madinika

Mampiasà ny rano voadio ho fikarakarana ny ao an-tokatrano