



ADRA ASOTRY Joint Midterm Review

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Acknowledgements

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To the more than 15 communities in 10 communes that took time from their long, busy days to participate in the midterm review, it is our hope that the review team's recommendations are used to develop and improve the program and policies that enhance their food security and livelihoods.

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Acronyms

AIM	Association Inter-cooperation Madagascar
Ar	Ariary (Malagasy currency)
AUE	<i>Association des Usagers d'Eau</i>
AUP	<i>Association des Usagers de Pistes</i>
BNGRC	<i>Bureau National de Gestion de Risques et Catastrophes</i>
CMAM	Community-based Management of Acute Malnutrition
CNV	Community nutrition volunteer
CRS	Catholic Relief Services
CU2	Children under two
CU5	Children under five
CHV	Community health volunteer
CLTS	Community-led total sanitation
CNV	Community nutrition volunteer
DQA	Data quality assessment
DRM	Disaster risk management
DRMC	Disaster Risk Management Committee
F2F	Farmer-to-farmer (approach)
FBA	Farmer Business Association
FFA	Food for Assets
FFP	Food for Peace
FFS	Farmer Field School
GMP	Growth monitoring and promotion
GoM	Government of Madagascar
IPTT	Indicator Performance Tracking Table
JMTR	Joint midterm review
M&E	Monitoring and evaluation
MoH	Ministry of Health
MUAC	Mid-upper-arm circumference
NRM	Natural resource management
O&M	Operations and maintenance
PIRS	Performance Indicator Reference Sheet
PLW	Pregnant and lactating women
PMU	Project Management Unit
RUTF	Ready-to-use food(s)
SBCC	Social behavior change communication
SECALINE	Surveillance and Education for Schools and Communities on Food and General Nutrition
TSIKONINA	(Name of ASOTRY cooking and feeding model)
UPNNC	<i>Unité de Programme National de Nutrition Communautaire/ National Community-based Nutrition Program Unit</i>
VSLA	Village Savings and Loan Association
WASH	Water, sanitation, and hygiene

Executive Summary

This is the report of the midterm review of ASOTRY, a five-year, USAID Food for Peace (FFP) Title II award whose goal is to reduce food insecurity and vulnerability among food insecure households and communities in Madagascar. The award, implemented in partnership with Land O'Lakes and Association Intercooperation Madagascar, runs from December 2014 to September 2019. ASOTRY works in 32 communes in Amoron'i Mania, Atsimo Andrefana and Hatue Matsiatraregions. It targets women of reproductive age, children under five years old and subsistence farmers and their communities with special attention to adolescents and youth, the elderly and the disabled.

This was a joint review, in that it covered ASOTRY and another USAID FFP award, Fararano. A team of development professionals conducted both reviews representing USAID FFP, the USAID Mission in Madagascar, Catholic Relief Services (CRS) and ADRA. An evaluation protocol guided the lines of inquiry, including detailed objectives for the review. The main focus was on perceived program effectiveness, constraints inhibiting effectiveness and means of overcoming these constraints. The review followed primarily qualitative methodology and made reference to select quantitative data from program monitoring.

Review preparations began in January 2017. The in-country mission, including the validation workshop and USAID FFP debriefing took place in April and May 2017. The team returned to Madagascar in June for a workshop on recommendations. The report was finalized in November with the support of an outside consultant contracted by TOPS.

Following are the main findings regarding overall quality, each of the three program purposes and program monitoring. The full report contains extensive recommendations that resulted from both the review exercise and the recommendations workshop.

Program Quality

Staff recruitment, training and partnerships with external organizations for technical support and service delivery were on schedule.

ASOTRY does not offer an integrated package of interventions to many target households. As a result, a substantial number of households do not receive critical support from ASOTRY to achieve all dimensions of food security – access, availability, utilization and stability.

ASOTRY's theory of change has yet to be contextualized or updated. For example, with small farm sizes and low levels of yield and profitability, it is unlikely that ASOTRY will achieve Purpose 2 (agriculture and micro-enterprise) objectives, suggesting a flaw in the current theory of change and intervention package.

While ASOTRY has been delivering important and needed services aimed at changing participant attitudes, practices and behaviors, it has yet to develop and implement sustainability strategies to continue service provisions after the end of ASOTRY.

Maternal and Child Health and Nutrition (MCHN) (Purpose 1)

Overall, ASOTRY staff, beneficiaries and health facility staff reported positive change in their community due to ASOTRY inputs. Specifically, there has been increased attendance in antenatal care visits, increased child visits to the health facility, more children vaccinated, and in general, mothers feel their children are healthier. Key successes include increased number of female community members empowered to make decisions and who are trained in health and

nutrition as well as an increase in the number of women and children seeking care at Ministry of Health facilities.

Key challenges include the quality of service delivery and social behavior change communication, context-specific targeting and related interventions and gaps in linking to government health and nutrition services.

Considering the massive burden of chronic malnutrition and poverty on the target population, the success of ASOTRY depends largely on how well the program can minimize the dual burden of chronic malnutrition and poverty and ensure the sustainability of critical services and institutions.

Agriculture and Micro-enterprise (Purpose 2)

ASOTRY's efforts to implement Purpose 2 rely on Farmer Field Schools (FFSs), Farmer Business Associations (FBAs) and Village Savings and Loan Associations (VSLAs). The Joint Midterm Review (JMTR) team's observations suggest that the FFSs are reaching many people, the participants are very happy with the services provided and they are applying the techniques learned to their own fields. The participants also liked the FBAs and widely reported wanting to continue them after ASOTRY assistance terminates. Similarly, VSLA members report being highly motivated to continue the associations and have a strong understanding of the principles and mechanics of how VSLAs function. VSLAs appear to be highly capable of continuing to operate without ASOTRY assistance. The value-chain interventions were not fully encompassed by midterm; however, there was evidence of incipient access to local markets.

Despite these successes, there are several constraints, limiting factors and missed opportunities with ASOTRY's implementation efforts. The JMTR team's observations suggest that some of the most vulnerable households are excluded from ASOTRY interventions. For example, they lack land that would enable them to participate in FBAs as crop farmers, which is where the program has focused compared to livestock production, which does not require private land ownership. In addition, many households receive interventions under only one component, but would benefit substantially from assistance and training under additional components. Neither FFS participants nor program staff know what yield increases to expect as a result of applying techniques taught in the FFSs. Production data and underlying factors affecting yields are not analyzed resulting in a substantial learning gap.

The sustainability of some of the interventions, especially the seed and input supply interventions, is highly questionable and needs to be revisited. The technical interventions will result in an evolutionary change in the targeted communities: people are planting in lines, have access to small loans and are forming marketing relationships with their fellow farmers that will lead to slight improvements in yields or business opportunities. Taken together, however, this set of interventions will not transform opportunities and livelihoods in rural communities to the extent needed to provide sustainable food security, diversified livelihood opportunities and enhanced resilience. Finally, as FFP measures program results on a population basis, it is very important for ASOTRY to develop and implement ways for interventions to reach indirect participants rather than just direct participants. Creating interventions that "go viral" – that spread under their own momentum rather than being award-mediated, such as seed fairs and

VSLAs, will be highly advantageous on this front.

DRR (Purpose 3)

While the Disaster Risk Management Committee (DRMC) appears to be addressing a clear need for community-based disaster risk planning and management, its strategic vision and implementation are unsupported. For example, while the flag system may be known throughout the community, its meaning and purpose need regular reminders. The linkages between this element and the natural resource management interventions are very weak, which is a significant missed opportunity for ASOTRY.

ASOTRY has been investing in a community-based early warning system, but faced many challenges. The country does not have a functional early warning system, and ASOTRY's plan to collaborate with the food security information system managed by FAO fell through. At the time of the JMTR, ASOTRY did not have a documented strategy and associated plan to develop and implement an early warning system that is functional and sustainable.

Program Monitoring

The ASOTRY program monitoring system was well-designed with all key components of an M&E system; however, the system was not yet fully functional two years after program began. Finalization of data collection tools took longer than expected, which partly contributed to the delayed finalization of the M&E system. The main challenges were database functionality, standardization of indicator definition interpretations and calculation and staff capacity. The consultant needs to expedite completion of the database, which involves identifying and addressing bugs in the database before the next reporting period. There is also a significant need for staff training, particularly for partner staff who do not have experience in managing USAID awards.

Major data quality issues were the validity, reliability, precision and up-to-date data. Validity issues were mainly linked to lack of standards of measurement, such as training definitions and standards. Reliability issues related to a lack of a system to objectively verify information reported by field agents, especially given that data are collected using tablets with no physical copy to use for data verification.

CommCare is a smart phone application for community health volunteers (CHV)s to facilitate counselling to caregivers during growth monitoring sessions and household visits. The application allows data collection on growth monitoring, upload the data to a central CommCare database, and synthesize the data. The application then synthesizes the data and make it available with the appropriate messages to CHVs during the sessions.

The review team found that the CommCare nutritional messaging platform was not working properly and had many challenges. This warrants an in-depth assessment of the likelihood of its effectiveness within the current program context of poor connectivity, remoteness and the limited capacity of community volunteers to use a smartphone as well as the likelihood of the platform's sustainability.

Overall Assessment

ASOTRY has been successful in setting up implementation processes (e.g., for care groups, FFSs and VSLAs), developing most of the needed guidance materials and staff training and is on track to achieve many of the output targets. Yet the quality of implementation, integration of

interventions at household level and coverage have been identified as major challenges to achieve intended outcomes. The JMTR team identified major issues, including high staff workload, implementing more interventions than for which it has capacity, starting different interventions at different times – but not as a full package in different locations – significant variability in partners' capacity, remote locations of some fokontany and lack of a viable sustainability strategy. These issues have further been complicated by the absence of a strong feedback loop to identify challenges in implementation systematically and address them promptly and consistently across partners. If ADRA and its ASOTRY partners take serious corrective measures to improve the quality of implementation, ASOTRY has the potential to achieve its intended goal.

Based on the JMTR team recommendations, the program should develop a tool to ensure proper and transparent follow-up on actions made toward these recommendations.

Introduction to the ASOTRY Project

Project Overview



ADRA, in partnership with Land O'Lakes and Association Inter-cooperation Madagascar (AIM), has been implementing ASOTRY, a five-year program with the goal of reducing food insecurity and vulnerability among food insecure households and communities in Madagascar. Incorporating the experience, successes and lessons learned from the SALOHI program, ASOTRY started implementation in December 2014. The program is expected to end in September 2019.

ASOTRY targets 32 vulnerable communes of 10 districts in three regions: Amoron'i Mania, Atsimo Andrefana and Hatue Matsiatra. The program prioritizes and targets the most vulnerable populations, achieving approximately 75 percent coverage of the population in the 408 fokontany of the targeted communes – those with the highest rates of food insecurity, stunting and poverty rates. Specifically, ASOTRY targets women of reproductive age, children under five years old (CU5) and subsistence farmers and their communities with special attention on adolescents and youth, the elderly and the disabled. Over the life of the project, ASOTRY plans to reach 264,380

beneficiaries with an integrated package of nutrition and health activities focusing on pregnant and lactating women (PLW) and CU5, agriculture and income-generating activities targeting vulnerable households and disaster risk reduction activities at the community level. It includes environment, gender, governance and socio-organization as crosscutting aspects in all project components. In addition to the three core implementing partners, ADRA works with various technical partners, including Dimagi for implementation of CommCare methodology in nutrition and health; Lecofruit, World Food Programme and SMTP as partners for farmers groups supported by the project; and Tillers International on adapted farming technology. It works with United Nations agencies through the Food Security Clusters and with 10 government departments at national and decentralized levels to ensure coordination in technical sectors and work toward the sustainability of award impacts.

The ASOTRY consortium includes a central program management unit headed by the chief of party and deputy chief of party, and technical leads in health and nutrition, agriculture, livestock



and livelihoods, resilience and infrastructure, gender and socio-organization, monitoring and evaluation (M&E), food commodity management and administration and finance. Each consortium partner has technical specialists in these areas, while additional specialists in environment, behavior change and communication, marketing and village savings and loans bring expertise to the whole consortium. The core ADRA team provides support in finance, human resources and administration, internal audit and monitoring of food commodity distributions and MIT. These technical and administrative staff ensure program quality by developing technical strategies and guides and in monitoring activities and providing administrative support for compliance with donor regulations. All three consortium partners also have community-based health and nutrition, agriculture and livelihoods, and resilience field staff and administrative and support staff based in four field offices in Ambositra, Bekily, Fianarantsoa and Tulear, including the M&E team of each partner.

There are two main overall challenges for both ASOTRY and its sister program, Fararano. First is changing climate conditions in the southwest region, which result in a dry climate, high risk of crop failure and a longer food gap. Second is a fragile political system that leads to weak and under-resourced government structures, impeding full transition of activities to government – part of the sustainability strategy.

Project Purpose, Sub-purposes, and Intermediate Outcomes

Purpose 1: Improved health and nutrition of women of reproductive age and children under five

Sub-purpose 1.1: Improved health and nutrition behaviors of caregivers and children under five

- Immediate Outcome 1.1.1: Improved awareness of nutritional status among community
- Immediate Outcome 1.1.2: Improved knowledge of appropriate health and nutrition practices
- Immediate Outcome 1.1.3: Increased access to diversified and sufficient food

Sub-purpose 1.2: Increased utilization of health and nutrition services for women of reproductive age and children 0 to 59 months

- Immediate Outcome 1.2.1: Increased access to quality community health services
- Immediate Outcome 1.2.2: Increased awareness of available health and nutrition services

Sub-purpose 1.3: Reduced incidence of water- and hygiene-related illnesses for children under five

- Immediate Outcome 1.3.1: Increased access to drinking water
- Immediate Outcome 1.3.2: Increased access to sanitation and hygiene facilities and equipment
- Immediate Outcome 1.3.3: Increased adoption of appropriate WASH behaviors

Purpose 2: Increased Access to Food for Vulnerable Households

Sub-purpose 2.1: Increased agriculture production

- Immediate outcome: 2.1.1: Increased use of agricultural and livestock services
- Immediate outcome: 2.1.2: Improved agricultural production practices
 - Sub-Immediate outcome: 2.1.2.1: Increased agricultural knowledge

Sub-purpose 2.2: Increased agricultural sales

- Immediate Outcome 2.2.1: Improved storage practices
 - Sub-Immediate Outcome 2.2.1.1: Improved knowledge of storage practices
 - Sub-Immediate Outcome 2.2.1.2: Increased storage facilities
- Immediate outcome 2.2.2: Improved marketing linkages

- o Sub-immediate Outcome 2.2.2.1: Improved marketing skills
- o Sub-Immediate Outcome 2.2.2.2: Increased access to market information

Sub-purpose 2.3: Increased engagement of women and men in micro-enterprises

- Immediate outcome 2.3.1: Increased access to credit
- Immediate outcome 2.3.2: Improved entrepreneurial skills

Purpose 3: Improved disaster mitigation, preparedness and response in vulnerable communities

Sub-purpose 3.1: Community disaster mitigation assets improved

- Immediate Outcome 3.1.1: Environmentally sound community
- Immediate Outcome 3.1.2: Gender-inclusive community infrastructure management systems implemented
- Immediate Outcome 3.1.3: Improved community natural resource management
 - o Sub-Immediate Outcome 3.1.3.1: Community knowledge of natural resources management increased.
 - o Sub-Intermediate Outcome 3.1.3.2: Community utilization of natural resource management assets increased

Sub-purpose 3.2: Community response capacities improved

- Immediate Outcome 3.2.1: Community knowledge of early warning systems and disaster preparedness improved
- Immediate Outcome 3.2.2: Community disaster response and early warning system structures improved
- Immediate Outcome 3.2.3: Commune linkages to external response structures improved

Midterm Review Objectives

The objectives of the midterm review for ASOTRY are:

- 1) Assess the overall strategy of ASOTRY in terms of its relevance for addressing food insecurity with targeted impact groups, taking into account contextual changes that may have occurred since the award began implementation. This will entail reviewing the strategies that ensure that the award reaches target groups, reviewing the theory of change and assessing the hypotheses, risks and assumptions made during the design of the program.
- 2) Assess the quality of inputs, implementation and outputs to identify factors that enhance or detract from the efficiency, quality, acceptability and effectiveness of the activities implemented and the likelihood that they will contribute to sustained achievement of project goals.
- 3) Review the level and effectiveness of coordination and collaboration with external organizations that are critical to achieve goals and purposes. This includes actors that provide complementary services necessary to achieve outcomes, actors that will provide essential services to sustain the outcomes after the end of the two awards, actors that influence access to goods and services, and organizations that promote or impede an “enabling environment.”
- 4) Present, evidence of changes through quantitative data and qualitative information, including intended and unintended outcomes associated with interventions and outputs, assess how well the observed changes support the theories of change and logic of the logframe and identify factors (both internal and external) in the implementation or

context that impede or promote the achievement of targeted results.

- 5) Related to collaborative learning and action - Review systems for capturing and documenting lessons learned and assess the extent to which they are used in implementation and refining program design, including feedback from the perspective of stakeholders and participants. Assess processes to use evidence, including baseline results and monitoring data for adjusting program strategies. Assess how well the program is seeking out, testing and adapting new ideas and approaches to enhance effectiveness or efficiency.
- 6) Related to sustaining impact - Determine the extent to which outcomes, systems and services are designed and implemented to continue after the award ends, and assess progress made on implementing sustainability strategies. What activities are being implemented to ensure that the service providers will have continuous access to required resources and capacity strengthening support? How has ASOTRY been creating demand and influencing the motivations of the beneficiaries and service providers? What has been done to establish and strengthen i) critical linkages necessary to sustain resources and ii) capacities that may positively or negatively influence sustainability? Has the program identified the indicators and planned for a phased transfer of responsibilities yet?
- 7) Relative to the major crosscutting themes in both awards - Determine the appropriateness and effectiveness of support for gender equity in terms of access, participation and benefits from interventions. Assess the extent to which interventions target youth, support greater capacities for local governance and address sources of environmental risk.

Methodology

Process Overview. The reviews of sister programs ASOTRY and Fararano each consisted of a preparation stage, a fieldwork stage and a reporting stage. Preparations began in January 2017 and included reviewing the draft statement of work, document review, protocol and tools development, site selection and logistics planning. The ASOTRY mission took place April 11 to 26, followed by the Fararano mission April 27 to May 12. Both missions included introductory meetings with USAID and awardees, fieldwork, a validation workshop, a debriefing and a recommendation and planning workshop. Each validation workshop took place at the end of each mission (April 25 for ASOTRY and May 10 for Fararano) and involved staff from ASOTRY/Fararano, implementing partners for the respective award, USAID mission staff and staff from ADRA/CRS headquarters. The workshops aimed to validate the JMTR team's observations with ASOTRY and Fararano implementers' staff.

The JMTR team debriefed to FFP Madagascar before the end of the mission to review findings. The team returned to Madagascar in June to review and finalize recommendations with both projects. The recommendation workshop (June 20 to 22) aimed to provide Fararano and ASOTRY staff an opportunity to review the feasibility of the recommendations, analyze the challenges to implement them, develop alternative recommendations in cases for which the original recommendations were deemed particularly challenging to implement and develop an action plan to implement the recommendations.

Methodology. A detailed protocol defined in Annex I¹ guided the methodology for the ASOTRY and Fararano reviews. The JMTR primarily used a qualitative approach.

Both reviews began with a desk review of documentation such as the baseline study report, technical narrative, theory of change and logical framework, monitoring data and reports including annual and quarterly reports, M&E plan, the Indicator Performance Tracking Table (IPTT) and implementation manuals as applicable. During the course of the reviews, the team continued to review, consult and analyze information from these and additional relevant sources. The team analyzed the annual monitoring data.

During the mission, the JMTR team applied primary data collection methods including semi-structured in-depth-interviews and group discussions with program managers, technical staff, service providers (frontline staff and volunteers) and participants, as well as some non-participants. The JMTR team also observed learning/training sessions as available and conducted in-depth visits of infrastructure projects. Inquiry focused on perceived program effectiveness, constraints inhibiting effectiveness and suggested means of overcoming these constraints. Key informants included: government staff; commune mayors; USAID/Mikolo program management staff; key management staff from the Surveillance and Education for Schools and Communities on Food and General Nutrition (SECALINE); awardee and implementing partners at country office and field levels; participants; indirect beneficiaries; non-beneficiary community members and community leaders; and Government of Madagascar (GoM) representatives at national and local levels.

Fieldwork also included direct observation of project activities such as nutrition sessions, growth monitoring and promotion (GMP), knowledge and technology transfer sessions, demonstration plots and other household and community-based activities. The team also conducted in-depth visits of irrigation and road infrastructure supported by the project.

Review Team. A team of development professionals representing FFP, the USAID Mission in Madagascar, CRS and ADRA implemented the JMTR. The team, led by the FFP Senior Monitoring and Evaluation Advisor, was comprised of “core team members” and “observers.” Core team members participated in the full review process for both the ASOTRY and Fararano awards, or as much of the process as possible, and led the investigations in assigned areas per their technical expertise. Observers

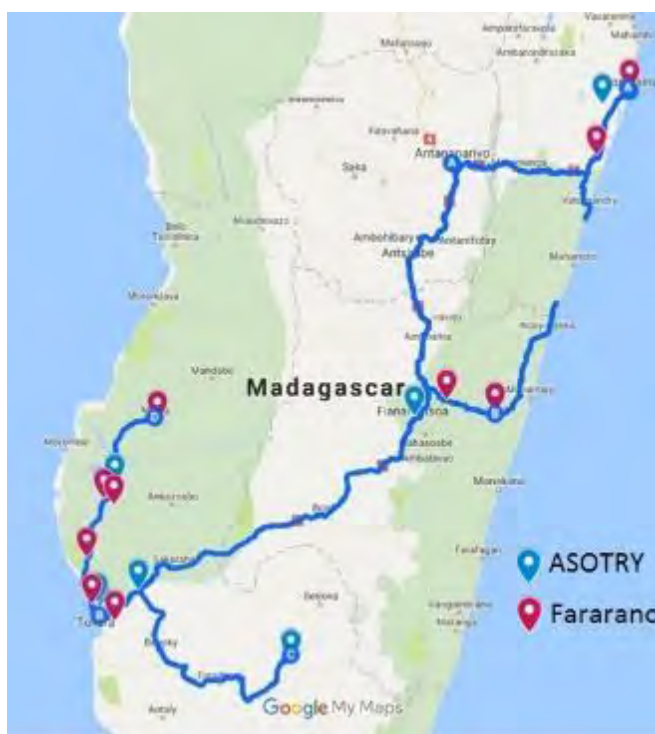


Figure 1: JMTR sample sites

¹ The protocol contains all interview guides and further details about the review process.

provided ideas and input to the core team in their areas of expertise but did not partake in the analysis.

Sample. The JMTR team selected a purposive sample of interview sites representing variation in agro-ecological zones, livelihood strategies, proximity to major infrastructure (markets, roads, towns) and access to resources and services, quality of service delivery and coverage/intensity of project services. Other considerations for sample selection included physical accessibility and the JMTR team's ability to visit all sites in the time available for the review, which meant choosing communities requiring less travel time to reach. For example, a number of the communities targeted by AIM in the Atsimo Andrefana region are extremely remote. These communities can only be accessed by foot and many require several days' travel to reach. The JMTR team left these communities out of the sampling frame. In addition, some communities were identified as unsafe considering the security situation. These areas were also omitted from the sampling frames.

The JMTR team visited 11 communes where ASOTRY is implemented (Ambondromisotra, Anjoma, Beroy, Mahatsinjony, Mahazoarivo, Maroarivo, Marosavao, Soaseràna, Tsarasaotra and Vohiposa), and 11 communes where Fararano is implemented (Ambohimahavelona, Anosimparihy, Antanimieva, Antaretra, Behompy, Belalanda, Mahatsara, Miary, Tsianisiha, Vohitravinona and Voreo,). The team visited and interviewed one or two communities in each commune.

Analysis. The JMTR team recorded field notes and convened daily to discuss and process emerging findings. The team thus began preliminary analysis in country during and after fieldwork, vetted initial findings through the validation workshops and continued its analysis post-mission using qualitative analytical methods.

The Baseline Status: The magnitude of the burden presented by the baseline survey is enormous. As many as 310,000 people (83 percent) in the ASOTRY target area live in extreme poverty (below \$1.90 a day). Over 32,000 children age 0 to 59 months (54 percent) are stunted, approximately 16,000 children age 6 to 23 months (91 percent) do not receive a minimum acceptable diet, and approximately 19,000 mothers (47 percent) do not practice exclusive breastfeeding. Approximately 12,000 CU5 (20 percent) reported suffering from diarrheal diseases in the two weeks prior to the baseline survey and approximately 50,000 households (71 percent) do not use an improved water source. As many as 68,000 households (98 percent) do not use an improved latrine, while approximately 40,000 households (44 percent) reported practicing open defecation, suggesting 51,000 households using some sort of latrine but not improved – an issue that can be tackled by SBCC. More than 60,000 women of reproductive age do not consume a diet with minimum diversity, 68,000 farmers do not use at least two sustainable natural resource management practices, and 43,000 farmers do not use at least two sustainable livestock management practices.

Limitations and Challenges

The lack of consistent participation of all JMTR team members was one of the limitations of the review. Since all JMTR team members have full-time jobs and other responsibilities, in some cases, a team member was not available to participate fully in the review using his or her technical component in both awards, so different people with similar expertise filled in.. This posed challenges to the interpretation of the observations because of the varied experience of these team members. To mitigate this challenge whenever possible, the JMTR members overlapped in the field or had meetings to share their observations and interpretations. In addition, the team leader accompanied the new members in the field to ensure consistency in observation and interpretation.

Related to the point above, securing technical specialists from CRS, ADRA and FFP to participate in the review who could commit two months to the exercise was a challenge. The FFP Gender Advisor was planning to join the team, but ultimately this did not work out due to travel-related complications. While another team member was assigned to address gender aspects of the review, the gap in specialized gender expertise on the team meant that gender integration and other gender aspects could not be fully evaluated.

Another limitation was the JMTR team could not interview an adequate number of non-project participants due to time and scheduling constraints. USAID, ADRA and CRS travel policies defined the time that the team could spend in the communities. Some of the communities selected were remote and it took significant travel time to reach them, which limited the amount of time for interviews in the communities. Since the JMTR team tried to interview a large number of direct participants, limited time was available to interview non-participants. For this reason, the JMTR team also could not interview a large number of government and non-government stakeholders.

Given the timing and the allotted time for fieldwork and the limited number of infrastructure (road and irrigation) projects in the target areas, the JMTR team visited only a small number of infrastructure projects, which was inadequate to gain an understanding of the quality and condition of the infrastructures the two projects developed. The JMTR team therefore prioritized i) active interventions where the projects made the greatest resource investments and ii) interventions considered to be making a relatively high contribution toward achieving strategic objectives. The team recognizes that the resulting trade-off was inadequate attention to the range of infrastructure interventions.

Data quality issues created a challenge for the JMTR team and monitoring data could not be used with confidence to assess progress. The data quality assessment (DQA) on six indicators the Madagascar Mission carried out in April 2016 noted some issues such as lack of process documentation and verification checks. The ASOTRY M&E team has yet to develop and implement a mechanism to verify the quality of data collected and recorded by community volunteers. ASOTRY conducts internal DQA, but it does not have a plan of action to address the issues identified by internal DQA. Some of the data quality issues identified in the past are yet to be fixed. The volunteers responsible for data collection do not receive regular refresher training, which negatively affects the accuracy of the anthropometric data they are responsible to provide. While analyzing the annual monitoring data reported by ASOTRY, the JMTR team

questioned the validity of data for some indicators.

An evaluability issue arose in the review of Farmer Business Associations (FBAs). While the JMTR team was able to visit several FBAs, it visited only one in the AIM target area, a decision made only that morning. The members of that FBA therefore could not provide any information on the FBA beyond what they had learned that day. One member of the FBA reported that village elders asked to join the meeting with the JMTR team. He did not know much about ASOTRY or the purpose of an FBA. While it is possible that this was the only FBA in that area that was feasible for the JMTR team to interview, selecting a brand-new FBA for a midterm interview was not helpful to understand the quality of the FBA, and not the optimal use of JMTR team time. The review of the FBA activity therefore reflects data collected primarily on FBAs visited in non-AIM areas.

Although individual members drafted their own sections, assembling the draft reports has been a challenge which took longer than anticipated. To address this issue, FFP requested TOPS to assist with the assembly and editing of the two reports.

Findings

Program Quality

The JMTR team reviewed various aspects related to program quality and each is discussed below.

Staffing

ADRA and its partners hired most of the staff by the second quarter of FY 2015. The project faced challenges at the beginning to find qualified technical staff for health and nutrition. It provided training to all staff on various topics related to their scope of work. The three partners (ADRA, Land O'Lakes and AIM) established all financial and administrative systems according to their own internal regulations; however, as the prime awardee, ADRA provides guidance and technical support to ensure FFP compliance.

Security

A number of communes located in Atsimo Andrefana and in the southern portion of Haute Matsiatra were faced with security challenges, and ADRA had to evacuate its staff to ensure their safety. ADRA also reported cattle raiding near or in the targeted areas.

Communications

ASOTRY holds town hall meetings at communal and regional levels on an annual basis. Community members, program participants and local and regional authorities participate in these meetings in which ASOTRY staff share results achieved during the year and plans for the coming year. These meetings provide a venue to promote local agricultural products produced with the help of ASOTRY and publicize the services offered by community health volunteers (CHVs), lead mothers, leaders of Farmer Field Schools (FFSs) and Village Savings and Loan Associations (VSLAs).

Partnership with Dimagi

ASOTRY partnered with Dimagi to develop and implement the CommCare phone application for the CHVs. Dimagi developed and tested a nutrition/growth monitoring application, which helped the CHVs to support their counseling work. Dimagi also developed a health application that deployed to all communities with the collaboration of the district health authorities.

Integration of Program Components

ASOTRY was designed as a multi-sectoral food security program, and the program has been implementing multi-sectoral interventions at the program level; however, it has not been offering a multi-sectoral package of interventions to a large proportion of households. The data provided by ASOTRY and interviews with staff and participants indicate that the household-level integration of various interventions from different components is extremely limited, meaning a small proportion of households benefit from interventions related to improve health and nutrition of children and women, increased income and production and improve disaster risk and natural resource management.

The baseline survey revealed that 83 percent of households in the ASOTRY target area are extremely poor. The ASOTRY theory of change and baseline study indicate that multi-sectoral interventions are needed to achieve food security objectives. Therefore, a majority of households receiving maternal, child health and nutrition services from ASOTRY that do not receive interventions to increase income or improve livelihoods may not necessarily gain access to food, and will likely remain food insecure at the end of the award.

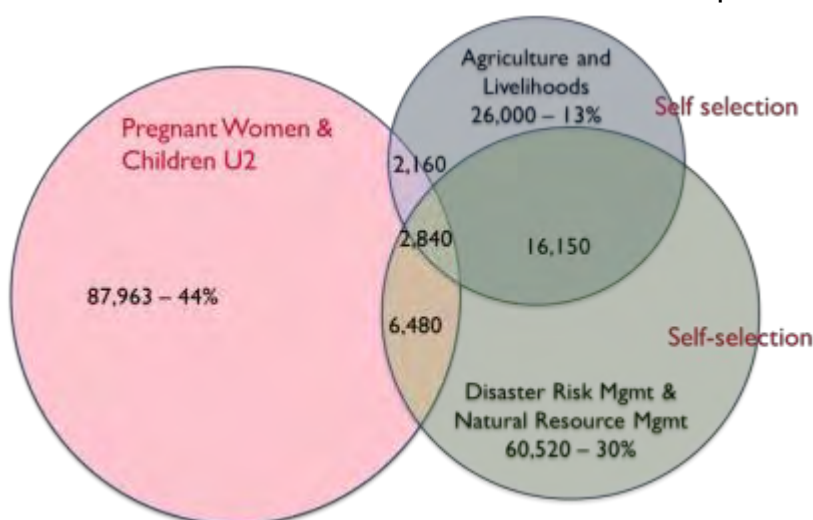


Figure 2: Venn diagram showing participant-level integration of interventions

Access to Land

Interviews with ASOTRY staff and direct participants suggest that a majority of ASOTRY direct participants own a small piece of land. Although no survey data are available to the JMTR team to estimate the average farm size per household, anecdotal evidence suggests that the average farm size is less than one hectare. ASOTRY annual monitoring data show that productivity and gross income from the crops are very low – inadequate to make a living – while the theory of change suggests that investments in crop productivity and marketing will help many of the target households achieve food access. Considering that households do not have access to more land, small farm sizes, poor access to high-quality inputs and current low levels of yield and gross income, it is unlikely that ASOTRY will achieve C2 objectives.

Variation in Vulnerability

The range of vulnerability in the Southwest and the Central regions is drastic. Participant vulnerability and capacity levels vary across communities in the Central region, whereas in the Southwest they are more or less uniform. All communities in the Southwest could be considered vulnerable. Another challenge in both regions relates to the approach ASOTRY uses to recruit participants for various interventions. Instead of targeting per established criteria, ASOTRY uses a participatory process to recruit participants for many interventions. For example, ASOTRY staff ask for interested community members to join the FFSs and it is up to the individual to decide whether she or he would like to join. As a result, some very poor/vulnerable people do not participate in ASOTRY.

In addition, the staff's heavy workload also prevented adequate integration and synergy among sectors, as staff are busy ensuring quantity hence less focus on quality.

Despite differences in beneficiary vulnerability, the capacity of community volunteers and determinants of malnutrition, ASOTRY is implementing the same set of interventions using the same approaches in both program regions.

Sustainability

Sustainability of the outcomes and necessary services is critical to the success of ASOTRY. The program is delivering important and needed services aimed at changing participant attitudes, practices and behaviors in: production techniques, marketing, livelihoods, maternal health and child feeding and caring practices, gender norms, water, sanitation and hygiene (WASH) practices and disaster risk management (DRM) practices. However, participants will need continued support after ASOTRY ends to maintain and enhance gains and to fully adopt the new practices. More importantly, there will be a continuous need for extension support to learn new techniques and support existing techniques, yet public-sector capacity to provide services in many of these areas is extremely limited or non-existent. Therefore, depending solely on the public sector will not likely ensure continuous service provision and may threaten the gains to be made through ASOTRY.

Program Quality: Recommendations

PQ-1: Revisit the targeting strategy to increase household-level integration among different components. Explore the possibilities to link C1 participants with C2 and C3. Consider re-targeting to focus on fewer fokontany and to support more households in the same fokontany with multiple interventions. It is important to note that even if direct participants are able to take full advantage of the ASOTRY investments and improve their food security, because the baseline and endline surveys are population-based, this change may not be statistically detectable due to the small number of target households in each fokontany.

PQ-2: ASOTRY should revisit its theory of change and assess the pathways to achieve C2 in consideration of ASOTRY monitoring data, typical farm size of the poor and vulnerable and an economic analysis of production potential. It should revise the theory of change and intervention package accordingly.

PQ-3: Review and reorganize the implementation strategy, approaches, staff workload, staff

capacity and social and behavior change strategies based on vulnerability level, operational challenges, geographic location, social norms, customs and behavioral practices. This should be coupled with hiring more frontline staff, training field agents on different scenarios and expanding their discretion to modify approaches to address different contexts relating to geography, community/household dynamics and seasonality.

PQ-4: Identify the services that are critical to sustain anticipated outcomes. Identify potential service providers and develop and implement a strategy, based on the findings of the FFP-funded Exit Strategies research,² to improve service providers' motivation to provide services after ASOTRY ends (supply) and motivate participants to seek and pay for services if needed (demand). Provide skills training to potential service providers to strengthen their capacity, identify and link service providers to the resources needed for service provision, identify institutions that provide capacity-strengthening support and link potential service providers with these institutions so they can periodically update their skills, and finally, monitor the sustainability strategy's performance during the remaining life of ASOTRY. For example, some farmer leaders may be interested in developing a nursery or starting a small livestock business. The program can invest in these aspiring entrepreneurs to develop skills specific to their enterprise as well as to extension work, and link them with resources to start a small business. This will likely increase their motivation to provide services to the target community.

Component I: Improved Health and Nutrition of Women of Reproductive Age and CU5

To improve health and nutrition behaviors of women and children 0 to 59 months (CU5), ASOTRY uses the care group model to transfer messages and initiate behavior change. ASOTRY also implements activities to improve dietary diversity such as home gardens, promotion of "rainbow foods," and ration distribution. To increase utilization of health and nutrition services, ASOTRY builds the capacity of CHVs and supports GMP and health and nutrition referrals.

² See Effective Sustainability and Exit Strategies for USAID FFP Development Food Assistance Projects at <https://www.fantaproject.org/research/exit-strategies-ffp>

1.1: Improved health and nutrition behaviors of caregivers and children under five

Care Groups

Activity description. ASOTRY started implementing care groups in late 2015. According to ASOTRY, there are 347 care groups made up of 2,703 lead mothers. The ASOTRY Regional Health and Nutrition Specialist supervises ASOTRY field agents serve as care group promoters. They supervise, train and facilitate care group meetings comprised of lead mothers, who then reach out to neighborhood women. Field agents oversee approximately 8 to 15 care groups, and deviating from best practice, each supervisor is responsible for four to six promoters and each promoter supervises four to nine care groups. In the typical care group model, the supervisor's and promoter's main responsibility is the care group, but in ASOTRY, supervisors and promoters are responsible for all of CI. Each care group is made up of 4 to 15 lead mothers. On average, each lead mother reaches out to 8 to 20 neighborhood women.



Care group members in Vohibe, Mahazoarivo

Findings. ASOTRY teaches lead mothers and neighborhood women about the importance of breastfeeding and antenatal care visits to the health facility, danger signs when pregnant, GMP, dietary diversity and care for sick children.

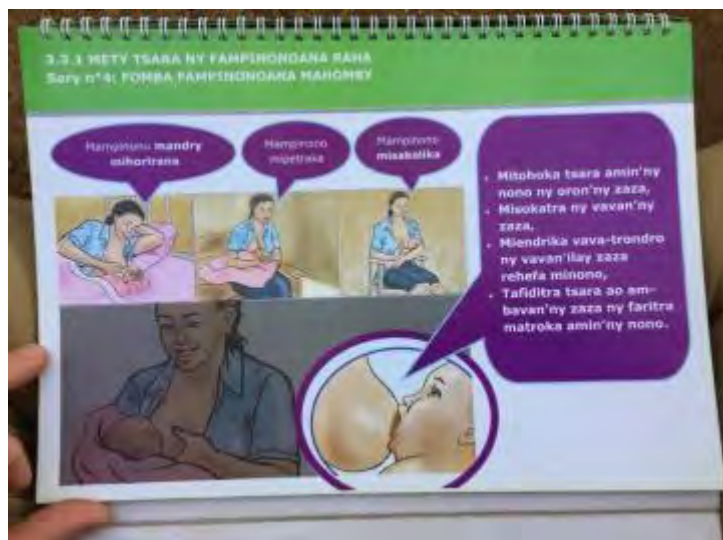
The field agents are responsible for choosing the topic for the monthly care group session and referring to a work plan that shows what topics will be covered each month. Few field agents or beneficiaries could describe how the lessons were chosen, responding only that the topics are about being healthy. Few beneficiaries could say why they are learning these topics.

Most lead mothers the JMTR team interviewed had been in the role for over a year and received an initial training led by field agents on care group structure, communication and facilitation techniques for delivering messages to neighborhood women. All lead mothers reported receiving at least one monthly visit from the field agent for training on the chosen monthly theme. Some communities reported receiving more than one visit and some communities reported that the field agent comes monthly, but less frequently during the harvest or other busy times in the community. The JMTR team visited communities in April, and in the Central regions, the majority of communities reported that the most recent care group session took place in February. Lead mothers reported a variety of ways they educate neighborhood women. Some reported doing one mass sensitization – gathering women under a tree – and one visit to the home.

While there was a defined schedule for the care group meetings, the JMTR team did not learn about a fixed schedule for home visits. In all communities visited, the individual lead mother determines when to visit neighborhood women based on her schedule and time availability. The majority met with neighborhood women twice a month. Some community members reported

The primary communication tools were flipcharts with at least one image representing each promoted behavior with a small amount of text in Malagasy describing the image. Lead mothers who were model mothers under the SALOHI project frequently use communication materials provided by SALOHI, including facilitation guides with details on how to lead games, songs and other interactive activities as well as flipcharts for leading neighborhood women. When the JMTR team asked to see materials provided to ASOTRY, lead mothers at the sites not previously covered by SALOHI only showed the flipcharts and responded they had not received any other guides.

ASOTRY provides food rations. Where ASOTRY was the only health/nutrition activity available, beneficiaries were hearing the messages promoted in the care group for the first time. The quality of message delivery varied depending on lead mother: in both Central areas and in the Southwest, some lead mothers were interpreting the flipchart images at the same time as the neighborhood women, leading the JMTR team to surmise³ that the lead mothers had no more knowledge than their neighbors and likely their capacity to teach and initiate behavior change was low. For



Breastfeeding flipchart

example, in a session the JMTR team observed on breastfeeding, the lead mother pointed to several images depicting optimal breastfeeding (position, latch, frequency, etc.). Neither the lead mother nor the neighborhood women distinguished between the differences in the images and all responded that each image depicted “the importance of breastfeeding.”

³ The basis for this finding is the JMTR team's observation of a planned session in the Southwest and in cases where sessions could not be observed, the team requested lead mother to role-play to show how they led a session with neighborhood women.

and lead mothers felt more empowered, with their role contributing to their importance in their community. While lead mothers were motivated, they did not have superior knowledge of the topics they were meant to teach and counsel. Moreover, because the care groups do not use a facilitative or interactive strategy for determining relevant topics or disseminating messages, the sessions are not very effective and less likely to lead to a sustainable change in practices.

Case study 1: FFA program helps household improve food security and nutrition though participants want more food and food preparation training

Ramamitiana
Anjoma commune, Tsikahoe fokontany

Ramamitiana, 32, lives with his wife, Jeanine, 30, in Tsikahoe village in south central Madagascar. He was born in Ambosontany, a nearby village, where his parents were farmers. Ramamitiana has five sisters and worked on the farm with his parents instead of going to school. When his parents divorced, he moved in with his siblings and his mother, who lived with his grandparents, also farmers. In 2001, after his grandparents and mother passed away, he moved to Tsikahoe on land he inherited from his grandmother.

Ramamitiana is now a tobacco and potato farmer, and it was while selling tobacco in a market that he met his future wife, Jeanine, 30. They were married in April 2012 and now have nine-month old baby named Rosa. Their family was doing well until the drought last year, which hurt the harvest.

In addition to the tobacco and potatoes, the family has a small plot with scattered vegetables, but it is not enough to supply all the food they need. They have to buy rice, cassava and maize, so for additional income, they make and sell charcoal. Ramamitiana participates in the Food for Assets program to rehabilitate the road in exchange for rice, beans and oil. Jeanine participates in a care group with Rosa and receives a ration of CSB + and oil for the baby in exchange for learning about sanitation and healthy feeding habits for Rosa.

They appreciate the program but would like more opportunities to earn food. Jeanine would also like to learn how to prepare food, and cooking has not been a topic of either of the trainings she has received.

Dietary Diversity

TSIKONINA: Cooking and Feeding Sessions

Activity description. ASOTRY developed the TSIKONINA cooking and feeding model based on CRS' Community Complementary Feeding and Learning Sessions approach. According to award documentation, TSIKONINA targets caregivers with a child with a weight-for-age z score between -2 and -3. The model uses positive deviance inquiry to collect information on food availability during lean and harvest seasons, creates recipes for each season, and demonstrates preparation of food using the recipe, and specific food that are nutritious, available, and affordable at the season. Caregivers are responsible for bringing local ingredients, utensils and other supplies required for the sessions, which are six days. The intended group size per session is 10 to 15 caregivers.

Findings. ASOTRY trained field agents on TSIKONINA just before and during the JMTR; therefore, the JMTR team did not observe any sessions or interview TSIKONINA beneficiaries. However, the team did visit UPNNC sites that conduct monthly cooking demonstrations that were well valued by current participants. The UPNNC cooking demonstrations require less input from the caregivers. The CNV conducts the demonstrations (see box to learn more about CNVs) and is also trained to monitor a child's nutritional status. In addition, participants reported enjoying the UPNNC cooking demonstrations and could remember the recipes and basic messages on dietary diversity.

Community Nutrition Volunteers

Community Nutrition Volunteers (CNVs) are recruited and supported by UPNNC and receive a monthly salary. They have nutrition rooms/huts in communities where UPNNC is active. They are complementary to the CHV, and in many places are the same person. While CHVs are supervised by the Ministry of Health, CNVs are supervised by implementing partners under UPNNC. CNVs were found to have higher capacity than CHVs and be more engaged in leading monthly preventive nutrition activities in their communities (i.e., cooking demonstrations, education and counseling sessions, GMP, etc.) ASOTRY does not contribute resources to CNVs, but given their training and community presence and appreciation, CNVs are a good exit strategy for maintaining some of the ASOTRY preventive nutrition activities.

Home Gardens

Activity description. ASOTRY targeted lead mothers to receive seeds as an incentive to be lead mothers, but also to show model behaviors through homestead gardens.

Findings. Some lead mothers reported receiving seeds for homestead gardens. In ADRA-implemented ASOTRY areas, lead mothers reported receiving seeds once, near the beginning of the program. However, they were not instructed how to save or multiply the seeds, and therefore only planted and had production from home gardens once. This was a missed opportunity because the lead mothers could have modeled their homestead gardens and saved seeds to share with the neighborhood women after their first harvest. Since the beginning of ASOTRY, a drought affected areas where Land O' Lakes implements the project, so the homestead gardening activity had not begun.. ASOTRY field agents had recently instructed lead mothers to identify land and that the activity would start later this year. No lead mothers in any ASOTRY area reported receiving instructions on how to teach neighborhood women on optimal cultivation techniques



Home garden in Zanaposa, Tsarasaotra

for home gardens, and it was unclear if lead mothers themselves received training, but rather most reported receiving only seeds, tools and education on the importance of rainbow (diverse) foods. While participants reported receiving education both from CNVs and lead mothers on rainbow foods and how they are linked with homestead gardens, they did not learn about infant and young child feeding as they relate to home gardens and dietary diversity.

Rainbow Foods

The concept of rainbow foods seemed to resonate with all participants. In the Central region, it was participants' favorite among the behaviors/practices promoted. Other actors in Madagascar are also promoting rainbow foods, and beneficiaries reported hearing about it at the UPNNC or on the radio, as well as through ASOTRY. In the Central regions, participants reported being able to produce their own rainbow foods and purchase the animal or fat source from the market; in some Central areas, they also reported they could produce their own blended flour similar to CSB+. Many Central region participants had access to these foods prior to ASOTRY,⁴ but said that ASOTRY helped them understand what foods should be prepared together to make meals more diverse. The JMTR team also heard about rainbow foods in the Southwest; however, in that region, the production of some of these nutritious foods is limited, and the participants' purchasing power to purchase rainbow foods on the market is low. Participants reported learning how to pair food groups to make "rainbow" meals, but did not have access to enough food groups to enable them to prepare the rainbow food recipes.

A shortfall of this activity was that in the original proposal, ASOTRY proposed to promote food processing, preservation and storage. None of the participants interviewed reported being trained in these processes.

Promotion of rainbow foods is a good example of synergy with other national activities. For example, in some areas of the Central region, the UPNNC used various materials in its promotion of rainbow foods. One CNV had a magnetized board with a variety of local foods depicted on magnets, and different prices on magnet pieces. The CNV had participants put together meals using the magnets and priced them out so people understood that rainbow foods were both available and affordable in the local market.

Ration Distribution

Most beneficiaries started receiving rations in late 2015. As of April 2017, 17,674 PLW or children under two (CU2) have received rations.

Findings – Targeting. Beneficiaries reported that ASOTRY conducted a census at the beginning of the project, enrolled households with a PLW or CU2, and provided a household code. Based on JMTR focus group discussions (FGD) and key informant interviews (KI), ration recipients and the community at large understand the ration is intended to promote the nutrition of women and children, but only a few communities mentioned the 1,000-days approach. In order to receive food rations, women need to visit the health facility to confirm pregnancy. In all communities the JMTR visited in the Central areas, the food is distributed in the community itself, while in the Southwest, some communities need to travel four to five

⁴ Beneficiaries reported either growing/raising rainbow foods or having access to them in markets.

kilometers (2.5-3 miles) to the food distribution point.

Beneficiaries reported that newly pregnant women have difficulty being added to the beneficiary list for the ration distribution: they either face a significant delay, or are not added at all. The process for a newly pregnant woman to enroll in the program requires the CHV to collect specific details from the applicant, an ASOTRY household code and a pregnancy confirmation from the health facility. The CHV sends this information to the field agent, who submits it to the regional ASOTRY M&E team, which adds the woman to the beneficiary list. If there is any unreadable information or if something is missing, the woman cannot be added to the beneficiary list. According to beneficiaries, and verified by ASOTRY staff, it can up to three to four months for a newly pregnant woman to be added to the beneficiary list. It takes longer if the woman moves from a different community into an ASOTRY target community to join her husband's family, or if she was not present when the original census was conducted and thus did not receive an ASOTRY code. Some women reported that for a newcomer, it is almost impossible to be added to the ration distribution list. Some CHVs reported that some pregnant women erroneously are dropped off the distribution list after they deliver their baby, and it is challenging for them to re-enroll as a lactating mother for the remainder of the 1,000-days period.

The ASOTRY M&E team reported that as of April 2017, 15 percent of households with PLW or CU2 were receiving rations within the ASOTRY intervention zone.

However, based on responses by beneficiaries when asked if they knew of pregnant, lactating or women who had CU2 who were not receiving rations, the JMTR team believes that there is considerable exclusion error. This is a substantial shortcoming because blanket feeding within the 1,000-days approach allows a community to collectively see and understand the benefits of



Mother receiving her 1,000-days ration, Mahatsanzony

protecting mother and child during this period when they see all children having improved growth and development. The distribution list must be dynamic and responsive enough to quickly account for newly pregnant women in order to have a multiplying effect, such that the entire community sees the benefit of optimal diet during pregnancy and complementary feeding.

Access to rations has only one conditionality: at least one visit to the health center to confirm pregnancy. Rations are not integrated with complementary activities to improve maternal and child health and nutrition. In several communities, the JMTR team interviewed women with CU2 who receive ASOTRY CSB+ and oil, but do not participate in any other activity. The team heard instances of women learning about ASOTRY over the radio and enrolling with the CHV

at the health facility, but not knowing about care groups, lead mothers, FFS or VSLAs. This is a missed opportunity because evidence shows that food alone will not prevent stunting: both nutrition-specific and nutrition-sensitive interventions are necessary.

Across ASOTRY, beneficiaries reported receiving the correct amount of CSB+ and oil.⁵ While these are intended to be consumed by the mother and CU2, there is some evidence of intra-household sharing, corresponding with the level of household vulnerability. In some Central areas, men reported that the CSB+ and oil were only for women and CU2, though they sometimes would be shared with other children, but not with the men in the household. In the Southwest, one household interviewed reported that the ration is equally redistributed within the same household, which included several families. The field agent covering a Southwest community that recently experienced drought and is generally vulnerable mentioned that the PLW ration in this community size lasts a maximum of two weeks due to the redistribution of rations among an entire household; the JMTR team found this to be a common practice.

1.2 Increased Utilization of Health and Nutrition Services for Women of Reproductive Age and CU5

Capacity Building of CHVs

Activity Description. ASOTRY works within the health system via Ministry of Health (MoH) CHVs⁶ as well through one to three supplementary CHVs brought on by ASOTRY in each community in an effort to avoid overburdening the MoH CHV with additional project activities. Currently, ASOTRY works with 1,460 CHV across its implementation area. All CHVs, MoH and ASOTRY, were trained by ASOTRY at the beginning of the program using the same curriculum the MoH utilizes. CHVs' main responsibility within ASOTRY is to facilitate GMP sessions and assist with enrolling women for ration distribution. ASOTRY staff visit CHVs and provide similar supportive supervision as they would to mother leaders or other community workers.

Findings. In the majority of areas visited, all CHVs worked well together and little to no distinction was observed between the MoH CHV and the ASOTRY CHV in terms of capacity or relationships with community members. Although they were working well together, there did not seem to be strengthening of capacity between CHVs, for example, from the ASOTRY CHV to the MoH CHV. While this was not an explicit objective of ASOTRY, it can be considered a missed opportunity to build additional capacity of permanent CHV in the community.

The capacity of CHVs varied across ASOTRY intervention zones. The JMTR team observed a few education sessions, and interviewed CHVs in most communities visited. Some CHVs observed seemed to be very capable of leading GMP and education sessions while others have lower capacity – they did not demonstrate an understanding of the topics they were teaching

⁵ PLW receive a ration of 12kg of CSB+ and 0.75 liter of oil. CU2 receive 3kg of CSB+ and 1 liter of oil.

⁶ MoH CHVs are the CHVs that existed in the community prior to ASOTRY. Usually two per community, they are supervised by the head nurse or doctor at the health facility. The project does not train of nurses/doctors at the health facility (Centre de Base); capacity building of the health facility staff was not part of the original ASOTRY design, and many chief nurses/doctors do not consider themselves linked with ASOTRY activities.

or did not understand their role. The chief of the health facility carries out limited supportive supervision of CHVs in ASOTRY areas. All CHVs receive monthly supervision visits from ASOTRY field agents, but beyond these, no formal refresher training is ongoing or planned. Most CHVs were satisfied with the supervision they have received from ASOTRY field agents and said that field agents typically look at their registers and sometimes stay for GMP. No CHVs interviewed had received feedback from field agents about exclusion error.

CHVs interviewed had all been trained on CommCare (a mobile data collection platform), including the smartphone and the software. CHVs with functioning phones were able to correctly explain to the JMTR team how they input anthropometric data and note the z score, and walk through the questions on management of childhood illness and related counseling messages that automatically played depending on the mother's responses. Where the software was working, it was well appreciated, and the only complaint was that the CHV could not add new beneficiaries. However, in the Fianarantsoa area and in the Land O'Lakes and AIM areas, there were significant technical issues with both the phones and software. The JMTR team was told that only 10 percent of telephones were functional.

Growth Monitoring and Promotion

The JMTR team found that GMP was taking place monthly and according to plan across ASOTRY areas visited. Planned GMP activities included emitting radio messages in nutrition education during the session, nutrition counseling and cooking demonstrations. On a monthly basis, CHVs, in collaboration with lead mothers weigh children 6 to 59 months and use a mid-upper-arm circumference (MUAC) band and length board to take quarterly arm circumference and length/height measurements.

In some sites, the JMTR team observed that the CHV failed to calibrate the scale prior to taking measurements, and incorrectly read and noted weight. If a child was malnourished, the caregiver was told that her child was malnourished, but few received nutrition counseling. No respondents spoke of the radio playing nutrition messages, and at one of the GMP sessions the JMTR team observed, the CHV said the radio was broken.

ASOTRY staff reported that attendance for GMP for CU2 is around 70 percent and drops dramatically to 30 percent for children 24 to 59 months. The primary reasons mothers gave for not bringing their 24 to 59 month-olds to GMP sessions were: 1) older children were attending pre-school; 2) the mother has a child under 24 months who was also attending GMP and she could not bring two children by herself and 3) the mother no longer received rations and thus did not bring her child.

CHVs recorded measurements in an ASOTRY-provided register with two carbon copy pages; one copy goes to the local health facility and the other to UPNNC (where functional). At functional UPNNC sites, GMP information was also recorded in the UPNNC register. CHVs poorly calculated weight-for-age z-scores using the MoH growth chart reference, except in the case that the CHV's CommCare telephone was working (the CommCARE software calculates z-scores automatically). CommCare also synchronizes GMP data to the ASOTRY database. However, when a phone is not functional, the ASOTRY field agent is responsible for entering data into the CommCARE system. Several field agents commented that this significantly increased their workload and that frequent lengthy delays in submitting data.

Health and Nutrition Referrals

In several ASOTRY sites visited, CHV and lead mothers reported that one of the key achievements to date is an increase in the attendance of pregnant women in antenatal care sessions and delivering at the health facility. Participants and ASOTRY staff indicated this is due to the provision of Corn Soy Blend Plus (CSB+) and oil, but felt that because women have seen the benefit of coming in for ANC, they will continue antenatal care for future pregnancies even if there is no CSB+ and oil.

Treatment of moderate and severe acute malnutrition faces significant challenges related to the availability of treatment options. All CHVs interviewed reported they refer children with acute malnutrition⁷⁷ to health facilities, but the overwhelming majority of health facilities (*Centres de Base II* and all *Centres de Base I*) in the ADRA ASOTRY zone did not have ready-to-use food (RUTF) or ready-to-use supplementary food in stock at UPNNC level. When a child arrives at the health facility with SAM, he/she receives RUTF if available, but in most cases, it is not available and the child is turned away. In the Central areas, most of the health facilities the JMTR visited team did not have RUTF in stock.

If a child has severe acute malnutrition (SAM) with any accompanying medical complications or severe wasting, the child is referred to the district hospital (often 60 to 100 kilometers away/37 to 62 miles) to receive in-patient care. The JMTR team visited the district hospital in Ambositra, which had meager supplies, no access to safe



Ambositra health center

water in the in-patient stabilization center (CRENI)⁸ and was not sanitary. The health facilities in Betioky and Ampanihy districts in the Land O'Lakes and AIM zones (Southwest) did have RUTF in stock, but the continuous supply may be related to the ongoing drought response and it was unclear if these health facilities maintain a supply in non-drought years. While the referral system in the Southwest is functioning better than other areas due to the available supply, the JMTR team did not find evidence of follow-up of ASOTRY participants by ASOTRY staff, CHVs or lead mothers.

Coordination

There has been an obvious and commendable effort to ensure coordination between MoH-CHV platforms, USAID/ Mikolo, the ASOTRY project and UPNNC. For example, through USAID/ Mikolo and ASOTRY, ASOTRY planned to train CHV on Integrated Management of

⁷⁷ As indicated by MUAC or weight-for-height measurements.

⁸ *Centre de Rehabilitation Nutritionnel Intensif* (in-patient rehabilitation for infants with severe acute malnutrition and medical complications)

Childhood Illness and GMP, whereas USAID/ Mikolo provided medication and registers. However, while this coordination has helped to avoid duplication, it does not appear that the coordination has led to synergy or a highly capacitated or impactful community health platform. Instead of providing additional training or additional services, ASOTRY and USAID/ Mikolo divided the package and provided the same amount of services as if one partner were there; they could have worked together more synergistically.

UPNNC Coordination

The UPNNC program has similar objectives to ASOTRY. The typical ratio is one UPNNC site to three to five communities. The CNV, who is paid a stipend of \$10 to \$15 a month, is often a lead mother or CHV with ASOTRY and very well respected by community members. The JMTR team visited several UPNNC sites throughout the ASOTRY zone and observed high-quality nutrition interventions and data registers, some dating back to 2003 and 2006. While it is understood that the UPNNC is not a permanent program, and historically has faced gaps in funding, ASOTRY is clearly implementing its nutrition activities in parallel with the UPNNC.

Coordination with MoH

In Ambositra, the JMTR team met with the Regional Medical Director who appreciated ASOTRY and commented on its positive impact on the community, particularly regarding program support during some of the health campaigns. She expressed concern regarding the lack of coordination and information flow between ASOTRY and the higher levels of the MoH system. She was aware that ASOTRY provides information to the nurse/doctor at the health facility (at commune level), but the district and regional medical authorities are less familiar with the details of ASOTRY. She requested more information meetings, quarterly coordination meetings and for ASOTRY to share work plans and targets and actively participate in regional planning meetings.

1.3 Reduced Incidence of Water- and Hygiene-related Illnesses for CU5

Proposed WASH activities for ASOTRY in FY 2016 included rehabilitation of water points and training on treatment and safe storage of water, tippy taps and Community Led Total Sanitation (CLTS). However, in FY 2016, ASOTRY did not rehabilitate any water points, as the program needed more time than initially anticipated to identify a partner organization that would test water quality before and after rehabilitation.⁹ Also in FY 2016, ASOTRY did not install any latrines to create access to a sanitation facility and did not certify any communities as “open defecation free.” This was because the CLTS activity was only initiated during FY 2016 and has not been fully facilitated yet.

While implementation varies and is somewhat behind schedule to tackle the WASH baseline indicators (Table 1), interviews with participants suggest they perceive an overall improvement in WASH conditions. People reported less occurrence of diarrhea, improved hygiene practices and the use of tippy taps in some areas. In many areas, people had access to water, and household water treatment was reported as accessible to households. In FY 2016, the program trained 12,216 households on the use of tippy taps and 1,402 CHVs in CLTS.¹⁰

⁹ ARR and IPTT FY 2016

¹⁰ IPPT FY 2016

Table 1: Baseline values for key WASH indicators

Activity	Baseline value (% HH)
% households using improved water source	29.2
% households practicing correct use of recommended household water treatment	26.8
% households that can obtain drinking water in 30 minutes or less	84.3
% households using improved sanitation facility	2.4
% households practicing open defecation	43.7
% households with soap and water at handwashing station	5.4

Interviews with field staff confirmed that workload played a major role in poor implementation of WASH activities. None of the partners has a WASH specialist. The health promoters are currently implementing WASH interventions as well as MCHN activities, so staff were pulled in many directions.

Water

In the baseline, it was reported that almost 71 percent of ASOTRY households lack access to an improved water source; however, the adjusted IPTT shows an end-of-program target of 20,000 people gaining access to an improved drinking water source, a reduction of two-thirds from the original target (60,000)¹¹. Also at baseline, only about 27 percent of households reported practicing recommended household



Unprotected spring in Zanapoosa

water treatment technologies.¹² In FY 2016, ASOTRY reached its target in training CHVs and lead mothers in the treatment and safe storage of drinking water at point of use.¹³

In general, access to an improved water source is a major issue for Madagascar, but particularly in the Southwest, where participants reported water availability and access are challenges during the dry season. In Ambatomitinity, the community reported they must travel an hour round-trip to fetch water. Another community urged the JMTR team to install water systems.

¹¹ Baseline Study of Food for Peace Development Food Assistance Projects in Madagascar. Final Report. 2015.

¹² Baseline Study of Food for Peace Development Food Assistance Projects in Madagascar. Final Report. 2015.

¹³ ASOTRY ARR FY 2016 Report

Access to water varies substantially by commune and fokontany. The beneficiaries reported that the water systems were built or rehabilitated by water programs funded by other organizations such as SAF/FJKM, Grand Lyon (Tambohobe) and UNICEF. Water was accessed from a variety of sources, including protected springs (Anjoma and Manaovaso), unprotected springs, public dams, water taps, rivers, Vergnet foot pumps and open hand-dug wells.

The majority of participants interviewed reported paying for their water to cover the costs of the operation and maintenance of their water source. The cost ranged from 200 to 1,000 Madagascar Ariary (Ar) (\$0.06 to \$0.30) per month per household. The JMTR team noted the existence of water committees in communes for systems constructed or rehabilitated by an NGO.

Neither participants nor staff reported that people test the water quality after installation of a hand water pump. Among all the wells the JMTR team visited, the team found only one well that was reportedly tested at the time of installation (Ambondromisotra).

From participant interviews, some households reported using *Sur Eau*, a sodium hypochlorite solution used to treat drinking water also known as a chlorine packet, boiling and filtering to treat water. Among those that reported treating water, boiling was reported as the most common treatment method, which could be due to affordability. Among the other water treatment methods mentioned in interviews were a system with central treatment, Watalys (electro chlorinator; reported by one community), and sand filters and *Sur Eau* or boiling (also reported by one community). In general, most people did not complain about the cost of water treatment. Some areas where the water comes from an unprotected spring, such as Tsarasaotra commune (Zanaposa fokontany), reported not treating their water because the chlorine has a bad odor.

Hygiene

At baseline, only 5.4 percent of households had handwashing stations that contained both soap and water.¹⁴ In FY 2016, 98 percent of CHV and many more (1.7 times more) lead mothers than ASOTRY targeted were trained on constructing and using tippy taps. Further, lead mothers have trained 94 percent of households (12,215 of the proposed 12,960) in installing and using tippy taps.¹⁵

Hygiene training is an integral part of CLTS. In the current training model, the field agent trains the CHV, who



Tippy tap in Ambatazana

¹⁴ ICF Baseline Study

¹⁵ ASOTRY DIP FY 2016. Quantitative data are not available for number of tippy taps installed.

trains the lead mothers to do handwashing sensitization and follow-up home visits to observe behavior change. Field interviews suggested that handwashing implementation and adoption is uneven, with some people reporting washing hands and others not. The majority of participants interviewed could not describe all five correct times to wash their hands. In addition, participants described washing their hands in the morning and evening, suggesting that they did not understand the linkages between handwashing and contamination through the fecal-oral route.



Handwashing station in Manarinony

having none. In many cases, even when tippy taps were present, there was no evidence of their use and they had no water or soap, indicating participants had not absorbed the link between tippy taps and the health benefits of handwashing. In addition, some participants interviewed in areas that had received tippy tap training did not know what a tippy tap was, indicating that the messaging had not been communicated to or absorbed by all individuals. Participants gave numerous reasons for the absence of tippy taps, including lack of bottles, cost of materials and that people were still undergoing sensitization.

The handwashing hygiene campaign runs parallel to the tippy tap construction campaign. The implementing partner field staff described the tippy tap construction as robust and widespread, and the JMTR team sometimes observed tippy taps in the field. However, the JMTR team did not often observe use of the tippy taps, and it appeared some had not been used in many months. Overall, the tippy tap campaign was uneven across the communities visited, with some having tippy taps and others

Overall, the hygiene campaign was uneven and had targeting issues. Hygiene must be a community-wide effort, but the ASOTRY hygiene campaign focused on the participants (i.e., women and children) receiving food rations. Thus all hygiene messaging was targeted to women and children while men were omitted. It should be noted that in interviews some CHVs reported sensitizing “everyone,” but this was not systematically practiced. In addition, hygiene messaging requires follow-up to ensure that the messages are being adopted and behavior change sustained, yet this was not widely reported or observed.

Sanitation

At baseline, about 44 percent of households practiced open defecation and only 2.4 percent were using an improved sanitation facility.¹⁶ This lack of sanitation and high percentage of people openly defecating was described as being tackled through the use of CLTS methodology: the ASOTRY model uses the CLTS approach to address these challenges and the proposed work includes training leaders to lead CLTS and declaring communities ODF. Because the

¹⁶ ICF Baseline Study

starting timeline for CLTS was delayed until October 2016 and the activity will not be completed until September 2017, only some villages had started the process before the JMTR team went to the field. Overall, ASOTRY seeks to double the percentage of people using an improved sanitation facility and increase the number of people with access to an improved sanitation facility by 5,400.

CLTS village selection and implementation varied. First, the criteria to implement CLTS in villages are different across ASOTRY partners, including implementation near but not in a capital, such as with ADRA, and implementation in a village that is likely to have positive results (AIM, Land O'Lakes). It should be noted that CLTS implementation should not be redundant with UNICEF efforts, but the work should be complementary. The process considered effective for implementing the methodology involves a trained field agent who trains community agents who do the triggering¹⁷ at the village level; however, the JMTR team found that partners did not always conform to the standard methodology (i.e., steps were missing). For example, an important component of CLTS is ample follow-up whereby a team of agents visits the villages



Pit latrines used by SALOHOI/ASOTRY participants without a cover, Manarinony

to collect information on progress and the JMTR team reported this lack of this follow-up. Finally, while CLTS was the proposed methodology, it was not used in all the villages visited, and sometimes sensitization to latrine use was conducted without complementary actions designed to maximize the success of behavior change efforts. For example, in the south, Land O'Lakes was educating people that feces is bad and open defecation should not be near a house. This approach did not yield the intended outcome. Latrines were uncommon, and where they did exist, were constructed in areas too far from houses for convenient use.

While lack of sufficient follow-up was reported to the JMTR team, ASOTRY did employ different tactics to ensure success of the sanitation campaign and to provide some follow-up. For example, on a monthly basis CHVs tell people to build latrines and follow up on whether they have been completed, but in some cases there are no repercussions for lack of follow-through. Another

¹⁷ "Triggering" is a step in CLTS whereby people in the community are "triggered" that defecating in the open is unclean. This can include identifying feces in the community or demonstrating how feces can be spread by flies.

approach was found in the southwest, where CLTS implementation was enforced by community police, known as *Dinabe*,¹⁸ who monitor implementation and fine non-compliant households.

The JMTR team learned from interviews with participants, field staff and implementing partner staff of many barriers and taboos to latrine use and construction across all project areas, including:

- households do not have land to build a latrine (i.e., migrants who rent houses);
- households do not have materials or money to build;
- changing practice or behavior is extremely challenging;
- deep-rooted taboo prohibits construction of a latrine near house, as it is taboo to store feces near a house;
- traditional leaders in the southwest are not convinced that latrines are good and
- men will not dig latrines because the work is considered “inferior,” so women were left to dig the pit and construct family latrines.

Proposed solutions to these barriers for latrine construction provided by participants and field staff during interviews were (a) if someone dug the latrines for households then they would use them and (b) if households observed that using a latrine was good for their neighbors, then they will also be motivated. In addition, one field agent noted that when one village demonstrates success with CLTS others want to do it (the snowball effect).

The JMTR team observed variations in latrine access and use. . The team observed latrine construction in the central east, while in the south, latrine access was very limited. It should be noted that not all of the latrine access was associated with ASOTRY. For example, in the central east (Anjoma commune), participating households reported that they had latrines prior to ASOTRY; however, since ASOTRY they had begun to put a cover over the pit/drop hole, which meets the definition of an improved latrine. In the southwest, latrines were not widespread, with four households using one latrine in Soaserana. Further, the existing latrines observed were not improved (i.e., no covers and not fly-proof), unsanitary and not well constructed. Additionally, in this area, previous ODF villages had visible feces present, indicating slippage had occurred. In another village (Tanandava commune, Maroarivo fokontany) about eight latrines were observed for a reported 110 households. It should be noted that the presence of latrines did not ensure that they were being used. In the central highlands, field staff reported latrine use as 50 percent in Soavina commune and 40 percent in Vohiposa commune with two to three households using the same latrine.¹⁹ One fokontany, Manaovaso, in Vohiposa, did report that 90 percent of people use latrines, indicating that latrine use can vary widely even within a commune.²⁰

Overall, the execution of CLTS appears uneven and ASOTRY does not have a full understanding of the barriers to adopting latrines and occurrences of slippage from previously ODF-declared

¹⁸ Dinabe were described as powerful men from the village who function as a local police, enforcing general order in the community. Dinabe also enforced latrine construction and use through fear tactics and fines. In the community observed, latrine construction and use was almost 100%.

¹⁹ Data reported by field staff

²⁰ Data reported by field staff

villages. Selection criteria for CLTS villages were unclear and partners appear to have different selection criteria.

Component I: Recommendations

Prioritized Global Recommendations

CI-R1. Improve the quality of capacity-strengthening interventions for field agents, lead mothers and community health workers at the community level so they can be proactive change agents for neighborhood women. This includes reconsidering the current field staff structure to ensure an adequate number of field agents per community workers (lead mothers and CHVs) to allow for training and follow-up, and ensuring that community workers have the capacity to promote optimal behaviors through more intensive interpersonal behavior change communication.

CI-R2. Interventions addressing dietary diversity should be context-specific and related to vulnerability level, which varies drastically throughout the different zones of ASOTRY. Specifically, the determinants of improved dietary diversity differ between the Central and Southwest regions. ASOTRY should consider tailoring the dietary diversity activities based on the level of vulnerability. For example, in the Central region where food is more readily available, beneficiaries would be taught about food processing and transformation to ensure year-round access to rainbow foods. In the Southwest, ASOTRY needs to reassess its implementation strategy to improve access to optimal nutritious foods, and messaging related to protecting women and children within the first 1,000 days needs to be reinforced.

CI-R3. In terms of sustainability, ASOTRY should consider working with UPNNC to identify strategies to reinforce collaboration between them and build on each other's strengths and ultimately strengthen the national platform for prevention of malnutrition. Create a work plan with steps that ASOTRY can take to better collaborate with UPNNC beyond targeting community nutrition volunteers (CNV) as lead mothers.

CI-R4. Consider phasing out resources to previous SALOHI areas of intervention where only CI is being implemented, and phasing out home gardens in the Central areas. Any resources that can be saved can help advance recommendation PI-R1 and ensure that field agents, lead mothers and CHVs have the training and tools necessary to elevate social behavior change communication (SBCC) in the remaining time of ASOTRY.

CI-R5. Considering less than a third of households are using improved water sources, and only a little over a quarter are correctly using recommended water treatments, re-assess and revise (if necessary) the target for increasing access to improved water, and expedite implementation. Consider improving the existing dug wells to make them protected and safe. Further strengthen the messaging related to treating, handling and storage of drinkable/potable water and integrate it in all SBCC sessions.

CI-R6. Considering less than 3 percent of households use improved sanitation, more than half practice open defecation and only five percent wash hands, further strengthening the CLTS campaign in accordance with the prescribed methodology is recommended. Provide adequate staff and intensive follow-up. Consider an aggressive sanitation campaign to encourage

households with pit latrines to use a lid on the drop hole and keep it clean based on an understanding of transmission of fecal coliforms through the oro-fecal route.

CI-R7: Launch a robust, systematic and comprehensive handwashing campaign that promotes washing hands in all key moments using soap and water from tippy taps. The SBCC session should incorporate experiential methods to understand the importance of hygiene and the consequences of poor hygiene practices.

Specific Recommendations

Recommendations 1.1: Care Groups

CI-R9: In areas with a low ratio of lead mothers to community members, reconsider the appropriateness of the care group model. Consider other community mobilization/nutrition education approaches or platforms.

CI-R10: More intensive training is required to increase lead mothers' capacities in observation, sensitization, counseling and problem solving in order to better address health and nutrition issues neighborhood women face. Improve lead mothers' capacities to be agents of change. Intensify supportive supervision, such as by:

- limiting the number of care groups per field agent to four to six groups; or
- using ASOTRY supplementary CHVs as “care group promoters.” (This option is likely more feasible given the time remaining in the program.)

CI-R11: Strengthen SBCC tools. Identify methods beyond standard flipcharts for message dissemination, including training care group promoters and lead mothers on how to make the topics relevant, dynamic and interesting to beneficiaries. The sessions should be more participatory and incorporate negotiation and problem solving to address barriers to adopting improved practices.

Recommendations 1.1: Dietary Diversity

CI-R12: ASOTRY should closely monitor the TSIKONINA sessions to assess their effectiveness compared to the UPNNC cooking demonstration sessions.

CI-R13: The JMTR team did not find value in the home garden activity in the Central region. It suggests phasing it out and focusing on nutrition education as it relates to current household production. ASOTRY can redirect resources saved from phasing out in the Central areas to strengthening the implementation and potential impact of home gardens in the Southwest.

CI-R14: Practical exercises like food pairing, making market decisions, processing and transformation of foods should have a higher focus in the Central areas. While the same activities are important for the Southwest, increasing availability and access to foods should be the focus in the Southwest.

CI-R15: While ASOTRY is phasing out enrollment of new ration beneficiaries, it is important to have a stronger focus on other planned activities for newly pregnant women to ensure that the woman, household and community understand the importance of the 1,000-day period.

Recommendations 1.1 – Ration Distribution

CI-R16: Blanket feeding typically is an unconditional activity, but in order to achieve a reduction in stunting, beneficiaries must access complementary activities. While it is not sustainable to link ration distributions to participation in care groups, requiring attendance at health services or orientation sessions for FFS or VSLA may help link CI beneficiaries to important nutrition-specific and nutrition-sensitive activities.

Recommendations 1.2 – Capacity Building of CHVs

CI-R17: More comprehensive and higher-quality supportive supervision should be prioritized to sustain community health outcomes post-ASOTRY. ASOTRY should consider developing a guide, or using an existing guide, to improve the capacity of ASOTRY field agents to provide supportive supervision to CHVs and lead mothers.

CI-R18: Overall coordination and collaboration with the MoH or UPNNC can be improved. The JMTR team suggests linking with the necessary stakeholders to identify activities that can engage health facility staff/CHVs to ensure supportive supervision re-commences in ASOTRY zones.

Recommendations 1.2 – GMP

CI-R19: Where there are MoH-linked CHV or UPNNC sites, GMP will likely continue after ASOTRY closeout. However, MoH CHV would benefit from stronger capacity-building interventions to strengthen the quality of anthropometric measurement and reporting.

CI-R20: Due to low attendance of children two to five for GMP, ASOTRY can consider pairing GMP with another activity, such as one at pre-school/kindergarten, quarterly or biannual health campaigns. Because GMP is a national activity for all CU5, the MoH or UPNNC should be consulted to learn what else could be done. For the time being, the activity should continue to target CU5s in line with the national policy. For project data purposes, the target for the GMP attendance indicator can be modified to include attendance of CU2, rather than CU5.

Recommendations 1.2 – Health and Nutrition Referrals

CI-R21: ASOTRY should continue advocacy with UNICEF to understand what other options are available in zones with high levels of global acute malnutrition where UNICEF does not support Community-based Management of Acute Malnutrition (CMAM) supplies. Because the majority of health facilities do not have functioning CMAM, ASOTRY is encouraged to put extra emphasis on i) identifying growth faltering at GMP sessions; ii) initiating and maintaining cooking and feeding sessions for caretakers of malnourished/growth faltering children and iii) nutrition counseling and education to prevent the child from becoming severely acutely malnourished.

CI-R22: ASOTRY should identify a communication mechanism so that field agents immediately learn about any child referred to CRENI or CRENAS²¹ services, whether or not treatment is available. For any child referred for treatment services, the CHV and lead mother should work intensely with the child's caretakers to ensure they are addressing the child's nutrition; the ASOTRY field agent plays a critical role in ensuring this happens through routine supportive

²¹ Centres de Récupération et d'Education Nutritionnelle Ambulatoire (outpatient treatment for severe acute malnutrition)

supervision.

Recommendations 1.2 – Coordination

CI-R23: Given that UPNNC will continue to receive funding for several more years, discuss with UPNNC ways of working more synergistically, specifically by identifying how ASOTRY can support this national platform and extend its services throughout ASOTRY zones.

CI-R24: Participate in existing regional or district working groups or coordination meetings to convey how ASOTRY contributes to the health and nutrition of women and children and relate any challenges it is experiencing, including those related to annual results and work plans. If commune- or district-level health facility staff are more aware of and feel more involved with ASOTRY, ASOTRY's community health and nutrition activities will more likely be sustained after the program closes out.

Recommendations 1.3 – WASH

CI-R25: Hire dedicated WASH staff to implement and follow up on WASH interventions, including CLTS. Provide more WASH trainings for the health promoters.

CI-R26: Invest in water point construction and rehabilitation to meet the goals specified in the revised IPTT. Install a cover and hand pump on existing hand-dug wells, an improvement that requires minimal effort or cost.

CI-R27: Test the water quality of the current available water sources for fecal coliforms, at a minimum, and to comply with parameters required by the GoM.

CI-R28: In addition to the current messaging on water, add messaging on proper storage and handling of treated water at the household level.

CI-R29: Elaborating on CI-R6): further strengthen the CLTS campaign, including: instate uniform criteria for village selection so all partners use similar criteria, hire a CLTS consultant to ensure all people are properly trained in this methodology, have a systematic approach to rolling out CLTS in the communes (i.e., will all villages undergo CLTS?), institute regular follow-up (this may require CLTS-focused staff), understand how to sustain open-defecation-free status and understand why there is slippage of open-defecation-free status (sustainability).

CI-R30: Specific actions must be taken to address the identified reasons for the inability to build a latrine, including lack of land, ownership of land, money and materials. Latrine construction should be incorporated into the CLTS sensitizations because in many cases the constructed latrines did not meet the definition of improved, such as not being covered or fly-proof. Finally, linkages with UNICEF should continue to occur so there is no redundancy in villages or communes.

Component 2: Increased Access to Food for Vulnerable Households

2.1: Increased Agricultural Production

ASOTRY uses a FFS approach to introduce improved crop and livestock production techniques to targeted farmers. ASOTRY reported setting up 825 FFS (578 crop-based and 247 livestock-

based) with 15,194 direct beneficiaries.²²

Farmer Field Schools

The FFSs observed by the JMTR team were developed and implemented using a slightly modified version of the classical FFS approach as developed by FAO.²³ The ASOTRY approach lacks FAO's experimentation component whereby the FFS plot is divided into multiple plots: a control plot, a plot for the standard local practice and a plot in which they implemented the learning from the FFS. The results of the plots are compared throughout the cultivation process to determine and demonstrate the most successful practices without presuming that the improved techniques introduced in the FFS will produce superior results to the local practice or the control. ASOTRY uses a self-selection process to select participants for FFSs (see further discussion below), and, together with ASOTRY field agents, decide which crop(s) to plant on a communal "learning plot." It bears noting that most FFSs appear to have adequately sized "learning plots,"



FFS learning plot in Mahatsinjony

where participants plant one crop in each season to collectively learn about the improved practices for the crop. Each FFS has a lead farmer who leads the sessions. ASOTRY field agents reported coming to some but not all sessions. Field agents reported wanting to attend more of the sessions, but found it difficult due to the large number of FFS they support and the logistical difficulties of transportation. The FFS quality may suffer for this, and hiring more field agents may improve the quality of implementation. FFS members report that they meet only once a month, which also deviates from FAO standard approach, which calls for weekly meetings.

Interviews with FFS participants suggest that commonly taught techniques were line sowing, proper plant spacing and intercropping. Many participants reported using the techniques learned in the FFS on their own plots, which is one of the desired goals. Pest and disease management, however, are problems in some places. FFS do not appear to be addressing these constraints, and participants reported not knowing how to manage these issues. Participants did note that if they had a problem they did not know how to solve, they could and would approach the project field agents to obtain the information they needed. While this is one solution, it is only valid during the life of the program. It is unclear where or to whom farmers would go for this type of information without access to program-funded specialists. In addition to what they are already learning, FFS participants expressed interest in learning about egg incubation for small-scale poultry production, pig rearing and other animal husbandry techniques. It should be noted that the techniques being extended as part of the FFS

²² ASOTRY Data Table MS Excel file provided by ASOTRY staff.

²³ See Farmer Field School Approach on FAO Website: <http://www.fao.org/agriculture/ippm/programme/ffs-approach/en/>

curriculum, and utilized by the farmers, are evolutionary compared to the existing practices, rather than revolutionary or transformative. Even if all of these techniques were to be successfully employed, overall yield increases would likely be small and certainly would not transform rural livelihood opportunities.



ASOTRY uses a participatory process to select the FFS participants. In most cases, the participants self-select by volunteering to be part of an FFS. While using a participatory process to select participants could be considered a strength, absence of a specific targeting strategy and mechanism excluded some of the most vulnerable members of the community. The elderly, for example, who do not have labor to participate in crop production or do

A successful farmer in front of his plots, Ankijana, Ambatazana not have land, are not participating in ASOTRY while some of the FFS participants may not necessarily be the most food insecure and/or vulnerable. Some FFS members interviewed appeared to be relatively economically advantaged, while other non-participants interviewed appeared to be far more marginalized. FFS members reported that they sometimes purposely exclude some people from their FFS groups because the group did not want them to part of the group for a number of reasons, including not having land, not being reliable and not being team players.

The frequency of FFS sessions is significantly less than the FAO standard, which is typically once a week. FFS participants meet and discuss the farming system only three to four times per crop. The limited number of sessions is a barrier to learning about the new techniques and discussing their associated successes and challenges. FFS participants also reported not knowing what yield increases they could expect as a result of their participation in the FFS. ASOTRY technical staff interviewed by the JMTR team did not analyze crop yields or establish targets at the beginning of the crop season; therefore, the ASOTRY promoters do not know or have estimates of the expected crop yields. ASOTRY technical staff have not analyzed the current yield for different crops in different agro-ecological zones or the underlying factors limiting those yields. Interviews with ASOTRY staff and FFS participants do not suggest that ASOTRY staff analyzed production data with the farmers at the end of each crop season to discuss yield, or factors and challenges affecting yield.

Case study 2: Woman benefits from agricultural advice and VSLA

Mobiny ***Beroy commune, Amboniarivo fokontany***

Mobiny, who is currently in her 50s, was born in Beroy to farming parents who had zebu and sheep. Of the seven siblings, some are still in the commune. When she was young they had plenty to eat, but she did not attend school.

Mobiny left her parents' home when she was 20 to marry. She and her husband are both farmers on land they inherited from their grandparents. Currently they grow peanuts, cassava, sweet potatoes and rice, and farm zebu and sheep. They have ten children, ages 10 to 22, who have completed various levels of education up to secondary school. Some still live with the family while some have married and moved out.

Recently production has been decreasing, but there are still a lot of kids to feed. The program helps them manage their work. Mobiny gets agriculture advice, seeds and participates in a VSLA.

The recent drought forced Mobiny to sell her sheep and land, but her new technical skills have helped the harvest improve. She learned how to better plant seeds and work the land during the rain so she can till and plant during the dry season.. Previously she harvested two carts of peanuts from 100 cups of seeds, but now she is harvesting three times that – six carts with the same amount of seeds.

The VSLA meets weekly and has about 30 members. Everyone gives at least 1,000 ariary (\$0.30) a week. Mobiny took a loan to market peanuts and had three months to repay it. She plays the area markets for peanut prices – she knows in Beroy the peanuts are cheaper in the morning, so she buys them early and then resells them at other village markets when the price is higher. She intends to continue in this VSLA after the program ends, and she says there are multiple VSLAs in the fokontany so anyone who wants to participate is able to.

Mobiny hopes the program will continue to teach new agriculture techniques.

Farmer to Farmer (F2F)

ASOTRY is utilizing a farmer-to-farmer training approach to help spread their improved practices to indirect participants. The approach requires that each member of the FFS share the information they learned in the FFS with one other farmer not participating in ASOTRY agriculture interventions. This approach, which relies on the voluntary good will of the FFS participants, is reported to be ineffective by ASOTRY staff and participants. ASOTRY staff reported that FFS members were having difficulty finding potential F2F counterparts and were not meeting the requirement. ASOTRY staff suggested that local authorities identify people who should be included as F2F participants and then to directly invite them. This approach appears to be taking significant staff time with very limited impact. It is far from clear that this approach will actually achieve the goal of spreading improved practices to indirect participants.

Input Supply

Farmers in ASOTRY target communities reported using traditional seed varieties, most often saved from their own production. Most do not have access to inorganic fertilizer, but many farmers reported using inorganic fertilizer. Organic fertilizer and irrigation appear to be principally reserved for application to rice fields. ASOTRY is attempting to address the input supply issue primarily in the seed sector, although some FFSs are working on proper compost production and utilization. Interviews with staff and participants do not indicate that ASOTRY is working on inorganic fertilizer, and irrigation for crops other than rice.

ASOTRY's main input intervention is through heavily subsidized seed fairs. In Years 1 and 2, seeds sold at the fairs are subsidized at 70 percent and in Year 3 the subsidy decreases to 50 percent. The stepdown subsidy was initially planned to decrease from 70 percent in Year 1, to 50 percent and 30 percent in Years 2 and 3, respectively, but program staff reported that farmers would not even pay 50 percent of the market price of the seeds, so ASOTRY adjusted the subsidy plan. It is unclear how the seed producers' groups fit in with the seed fairs and



Compost pit in Manazoarivo

what steps are being taken to help create a sustainable supply of affordable seeds. Participants report they used to save seeds from their own production or obtain them from local markets,²⁴ but now they rely on the seed fairs. Some participants reported that before ASOTRY they were getting all the seeds they needed from local markets. Participants reported liking the seed fairs, although some noted that the seeds they got from the fairs were of mixed quality. When asked about the seed fair vendors, participants typically reported knowing a few of the vendors before, but that most were new to them and the area. This suggests that the seed fairs the program set up have created a parallel and competing system with existing markets. A heavily subsidized seed system the program created is not sustainable.

Participants reported using manure and compost primarily on rice fields, although one beneficiary reported using it on onions. Several participants reported learning how to make compost from their FFS and some stated they took loans from the VSLA groups to purchase compost. Virtually every participant understood that compost was beneficial and reported wanting to apply more if it were more available and affordable. Field observations suggest that soil fertility is a limiting factor to yields and given the widespread understanding of the use of compost, it appears that increasing compost production and use is a potential area of opportunity.

Limits of Agriculture

As mentioned above, the suite of ASOTRY interventions does not appear to be revolutionary or transformative. This observation is supported by an analysis of ASOTRY 2016 annual monitoring data presented in Table 2 and Table 3. The two tables present an analysis of production and gross income data²⁵ for different crops planted by ASOTRY participants. Gross income per farmer from selected crops, using the improved techniques promoted by ASOTRY, ranges from -\$10 for rice (a loss) to \$32 for cassava. While the 2016 drought may have affected

²⁴ Primarily for a new crop or a high-value crop such as pulses.

²⁵ The JMTR team extracted data from the reported gross margin indicator to estimate gross income. Note that the estimation of gross income does not take into account "own labor": USAID does not require an estimation of "own labor" to calculate gross margin, therefore "own labor" data are not available to the reviewers.

production and yield, if these data are correct, the gross income of the crops listed in **Table 3** is questionable. The limited gross income combined with the facts that 1) crop production is the main income source for most rural households in ASOTRY target areas, 2) 83 percent of households in the target fokontany live below the poverty line and 3) mean depth of poverty is 38.1 percent²⁶ strongly suggest that investing only in agricultural production will likely be insufficient to help participants substantially increase food access. In addition, only a small proportion of FFS participants (and an even smaller proportion of ASOTRY participants overall) are benefiting from the agricultural practices ASOTRY promotes.

Table 2: Area, yield and production, selected crops, 2016

Crop	Area (ha)	Production (MT)	Yield* (MT per ha)
Beans	167	108	0.6
Cassava	303	420	1.4
Maize	212	184	0.9
Rice	820	2430	3.0
Sweet potato	63	137	2.2

Source: 2016 SAPQ

*JMTR team calculation

Table 3: Sales and income data, selected crops, 2016

Crop	Sold (MT)	Total value of sales (USD)	Total input cost*	Gross income (USD/MT)*	Number of farmers cultivating	Gross income per farmer* (USD/MT)
Beans	82	\$23,560	\$3,311	\$246.94	1267	\$15.98
Cassava	201	\$25,079	\$3,266	\$108.52	667	\$32.70
Maize	68	\$17,659	\$4,334	\$195.96	696	\$19.15
Rice	738	\$148,971	\$172,228	\$-31.51	2217	\$-10.49
Sweet potato	62	\$8,558	\$647	\$127.60	285	\$27.76

Source: 2016 SAPQ

*JMTR team calculations:

Gross income per MT = (Total value of sales – Total input cost)/MT sold

Gross income per farmer = (Total value of sales – Total input cost)/Number of farmers cultivating

2.2 Increased Agricultural Sales

ASOTRY works through FBAs and livestock marketing groups to introduce improved marketing techniques and strategies to targeted farmers. ASOTRY has been slowly rolling out the FBAs. The project has yet to establish FBAs in many target communities where these are planned and in some, the FBA is still brand new. The program reported establishing 92 FBAs with 3,485 direct participants and 21 livestock marketing groups with 715 direct participants.²⁷

The FBA model implemented by ASOTRY is for self-selected farmers to collectively market their products in more profitable markets. The FBAs interviewed by JMTR team focus on marketing of cassava, peanut, rice and beans.

²⁶ Baseline Survey 2015

²⁷ ASOTRY Data Table MS Excel file provided by ASOTRY staff.

Most FBA participants interviewed reported appreciating the structure and information the program has provided, as well as the social interaction component, and want to continue working together as an association once ASOTRY support finishes. Field agents and FBA leaders interviewed were regularly able to recall training topics and cite price differentials between local and more-competitive district hub markets.

The JMTR team found several aspects of FBA implementation in need of improvement. These are detailed below.

Joint marketing and purchasing. While FBAs were generally successful in aggregating members' produce, in some cases they sold it at the same markets as they did prior to forming the FBA. Despite this limited progress in developing new market relationships, the JMTR team observed more-structured market information channels. This misses a key purpose of FBAs, which is to work collectively to enable sales in new and more-profitable markets.

Another missed opportunity to maximize the impact of FBAs was that staff and FBAs did not appear to conduct economic modeling, which would have allowed farmers to understand production costs, return on investment and net income potential of different crops.

In addition, per the FBA model, members should buy inputs together, but most participants interviewed report not doing so. Despite an acknowledged significant need for improved access to inputs, FBAs focus only on joint marketing.

There is relatively little focus on livestock and livestock product marketing. This appears to be an overlooked opportunity as it could be an alternative livelihood option for people with limited or no land to grow crops, who are systematically excluded from joining an FBA because of a lack of land (among other reasons). Grazing land is often communal, or on land unsuitable for crop production, so a lack of cropland is not necessarily a constraint to livestock production. If poultry is produced, then land is not a constraint at all and feed can be purchased, especially if fodder is planted at the communal land. Livestock can also serve as a way to manage the risks of conventional crop agriculture. Including fodder production as part of livestock production could feed into Intermediate Outcome 3.1.3 – Improved Community Natural Resource Management, as growing trees as fodder crops has many environmental and natural resource management benefits.



Small livestock is a preferred livelihood diversification strategy expressed by many participants, Manarinony

Value chains. The value-chain interventions were not fully encompassed by midterm; however, there was evidence of incipient access to local markets.

Storage facilities. FBAs can obtain construction materials from ASOTRY to build storage facilities, but are required to manage the construction themselves. The construction of these facilities was quite limited, only a couple of the FBAs interviewed reported working on them and participants reported storing produce in their houses or in makeshift adobe structures. One participant noted that she was “volunteered” to be the construction manager and that it was a lot more work than anticipated, adding that she said she would like to be paid by ASOTRY for her work. While the JMTR team only heard of one such case, it is worth exploring whether these circumstances apply in other areas.

Cost. Members are required to contribute regularly to the FBA. Establishing an FBA legally has some cost, to be declared a legal cooperative by the government requires a payment of 200,000 ariary (\$59). Sustainability of the FBAs would likely improve with legal registration.

Membership. FBA members come mostly from the FFSs, and many appear to be the more technically advanced farmers or wealthier members of the FFS. Interviewed FBA members reported excluding some people who want to join: “they weren’t properly motivated, and the FBA turned them away.” Hence this activity is not reaching the more-vulnerable farmers.

Literacy and numeracy. One of the biggest reported challenges for FBAs is a high level of illiteracy, cited at 97 percent in some fokontany. It is safe to assume that numeracy is also a constraining factor in many of these communities, which is problematic because more than basic numeracy is required to optimize marketing strategies, e.g., one must be able to calculate profit, loss and return on investment. Lack of literacy and numeracy skills poses a major challenge to the sustainability of the FBAs. Some field agents wondered – without literacy and numeracy skills – who would assume leadership of the FBA after the end of the program when the ASOTRY staff will not come to help them? However, participants did not report seeing this as a problem with the exception of one farmer who sees illiteracy as a barrier to enrollment (Case study 3).

Case study 3: Farmer learns from farmer field school; literacy is a barrier to enrollment

Jean
Ambondromisotra commune and fokontany

Jean, 33, lives with his wife, 31, his parents and his children ages 10 and 6. He is a farmer and feels the food security problem in the community is about livelihoods saying that there are not enough seeds, too many people and production income is very low. Additionally, there are no crop storage facilities, so when people harvest they must sell immediately, often at lower prices. Higher yields from improved techniques lead to more time harvesting, but prices are low because of the inability to store for better market timing.

Jean used to participate in a farmer field school, but stopped after he had a conflict with another member. While he was in the farmer field school he learned a lot and still utilizes the information. It has improved his crop a bit. After he left, his brother took his place, and shares the information he receives. Now, when a current participant cannot participate in the class he takes their place, but this is not consistent.

Jean said that the community was involved in choosing the activities of the farmer field school, but if someone is

illiterate, that person will probably not be chosen to participate because he or she is unable to fill out a form.

2.3 Increased Engagement of Women and Men in Micro-enterprises

ASOTRY uses the VSLA approach to increase women's and men's engagement in micro-enterprises. By midterm, ASOTRY had created 402 VSLAs (50 percent of the endline target and 84 percent of the target through the midterm) with 7,107 members in the target areas.²⁸ While there was little need for ASOTRY assistance beyond set-up, only in very few cases did communities establish VSLAs without ASOTRY assistance.

Most VSLAs have mixed membership. Female membership ranges from about 40 to 70 percent of total membership.

VSLAs create a valuable opportunity for participants to access financing and learn about financial management and enterprise development. VSLAs hold weekly meetings and require weekly contributions to loan funds and social funds. Social funds are used to provide "social support" to community members. If someone is sick, having a baby or getting married, for example, they can get support from the social fund. VSLA members are self-selected. ASOTRY staff explain the VSLA objective and the process to the community, and those interested indicate that they would like to join.

Most VSLA members interviewed were very happy with the VSLAs and highly motivated to continue them without ASOTRY support. The interviews suggest that access to finance had been a major limiting factor before they joined a VSLA – traditional moneylenders reportedly charge as much as 100 percent monthly interest, when loans are available at all. In the ASOTRY VSLAs, the monthly interest rate is 10 percent, and loan duration varies from one to three months. Most of the interviewed participants took multiple loans, and plan on taking more over time. Commonly reported uses of the loans include hiring agricultural labor, purchasing seeds and other agricultural inputs, buying commodities for resale (e.g., rice, cassava, potatoes or beans), animal fattening, school fees and health costs (the latter two uses qualify for the social fund rather than main loan fund).

Participants had strong knowledge of VSLA procedures and policies, and appeared to embrace the model. The open and transparent processes and the dedication of VSLA beneficiaries were very impressive to observe in the field. The participants and ASOTRY staff alike reported the default rate and late payment rate as zero. Interestingly, VSLAs generally increased the required contribution in the second year of implementation – from 250-2,500 ariary (\$0.07-\$0.74) per week in Year 1 to 1,000-5,000 ariary (\$0.30-\$1.50) per week in Year 2 – to take account of participants' increased wealth.

There are, however, some areas for improvement in the VSLA activity. First, given the small size of the loans (30,000-60,000 ariary [\$8.92-\$17.83]) and their short duration, many possible investment opportunities cannot be undertaken. Many participants noted this problem and would like to be able to access larger loans for both themselves and their FBAs. ASOTRY has been trying to link the VSLA groups with formal microfinance organizations, where these exist.

²⁸ ASOTRY Data Table MS Excel file provided by ASOTRY staff.

ASOTRY reported that it has thus far linked 109 VSLA groups to formal microfinance, but the impact of this is unclear.

Second, some very poor households have not been engaged in VSLAs because they cannot afford the small weekly contributions. Similarly, some poor households that have joined have not taken loans, as they do not feel they can repay the loan back in a timely manner.

Third, while ASOTRY provides some financial management training, especially on how to run a VSLA, it does not appear to provide potentially valuable training on small trade or microbusiness. This, combined with a relatively limited number of loans for sustainable enterprises, including off-farm activities, rather than just short-term buying and selling of produce or animals, appears to limit the effectiveness of the VSLAs, especially for the most vulnerable.

Lastly, while there is high demand for more VSLAs, ASOTRY's technical support is limited. This is largely because of heavy workloads and a limited number of ASOTRY staff. Moreover, ASOTRY plans to cover 16,000 members through the end of activity, assuming one member per household participates in a VSLA, 22 percent of the households in the ASOTRY target areas will be able to participate in a VSLA group, which will likely be insufficient to have a transformative impact at the population level.

Case study 4: Four family members participate in VSLA

Tsitsobo Beroy commune, Ambonarivo fokontany



Tsitsobo, center, with his father, daughter, and grandsons

Tsitsobo was born in Ambonarivo fokontany. His parents farmed cassava and sweet potatoes. Now four generations of his family, from his father to his grandchildren, live in the same fokontany and off the same land. When his father was a child, there was plenty of food, and when he was a child, there was plenty of food. He correlated that with the fact that there was plenty of rain in the past. Yet in the last two years, the family has been struggling because of the drought and the increasing number of family members to

feed. Tsitsobo is one of 12 children, and he himself has seven children. The farmland is shared, but as the family expands, the harvest does not. The family does not sell any crops, but rather consume everything they grow. For the last two years they have had to sell land to get money to buy food because production was so low. They had chickens in the past, but they died from disease.

The area has natural resources, so many members of the family pan for gold on a daily basis. Foreigners come in and buy the gold that they find. This is the best supplement for the families' income to buy rice. Tsitsobo's family grow cassava, maize and sweet potatoes, but they do not grow rice.

Four members of the extended family recently joined a VSLA (there are about 10 people total in the VSLA) because they saw improvements in their friends' lives after they joined. They saw an increase in capital as well as increased crop yields. The VSLA is the only activity anyone in the family participates in, except Tsitsobo's daughter who gets CSB+ and oil rations for her youngest son. She reported that she gets approximately one bowl of CSB per month, but it is not enough to adequately support the child.

Component 2: Recommendations

Recommendations 2.1 – Increased Agricultural Production

C2-1: Develop and implement a participatory system to analyze yield and to set realistic goals. This will help farmers and staff understand the effectiveness of the techniques promoted by ASOTRY. In addition, consider increasing the frequency of the sessions from monthly to biweekly. Consider organizing a participatory learning session, with the farmers participating in FFS sessions at the beginning of each crop season. In the session, the promoter should facilitate a discussion about current yield, practices and challenges. The promoter should collect baseline yield for the selected crop from each participant and record it. This can be done using tactile tools²⁹ in a participatory session with the group. Discuss the advantages and challenges of current crop and soil management pest and disease management, and seed quality issues. Once the farmers group establishes the baseline yield, discuss and help farmers set a realistic yield goal using a set of improved practices and inputs. This will help FFS participants and the promoter to work towards the goal that they themselves establish. At the end of the crop season, the promoter should facilitate a discussion to review the yield achieved, what contributed to the increase (for those members who achieved the goal), and the challenges and limiting factors the farmers who could not achieve the goal faced. If it is not feasible for the promoter to facilitate such a session because of his/her workload, consider providing training to the lead farmers to facilitate the session.

C2-2: Completely rethink input supply interventions. It appears that ASOTRY is creating a parallel, highly subsidized, and unsustainable seed system. This strategy should be revised to create an affordable, accessible, and sustainable seed system that will continue after ASOTRY assistance ends. Guidance on how to approach sustainable seed systems can be found in the USAID Office of Foreign Disaster Assistance technical guidelines (pp. 74-76).³⁰ Similarly, fertilizer supply, both organic and inorganic, is woefully inadequate to needs. ASOTRY should consider innovative ways to address this limiting factor above and beyond the very limited work on compost being undertaken.

C2-3: Create crop technical specification sheets. A crop technical specification sheet can help farmers and technicians understand the economic feasibility of crop production including inputs required, production costs, and return on investment based on average price and yield

²⁹ This refers to three-dimensional tools used to facilitate discussions: items one can hold, feel and move, such as small plastic or jute bags or wooden fish. For example, participants can decide each jute bag is equal to 20 kg of rice or another amount they choose. Each participant then puts near them the number of jute bags that corresponds to the kilograms of rice s/he produced from a specific plot of land. Everyone thus sees how much each person harvested. This can generate discussion about why some had better production than others, and what could be done in the next season to increase production.

³⁰ USAID/OFDA. 2012. Guidelines for Proposals. October. Available at https://www.usaid.gov/sites/default/files/documents/1866/guidelines_for_proposals_2012.pdf

data. Compiling this information for field agents in an easy-to-digest format for farmers will be useful at the beginning of planting season, in negotiating the terms of a purchase contract and in measuring project impact. The JMTR team can assist by providing specific tools upon request.

C2-4: Develop and implement a pest management strategy. Given the prevalence of pest damage to crops, increase the promotion of sustainable pest management practices such as integrated pest management and repellents to combat pests.

C2-5: Develop and extend irrigation technologies; consider higher-value horticulture crops. Given the importance of rice in the culture, irrigation is currently focused on rice. Given the climatic conditions of the agro-ecological zone and the potential effects of climate change, consider pilot investments in rainwater harvesting and/or surface water micro-dams. Such expanded irrigation techniques would be beneficial not only for rice, but also for higher-value horticultural crops. Indeed, communities have expressed interest in horticulture. ASOTRY could also explore pilot investment of FBAs or FFSs in smallholder irrigation technologies, such as treadle pumps for horizontal distribution to neighboring plots through flowing artesian wells and potentially solar-powered well pumps as a means to stimulate short-cycle horticulture crops for cash and nutrition.

C2-6: Eliminate the F2F requirement. The value of this intervention is not clear, moreso considering it does not appear to be working. Eliminating it could free up some time for ASOTRY's field agents to focus on aspects of the activity that is working.

Recommendations 2.2 – Increased Agricultural Sales

C2-7: Increase focus on the production and marketing of livestock and livestock products. Participants expressed interest in rearing small animals and producing livestock products, such as eggs and milk to generate income. Indeed, production and/or breeding of poultry, goats and pigs, as well as aquaculture and apiculture activities, could be a way for people with limited or no land to participate in FBAs. Moreover, including fodder production in livestock production activities would also support Intermediate Outcome 3.1.3 – Improved Community Natural Resource Management, and help improve income, nutrition and natural resource management (NRM) practices simultaneously.

C2-8: Revisit targeting for FBAs. As implemented, the FBAs that the JMTR team observed are comprised of wealthier farmers with access to land, and exclude the most vulnerable. Rethink what FBAs could do to allow more of the most marginalized to take part in income-generating activities, such as small livestock rearing, non-farm livelihoods or high-value horticulture on small or rented plots.

C2-9: Form strategic alliances with agri-business stakeholders: ASOTRY would benefit from establishing strategic alliances with buyers, lenders and input service providers. Some of these relationships, particularly with buyers, could be structured using principles of inclusive business relationships from CIAT's Link 2.0 tool³¹ (also part of the CRS value chain tool kit). It

³¹ CIAT. 2014. LINK methodology: A participatory guide to business models that link smallholders to markets. M Lundy, A Amrein, JJ Hurtado, G Becx, N Zamierowski, F Rodríguez, EE Mosquera. Cali, CO. Available at: http://ciat-library.ciat.cgiar.org/articulos_ciat/LINK_Methodology.pdf

would be helpful to structure a contract template that provides farmers leverage and reflects their interests on sale terms such as price, form of payment, and additional agreement terms such as input, financial services and market intelligence provision.

C2-10: Strengthen farmer organizations. At midterm, the program needs to identify and implement methodologies to create functioning and sustainable VSLAs and FBAs. Vital aspects include leadership formation and structure, management systems and forming commercial relationships with buyers, service providers and the public sector. Create milestones for how the program will build the capacity of producer organizations and collection point organizations through the end of ASOTRY. Recordkeeping, and establishing a permanent database that farmer organizations can manage post-program, are also important milestones. The JMTR team can provide organizational strengthening tools upon request.

C2-11: Improve post-harvest storage options. Lack of post-harvest storage capacity appears to be a limiting factor to produce marketing. ASOTRY could promote sustainable and FBA-financed basic crop storage infrastructure to enable FBAs to organize larger-volume collective sales. Collective storage capacity can produce positive results for farmer organization morale and a sense of accomplishment as a young business.

C2-12: Utilize a living-income methodology. Establish an income target based on a living-income for the standard of living for the area. A living-income methodology establishes agriculture income benchmarks for specific crops based on a site-specific standard of living. It uses four criteria to estimate the cost of basic standard of quality of life: 1) cost of a nutritious diet, 2) cost of basic acceptable housing, 3) health care and education for a family and 4) margin for family emergencies. The JMTR team can provide follow-up on specific, practical tool usage upon request.

Recommendations 2.3 Increased Engagement of Women and Men in Micro-enterprises

C2-13: Invest in livelihoods diversification to increase income, focusing on off-farm income-generation activities. The target households, especially the most vulnerable, need diversified income sources. Off-farm income opportunities can help to reduce the reliance on weather-dependent agricultural systems. Supporting entrepreneurship development, including low-cost technologies that have the potential to transform the livelihood options for target communities, could reduce overall risk exposure while potentially increasing household income. Examples may include producing charcoal using rice chaff; egg incubators powered by rice chaff; community-based, low-cost, ring-slab latrine production units and other potential income-earning opportunities feasible for the target areas and the capacity of the participants.

C2-14: Use VSLAs to spread innovative business ideas: The JMTR team observed interesting examples of business incubation at the VSLA level, but most businesses were similar to one another, such as businesses doing livestock fattening and buying and reselling of agricultural commodities. These kinds of businesses produced small profit margins and generated low value addition. ASOTRY could utilize VSLAs to introduce diverse business prototypes adapted to the local economic context.

C2-15: Increase the reach of the VSLAs. The VSLAs are popular among participants. Many – if not most – of the VSLAs appear they will be sustainable after ASOTRY assistance ends, but

the growth of VSLA groups has been limited by time constraints on the field agents charged with establishing them. ASOTRY should rethink this strategy and come up with alternative approaches that will allow VSLAs to spread under their own momentum and not to rely on externally funded agents to establish them.

Component 3: Improved Disaster Mitigation, Preparedness, and Response in Vulnerable Communities

3.1 Community Disaster Mitigation Assets Improved

To help mitigate the impact of disasters in communities, through FY 2016, ASOTRY rehabilitated 74.4 kilometers (46 miles) of earthen road in seven communes and 21 irrigation systems in six communes. All road and irrigation system construction and rehabilitation is implemented using Food for Assets (FFA) incentives that provide participants who volunteer to work with rice, beans and oil. The JMTR team visited roads projects but not irrigation systems; therefore, the findings in this section relate primarily to roads.

Project selection. ASOTRY built/rehabilitated 10 irrigation systems, 16 multi-use water points and 75.95 kilometers (47 miles) of road using FFV. The process of selecting roads for rehabilitation varied by community. In one case, the community identified a poor-quality road used to transport rice to market and sent their priority selection to ADRA, which selected this road after studying all the roads identified. Another community indicated that the mayor was part of the selection and the decision of which road to rehabilitate was made at the regional level.

Case study 5: Participant in the FFA road rehabilitation

5. Marie Odette *Anjoma commune, Tsikahoe fokontany*

Marie, 26, lives with her husband Bruno, 31. She and her five siblings were born in a nearby village. Her father died when she was young, but life got difficult when her mother died when she was 10. She and her siblings moved in with her uncle, and there was not enough food to go around. She came to Tsikahoe to get married eight years ago. She and Bruno are farmers. They have rice, peanuts and maize, which they sell and consume. They have two children who are seven and nine and attend the local school. Bruno participated in a Food for Work program to rehabilitate the road and it provided food for the family to supplement what they grew on their farm. Marie would join her husband doing Food for Work if the project was available again.

Community satisfaction. Based on JMTR team discussions in communities, people are happy with the roadwork as roads provide access to markets to sell produce, to schools for children to learn and to health facilities so the sick can be treated. Roads also offer the opportunity to transport water more easily. One participant stated, “The road is development.”

Work quality. Technician-level personnel, not engineers, oversaw road improvement activities. The JMTR team visited several projects that indicated sub-standard quality of the road rehabilitation work:

- One road that the JMTR team observed was already eroding. It lacked drainage structures and culverts and was not properly crowned to allow for maximum drainage from the road surface.

- One bridge at the entrance to one of the roads being rehabilitated is not passable by car and no one knew when work to rehabilitate the bridge would be started. The road does not follow the minimum engineering standards.
- In many places, the observed slope of the road seems very high. The compaction seems substandard and the road is not properly crowned to allow proper runoff of rainfall for the road to dry sufficiently after rains.

Interestingly, one road in Ambondromisotra had taken the step to prevent people from using the road during the rainy season by installing a pole to close the road at certain times of the year, indicating that they were thinking about the sustainability of the road.

Staff could not provide design drawings of the actual work plans, such as road surface grading and drainage ditch construction. It does not appear that these documents exist, or if they do, they are not readily available to consult or used by those constructing the project.



Road constructed under Food for Work

Operations and maintenance (O&M). ASOTRY reported that it formed 19 *Association des Usagers de Pistes* (AUPs) [road user associations] to operate and maintain the roads, and 14 *Association des Usagers d'Eau* [Water User Associations]. These associations include both female and male members. Although AUPs were created to maintain the roads, committee members did not always know their roles and responsibilities, indicating that more discussion and participatory planning are needed. The infrastructure sites the JMTR team visited have yet to form associations and develop operation and maintenance (O&M) plans with respective financial or human resource requirements, which is a recommended first step in construction design. O&M plans are necessary to keep roads and irrigation systems functioning beyond the life of ASOTRY with little to no outside support. It is anticipated that the work specified in the plans will require volunteers, but it may be necessary to create a payment plan if there are no volunteers. Some of the AUPs visited have not yet collected money in anticipation of future road maintenance. It does not appear that the AUPs are linked to a regional or district level government engineer, nor are the O&M plans budgeted by local authorities.

In one community, the JMTR team visited an irrigation canal and the household that owns land adjacent to the canal. This household and the community members stated they are benefiting from the canal and that when the canal needs repair, they will work collectively to make the repair, volunteering their own physical labor.

In summary, the JMTR team finds that most of the infrastructure has a management committee and many committees are collecting subscription/user fees, though the amount is so low that it

may not ever be adequate to pay for the labor needed to make repairs. However, the community is willing to donate physical labor. At the time of the JMTR, it was too early to conclude the effectiveness of these stated plans.

NRM/ reforestation. Reforestation activities for increasing the number of trees in the fokontany use FFA and community-level planning. Participants appear to like planting trees, and often expressed that they like and need the FFA ration. They perceive the benefits of tree planting to include preventing soil erosion, and hold an incorrect, but not harmful, belief that trees increase rainfall in the fokontany. Participants also stated that the trees, while helping to bring rain, would later provide timber for households to use for furniture and home construction. Participants like planting trees in public places, even on their own land, especially the part of their land that is not suitable for agricultural production.

However, the tree planting appears to have limited sustainability and is not developed with an overall purpose or strategic design. There is a very small likelihood of achieving goals when the FFA approach uses free seedlings and paid labor to do seemingly non-strategic tree planting. A strategic approach to reforestation has yet to be developed, and participants do not appear to have even a basic understanding of the importance of watershed management. In some communities visited, the tree planting areas appeared to be mostly communal land, but offered no other benefit to that land (or to the community) in terms of soil/water conservation, protection from wind damage or even for agroforestry/forage purposes for livestock. Some tree planting sites are using mulch, but mulch does not appear to be promoted for use in cropping systems despite the many benefits of mulching and the added importance and opportunity to discuss soil moisture retention after the 2016 drought. This is a missed opportunity to tie together NRM and increased agricultural production.

This approach to NRM needs to be rethought and improved, as it appears only reforestation activities have taken place. Participants need to have a better understanding of why the resources must be managed properly and how proper management of those resources ultimately benefits the community. This includes all natural resources (land, trees and soil), water resource management (both natural surface bodies and rain catchment), and perhaps most crucially, the means to implement and maintain a community-developed plan with limited to no external supervision or financial resources. The staff noted that the involvement and support from the local government has been minimal. As a result, ASOTRY staff have limited motivation to involve the local government. While coordination and even human and/or financial support from local government staff may be minimal, it is important for ASOTRY to engage with local officials whenever possible to foster the linkage between relevant ministry counterparts and programs within their jurisdictional area.

Overall, the NRM strategy lacks a focus on community knowledge building, community ownership and capacity to appropriately prioritize and make decisions affecting natural resource use and management, which is key to these resources' long-term survival. While it was apparent to the JMTR team that certain individuals understood, for instance, the cause of a dam breaking, and the flooding and soil erosion that may occur, they did not appear to understand the overall significance of vegetative removal and soil matter loss, and how to comprehensively mitigate and manage those occurrences – and therefore those resources.

It also appeared that the follow-up by ASOTRY to any NRM interventions already implemented was minimal, thus further compounding the issues of knowledge, understanding and ownership.

In the view of the JMTR team, disaster mitigation would also be improved through greater attention to and a more-comprehensive management of watersheds within the targeted ASOTRY communities. While irrigation and roads are a much-needed element of disaster mitigation and community resilience, if upper watershed control is not managed properly, the downstream effects will likely be lost as vegetation loss and deforestation continue at the pace observed in most locales. A more thorough understanding of the interaction between the upper, middle and lower parts of the watershed would benefit people living in the targeted watersheds.

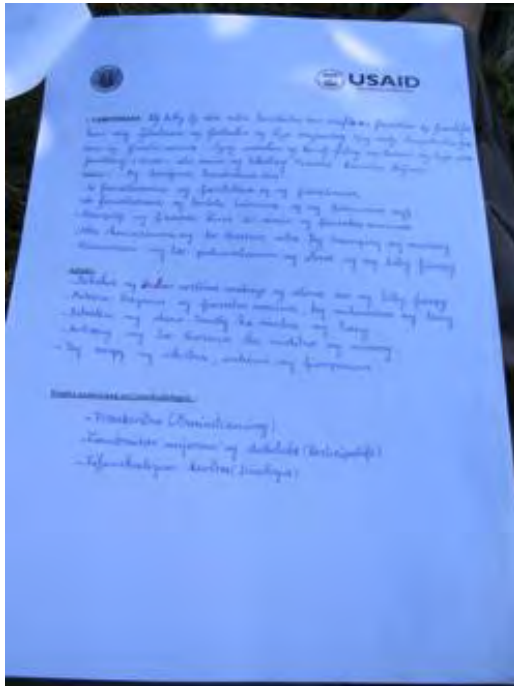
3.2 Community Response Capacities Improved

Overview. In accordance with Madagascar government policy, ASOTRY created Disaster Risk Management Committee (DRMC) structures at the commune and fokontany levels. ASOTRY has also been developing and building the capacity of the network of DRMCs in the targeted areas. ASOTRY has formed 373 DRMCs in the target fokontany and communes. Each fokontany committee has 10 members.

The responsibility of a DRMC is to develop a disaster risk management (DRM) plan for the fokontany, gather early warning information from public media, provide disaster early warning using color-coded flags, and disseminate early warning information to the community. The DRMC is also responsible for identifying communities suitable for DRM projects, sensitizing communities, participating in simulation exercises, planting trees, and coordinating meetings; it also should be monitoring food security in the commune. ASOTRY organized regional workshops to link these committees with district and regional committees and other government structures. The activities are relevant to achieving Purpose 3.

DRMC membership. The DRMC members are selected by the communities – mostly by the chief – and are only considered formalized by the government when all committee member names are submitted to the respective regional ministry. While women’s participation in the committee is not mandatory it is encouraged, and many reported at least three to five women

members. The participation of women in the decision-making positions in the DRMC is limited.



A narrative DRM plan developed by Fokontany DRM Committee

DRM plans. ASOTRY staff facilitated the development of DRM plans. Most of the communities developed a DRM plan. This includes a baseline resource map, an evacuation map/plan map drawn by committee members and an aspirational map showing how the community should look with the proposed improvements.

The JMTR team found the DRM plans to be detailed; however, the format of the plans does not appear to be user-friendly for the community the narrative plan is written on a small piece of paper while many members do not have literacy skills, and the accompanied evacuation plan is usually drawn on a small piece of paper. An illustration of plan contents on a large banner hung on a wall could be more effective.

Comprehension of the DRM plans varies substantially. Many DRMC members are not familiar with the content of the plan, suggesting more frequent review of the plan may help the committee – and perhaps the community writ large – to internalize the content. The knowledge and awareness of the DRM plan beyond DRMC members was found to be extremely limited.

Simulation exercises. In preparation for disasters, particularly cyclones, ASOTRY facilitates at least one simulation exercise per commune. This includes training to the DRMC on DRM plans and a DRM kit that includes a radio for listening to national cyclone information, a megaphone for alerting community members to specific disaster information, and four color-coded flags to communicate cyclone early warning to each DRMC.

For cyclone preparedness, the DRMC organizes a simulation exercise at the commune level. At its current pace, most community members are unlikely to participate in a commune-level simulation by the end of the award, which raises questions about the reach of the simulation. Moreover, women’s participation in the simulation in areas located far from the commune center where the exercise is implemented is generally limited. A large proportion of community members interviewed did not know about simulation exercises, suggesting the commune-level simulation may not be adequate to raise community awareness. In addition, AIM and Land O’ Lakes seem to be facing challenges in holding simulation sessions, as indicated by their low completion rates. In some communities the JMTR team visited, it did not appear that more than one simulation had taken place, which raises questions about the utility and impact of this intervention.

DRM awareness. While most community members know about the flags for early warning, interviews with community members indicate that many forgot the significance of the color codes, suggesting a need for more frequent sharing of information and refresher trainings.

In addition to cyclones, drought, locust infestation and brush fire were commonly cited as the major shocks in the communities. A DRMC's plans for drought management, locust attack or brush fire are limited to tree planting and informing the government – yet tree planting cannot solve any of these problems. It was not apparent to the JMTR team that ASOTRY activities were amended due to the current drought or locust infestations. Utilizing either disaster as a learning tool to adapt the component or improve component complementarity, or to refine disaster risk reduction work, was not evident, and should be a core focus of these interventions.

Go Green. Another activity that was not explicitly implemented is the linking of ASOTRY activities with the Go Green Strategy. Go Green Strategy activities were well described by ADRA but have not been rolled out in the fokontany yet. It does appear that the Go Green Strategy can be used to integrate the goals of the three purposes.

Development of food security early warning systems: For slow-onset disasters (drought, locusts), ASOTRY has been working to establish a community-based food security monitoring system at the commune level. Initially this activity was to have been implemented in partnership with FAO but due to management issues, ASOTRY planned to develop its own.

The system will require collecting data on rainfall, stream gauge, household food stock, food prices, daily wage rate, number of meals, dietary diversity, coping mechanisms and crop loss. ASOTRY plans to pilot the system in 26 communities. In these pilot communities, among the DRMC members, ASOTRY identified two Early Warning Food Security Monitoring System agents responsible for regular data collection. ASOTRY will lead the data analysis in collaboration with the DRMC and the representative of the local authority (mayor). The findings of this analysis will state the trends of the local food security situation, which will be disseminated along with appropriate recommendations for action to all community members and potential stakeholders.

At the time of the discussion, the early warning system is not operational and documentation about the process and methodology is not yet available, therefore the JMTR could not attain a comprehensive understanding about the methodology and processes. It appears the early warning system may not be implemented by the end of ASOTRY. Even if it is, it does not appear there will be time within the remainder of the program to gauge its effectiveness. It is to note that FFP experience with the community-based food security early warning system is mixed with limited success to share. A community-based data collection system that consistently generates valid data could be a major challenge, particularly given the large number of indicators for which data are required, and the staffing levels that would be required at the field level to consistently and adequately analyze that data. FFP has also observed that in many of these systems, the information flows up and no response or reply flows back down. This creates frustration and a lack of ownership and commitment by the community and a subsequent lack of sustainability. Moreover, the capacity to analyze rainfall or other data in the context of a broader climatic system may not exist at community level. Unfortunately, the performance of a newly developed early warning system may remain unknown through the life

of ASOTRY.

Regarding sustainability of the proposed early warning system, no information is available to determine the motivation of the community to 1) collect and analyze early warning system data after ASOTRY, 2) access resources to manage the system or 3) maintain or strengthen capacity to consistently collect and analyze the data and assess the performance of the system. In most cases, the DRMCs at the district and regional level are non-functional. Despite ASOTRY's efforts to link the fokontany and commune-level DRMCs, it is unlikely that these committees will continue to be functional after ASOTRY. The DRMCs do not have access to resources. The DRMCs in Ambositra, Fandriana and Manandriana created by SALOHI and interviewed by the JMTR team were found to be non-functional: they do not meet, and the equipment provided by SALOHI is broken.

Component 3: Recommendations

C3-R1: Ensure the quality of design, construction and sustainability of road and irrigation structures. ASOTRY should ensure professional engineering oversight at all stages of infrastructure development, from planning through construction. In addition, more support, guidance and training needs to be provided to the AUPs to ensure that they develop comprehensive and financially responsible O&M plans. Finally, to ensure sustainability, linkages should be made with local and regional government to keep the roads passable and sustainable.

C3-R2: Rethink NRM implementation strategy. It is highly unlikely that any NRM objectives sought through ASOTRY will be achieved, much less sustained, under the status quo. A strategic approach to NRM should be developed and implemented, with local ownership, good governance and sustainability of all the NRM interventions given paramount importance. The strategy should be developed in accordance with best practices such as those described in the USAID/IRG publication, *Nature Wealth & Power 2.0*,³² and the FFP-funded Exit Strategies research.³³ The strategy should be informed by a review of the status of NRM activities and staff coverage to ensure that activities are better planned, communicated, educated and implemented within the communities; it is advisable to seriously consider hiring additional staff.

C3-R3: Discontinue further investment in the food security early warning system. Given that the system is still in its development stage, and its questionable track record in FFP programming, it is inadvisable to keep funding it as is. There is not yet enough evidence to suggest that a community-based early warning system will be effective and sustainable, nor that this is a viable and effective use of funds at this stage of the project. The JMTR team therefore recommends not to further invest in this initiative. Instead, ASOTRY may explore opportunities for obtaining data from Meteo Madagascar or the Government Meteorological department and passing on forecast data to the communities in a way that is comprehensible to the community.

C3-R4: To better manage the consequences of drought, ASOTRY should facilitate a process to revisit the DRM plans to integrate drought-resistant crops and

³² USAID and IRG. 2013. *Nature, Wealth, & Power 2.0: Leveraging Natural and Social Capital for Resilient Development*. October. Available at <https://rmpportal.net/library/content/nwp-2.0>

³³ See FANTA Web page, *Effective Sustainability and Exit Strategies for USAID FFP Development Food Assistance Projects*, at <https://www.fantaproject.org/research/exit-strategies-ffp>

cropping systems, horticulture, and intercultural practices for agricultural production. This should form the core of drought management activities. Currently, DRM actions are heavily focused on managing risks for cyclone and less focused on management of drought, locust, brush fire and other shocks, which can be more common and have equally devastating impacts on food security.

C3-R5: Explore the possibility of integrating DRM activities into the VSLAs. Since the vertical linkage with the district- and regional-level *Bureau National de Gestion de Risques et Catastrophes* (BNGRC) committees will remain weak (as these committees are mostly nonfunctional and making them functional is beyond the scope of ASOTRY) while the likelihood of VSLAs to be sustainable is fairly high, it is worth considering vesting the DRM interventions with the VSLAs. This may include incentivizing the VSLAs to take on some of the responsibilities identified in the DRM plan. For example, ASOTRY may explore channeling a part of the FFA activities to develop productive assets through the VSLA, whereby the VSLA will manage the implementation and the asset. Income from the productive assets could be shared between the VSLA members and investments in the activities or maintenance of the assets. Considering other innovative ideas around how to link DRM and VSLAs is encouraged.

Program Monitoring

Background and System Overview

The ASOTRY monitoring and evaluation (M&E) system was developed following lessons learned from the SALOHI program, in which both ADRA and Land O'Lakes were members of the consortium. Such lessons led, for example, to a transition from paper-based data collection tools to electronic data collection using tablets, and use of a fully developed database for data storage, processing and reporting. The M&E system was developed at the beginning of the program, which allowed the program to develop data collection instruments that link project activities to the indicators to be reported. This is a positive development, as it ensures standard data collection and reporting. Consortium partners appreciate the M&E system and all partners have embraced the system. The JMTR team sought to understand to what extent the ASOTRY M&E system had been developed as outlined by the program, assess the system's adequacy to meet USAID data quality standards and information sharing, and review how the data were utilized for learning and project management.

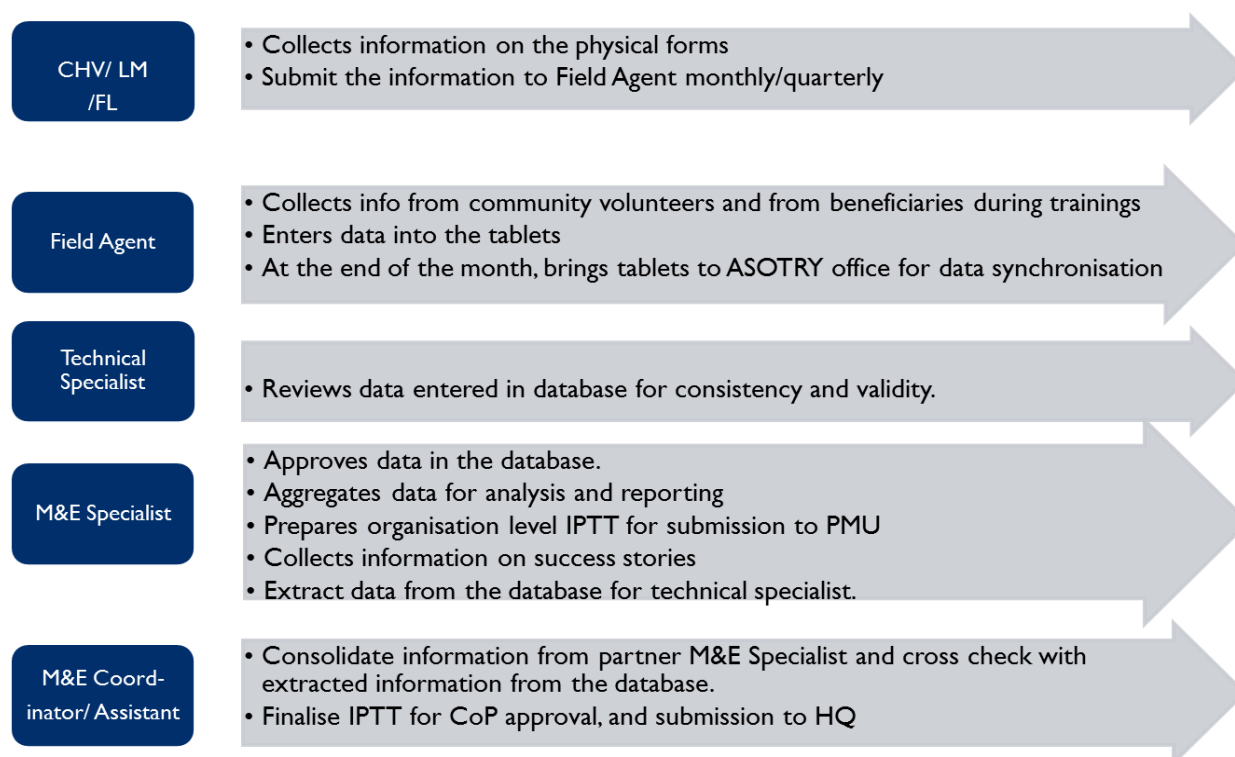
ASOTRY set up an M&E system with two main methods of data collection for reporting annual indicators: routine monitoring, whereby information is collected during program activities for output indicators, and an annual beneficiary survey, which collects data for outcome indicators. The M&E system is primarily centered on routine monitoring, likely because 64 out of the 74 annual indicators are collected through routine monitoring. The database developed by the program is meant to capture and process information from routine monitoring, while outcome indicators are reported outside of the database. The annual beneficiary survey is conducted by an external consultant following the scope of work the program developed. All partners use the same M&E system, which facilitates standardization of data collection, analysis, and reporting.

Staffing

The program has an M&E unit with staff from each of the consortium partners. The M&E

coordinator, from ADRA, oversees all M&E functions and supports M&E specialists at each of the partner organizations. The Assistant M&E Coordinator works with the coordinator on data management and reporting, which gives the M&E coordinator more time to coordinate activities and support partners.

The graph below shows the data flow from community volunteers to the M&E coordinator.



Data Collection Plan

The finalization of the M&E plan took longer than planned, and the development of the data collection tools was protracted. Documents reviewed and staff interviewed revealed that the data collection plan was not comprehensive enough to capture all the data needs at the beginning of the program. This was partly due to a misunderstanding of the Performance Indicator Reference Sheets (PIRS) at the beginning of the program and delayed development of PIRS for custom indicators.

The program has a plan for data collection for all the indicators. However, a number of indicators were not reported in FY 2015 due to lack of data, and a few indicators still had some data points missing in FY 2016 reporting, e.g., *Number of people gaining access to basic drinking water services as a result of USG assistance (FFP 47)*, *Number of people gaining access to a basic sanitation facility service as result of USG assistance (FFP 48)*, *Percent of physically improved sanitation facilities with feces visibly present on the floor, wall, or area immediately surrounding the facility (FFP 46)*, and some sex disaggregates.

Guidance Materials

ASOTRY invested time to develop M&E documents to guide data collection and reporting. All M&E documents have been approved by USAID except the M&E plan, which is now awaiting administrative approval after technical issues were addressed.

The program invested a substantial amount of time and resources to develop guidance documents on topics such as theory of change, PIRS and the Beneficiary-Based Survey report, to assist staff in implementation and management. However, the majority of these documents are in English, which limits their utility, as most staff are not fluent in English. Translation of these documents to French would increase their usability and improve the quality of implementation.

The program did not develop written guidance for the different M&E functions or checklists to standardize M&E processes. This resulted in inconsistent implementation. For example, technical specialists do not have a common understanding of what they need to check when verifying forms from field agents.

Harmonization of indicator definitions across partners was weak. While PIRS are shared with all M&E specialists, there has not been a formal discussion on their proper interpretation. For indicators not calculated from the database, the interpretation of the PIRS by each partner's M&E specialist is prone to variability. The indicator definitions also have not been translated to French, making it difficult for the M&E specialists to understand them well.

Database

The ASOTRY M&E database is based on MySQL and linked to the SQLite database on tablets. The database is not yet fully developed. According to the design, once developed, the database should be able to store, collate, aggregate and analyze most indicators for reporting. It is designed to give different levels of access to different staff based on their need to review or use the information. An external consultant is developing the database for a contract of about \$80,000.

The database has taken a long time to finalize. While ASOTRY was hopeful the database would be fully operational by the end of May, this was doubtful given the rate at which it had been moving. This transition period was challenging as staff were trying to use both the database and physical forms for reporting. The sooner the database is completed, the less likelihood of data loss and room for manipulation (e.g., errors or tampering).

Currently the database is unable to calculate most indicators, with the exception of simple aggregations. The development of formulas for the various indicators was in progress during the JMTR; their accuracy could not be assessed as their development was still at an early stage. Once the database is fully operational, it will be important to review reporting accuracy, mostly focusing on indicator calculations from the database.

The external consultant has total control and administrative rights to the database, which limits ADRA's flexibility to adjust forms or templates to suit emerging needs. There is an effort to train one of the M&E teams to develop forms and queries, which will facilitate the generation of

customized reports. The program had no clear plan to have full control of the database.

The database is cloud-based, so in areas where internet access is limited, usability will be an issue. Moreover, the bandwidth needed for the database was not incorporated in initial partner budgets, which makes internet costs higher than expected.

CommCare

Data collection for growth monitoring is done through a combination of physical forms and smartphones using CommCare software. The JMTR team observed many challenges with the CommCare system related to smartphone coverage, functionality, and hardware performance, as detailed below:

- **Smartphones.** The smartphones used for data entry had functional challenges in both the hardware and software. Many phones do not work properly. For those that work, the CommCare system may not work properly. The feedback system takes too long to send counseling messages or does not send the messages at all. Network coverage in many target areas is limited by weak signal. Less than half of CHVs received a smartphone and the phones are shared for data entry.
- **CommCare – database linkage.** The data entered into the CommCare system are not yet linked to the database, making it a messaging platform separate from the data collection system. The system requires multiple layers of data entry for the CHV, as s/he has to fill the physical form first and then input data into the smartphone. This investment in effort is not taken advantage of, as the field agents enter the information again on the tablet.

Given the serious functionality issues, CommCare is currently an ineffective system. The JMTR team remains skeptical about the performance and effectiveness of the system. Given that the system has already cost the program about \$200,000, return from further investment is not guaranteed. Neither the ASOTRY M&E team nor the JMTR team could determine what further investment would be necessary to make the system operable.

Data Collection and Quality Assurance

Field agents have the primary role of data collection and entry, in addition to implementation responsibilities. All are equipped with data collection tablets, though some were facing challenges with battery power due to insufficient charging time, as field agents spend the whole day in the field with charging time restricted to breaks or training periods. Field agents were trained on how to use the data collection tools at the beginning of the program; however, there were several changes to the forms and database, which the field agents only learned of through informal feedback. This resulted in some field agents using incorrect forms or not properly capturing information. Providing refresher training would allow an opportunity to review skills and systematically inform field agents of process changes, and thus help improve data quality and avoid poor data collection and capture.

While considerable progress has been made in ensuring that all routine monitoring information is collected via tablets, a majority of the primary data are collected by CHVs, lead mothers and FFS chairpersons who still need to use paper. (However, ASOTRY staff told the JMTR team

that the use of paper is temporary.) One issue with this data collection approach is that ASOTRY has yet to develop and implement a mechanism to verify the quality of data collected and recorded by community volunteers. While technical specialists are responsible for reviewing the data entered in the database, there is no system to verify the authenticity of the information besides relying on the information entered in the tablets. The technical specialists mainly assess completeness, rather than validity and integrity of information. The JMTR team noted some situations where volunteer-collected data may be unreliable. For example, the team observed variation in the information the lead farmers recorded in their record books. Group forms developed by ASOTRY were not always used or available in the field. Most lead farmers preferred to use their record books. In the case of CHVs, there is a capacity issue regarding anthropometric measurement: precision of measurements drastically varied by CHV, according to their capacity to read scale readings and properly adjust the scale. These volunteers do not receive regular refresher training on anthropometric measurement, which negatively affects the accuracy of the anthropometric data they are responsible to provide. It is also important to recognize that the community volunteers, in their role as data collectors, could have a conflict of interest as they are also the promoters of maternal and child care behaviors. ASOTRY staff should randomly check the quality of data collected by community-based actors to ensure reliability and validity before transferring the data to the database.

Another quality assurance issue relates to the implications of data backlog. Some field agents interviewed reported that they have a huge backlog of forms to be entered and are not sure if they will be able to catch up. Others reported that they only implement activities that they have time to record the same day to avoid carrying over data entry work to the next day, which may reduce their contact time with farmers. The possibility of losing forms is fairly high, as well as the chance of not entering some data, but there is no system in place to detect these issues.

ASOTRY conducts an internal DQA to understand data quality before reporting. ASOTRY documents DQA findings and repeats the DQA if needed. However, it does not develop a plan of action to address the issues identified. Some of the data quality issues identified in the past are yet to be fixed. There is also a potential risk of underreporting, given the over-reliance on information in tablets with no other way of verifying data on the ground, particularly when the field agent feels overwhelmed and may decide not to record all activities or complete all forms.

Reporting

The component specialists and coordinators draft the qualitative quarterly and annual reports, while the M&E team drafts the quantitative report using annual monitoring data from the IPTT. M&E information is shared with technical teams to inform narrative reports. The M&E coordinator takes the overall responsibility to integrate both narrative and quantitative pieces and produce one report. Once the database is fully developed and the program begins to use the data from it effectively for the report, the consistency of indicator estimation and data reporting will improve.

As noted in the “Guidance” section above, one of the challenges is different interpretations of the same PIRS by different partners, which results in non-comparable indicator estimations. Moreover, ADRA did not always communicate changes to the PIRS to its partners in time, resulting in some partners calculating indicators using previous versions. This posed serious

issues in indicator estimates and aggregation. Updates to the database and analysis plan were mainly communicated through Skype calls and e-mails, which was not effective in ensuring all partners had the same understanding of indicator definitions and calculations.

Qualitative monitoring was ad hoc, and no specific schedule or reporting format was followed. Interestingly, these monitoring reports were used for program management decisions, regardless of their anecdotal nature, which might be misinforming. Sub-partners receive feedback on their report contributions from the Project Management Unit (PMU), but do not always receive a final report after approval by USAID.

Data Utilization

The program reported using annual M&E data to review performance and set targets for the next period. Technical coordinators use output data generated from the database to track progress against targets. Requests for monitoring information by program managers were evident mainly for ASOTRY PMU, where coordinators are based, and far less from partners partly due to relatively weak capacity of partner M&E staff to analyze data from the database. All partners reported more utilization of quantitative data and limited use of qualitative information for decision-making. The program team did not read the baseline report nor did the M&E team conduct any further analysis of the baseline dataset or annual survey dataset. The program could benefit from further analysis of baseline and annual monitoring data for context analysis and monitoring program performance.

Information Sharing and Collaboration

Staff interviewed reported that the main information they receive is program-related documents, primarily the IPTT and DIP, which are shared with all levels of staff, including field agents. Program performance information is shared during partner quarterly review meetings. However, low-level staff do not have the full picture of the program since they only receive the documents related to their level of implementation, and do not always participate in the review meetings.

A successful information-sharing activity has been the stakeholder town-hall meetings organized by ADRA. These are highly appreciated by staff, who see the meetings as an opportunity to engage with stakeholders on both implementation and partnership issues.

Technical collaboration to improve implementation quality among partners is limited to quarterly review meetings. At these meetings, the component coordinators and specialists meet to review implementation progress for the quarter and review the DIP for the coming quarter. These review meetings focus more on implementation and less on sharing best practices and harmonization of approaches.

Collaboration between ASOTRY and Fararano is limited to the Chiefs of Party. ASOTRY does not have a mechanism to promote collaboration among technical staff between the two programs. This is a missed opportunity for both of the programs to learn from each other.

Technical Support and Capacity

While all M&E staff have relevant qualifications, and are dedicated to their work, their capacity

and experience in M&E varies significantly. Some M&E specialists are working for the first time on a complex program, some could not demonstrate how to calculate different indicators using a spreadsheet and others could not download beneficiary profiles from the database. All specialists reported lack of technical training to standardize their activities, and lack of capacity building efforts, particularly for those who were not part of previous programs.

ASOTRY did not develop and implement a capacity building plan for the M&E staff. Support from headquarters is limited to management and reporting. Training needs for mid- and lower-level staff remain unmet. M&E staff have access to, and consult with, the reference materials such as the USAID M&E and Reporting Policy and Guidance and Sampling Guide for Beneficiary-based Surveys.

Technical staff rarely visit the remote areas for monitoring purposes and as a result, ASOTRY does not have a system in place to monitor the technical quality of the interventions.

Program Monitoring: Recommendations

PM-R1: Urgently institute a comprehensive DQA mechanism. This can be achieved through:

- A comprehensive review of data needs for all indicators and ensuring that appropriate data are collected for complete reporting. This includes incorporating revisions made to the PIRS during the M&E review process.
- Workshops to facilitate a common and improved understanding of the key guidance. M&E staff and the key users of the monitoring data should participate in the workshop.
- Development and implementation of a data verification system for data collected by CHV/lead farmer/lead mother or other sources. This could be done through brief interviews with a small random sample of beneficiaries to ensure that the data the CHV/lead farmer/lead mother recorded are reliable and valid. It would be useful to develop a checklist for data verification/review.
- Refresher trainings for community volunteers responsible for data collection, particularly the CHVs responsible for anthropometric measurements.

PM-R2: Considering the continuous issues to make CommCare functional, and its ineffectiveness in messaging, data recording and screening, the JMTR team does not support further investment of project resources into CommCare. ASOTRY should negotiate with the developer to fix the implementation issues and make this application functional. ASOTRY should distribute the existing phones to a few communes, to all CHVs in those communes. This will allow ASOTRY to use these few communes as a pilot and document lessons for future programming. ASOTRY should consider reverting to a traditional method of screening and messaging using growth monitoring cards.

PM-R3: Given the protracted development of the database, ASOTRY should concentrate on finalizing the database, including the user interface and building queries. ASOTRY should continue to invest in developing staff capacity to operate the database and making minor changes to it without the help of the developer, which will give ADRA more control of the database.

PM-R4: Develop a system to use data for learning and decision-making. This should include:

- Meetings or workshops with the PMU, regional staff, and partners to discuss the implications of data findings for the ASOTRY ToC, e.g. What changes could or should be made in program design and implementation? What are the lessons learned? This should include an in-depth analysis of the findings/results in relation to achieving the project goal. There is no need to bring all staff to one workshop; similar workshops can be organized in regional offices.
- Wide distribution of the baseline report and follow-up discussion with staff to understand the potential and limitations of the measurement methodology. For example, the baseline and final evaluation surveys are population based, and samples are drawn from beneficiaries as well as non-beneficiaries. If the program targets only a small proportion of the households, there will be a small proportion of households in the final evaluation survey sample. Even if the direct beneficiaries experience substantial improvements in food security, the changes might not be detectable in the final evaluation. In addition, staff discussions should include review of baseline findings in light of the food security conceptual framework – availability, access, utilization and stability.
- Develop and implement a process to bring specific learning from other programs to improve ASOTRY, such as Fararano, other programs in Madagascar and ADRA programs from elsewhere.

Conclusion

ASOTRY has demonstrated progress in establishing processes to implement the program interventions and at midterm, appears on track to meet many of the output targets. The project is implementing several approaches or activities notable for attaining objectives at output level and for participants' favorable reception. These include:

- training on crop production and management through FFS;
- cooking demonstrations;
- establishing and training FBAs;
- building/ rehabilitating roads and water points;
- savings and lending groups; and
- developing and strengthening commune and fokontany DRMCs

These are important successes. At the same time, they must be viewed in light of higher aspirations for outcomes, impacts, and sustainability at program, population, and system levels. The JMTR presents a moment for strategic reflection on what implications the observed presence or absence of progress to date – and more importantly, the program strategies and processes – have for the short, medium, and long term. It is an opportunity to adjust mid-cycle, to optimize progress on different scales and timespans.

Considering the massive burden of chronic malnutrition and poverty on the target population, the success of ASOTRY depends largely on how well the program can minimize the dual burden of chronic malnutrition and poverty and ensure the sustainability of critical services and institutions. The magnitude of the burden the baseline survey presented is enormous as described on page 6.

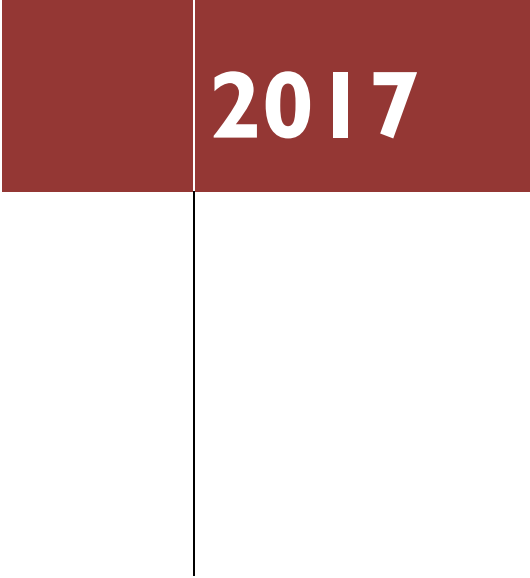
These challenges have major implications for ASOTRY's coverage. For example, ASOTRY

needs to significantly reduce chronic malnutrition in 5,000 additional children under 5 to achieve its target. Approximately 3,000 more children need to receive a minimum acceptable diet to achieve the project target.

While ASOTRY has been training farmers through FFSs, and mothers through care groups, ADRA and its partners should seriously consider developing and implementing strategies so that farmers, mothers and other target groups continue to receive these critical services. Considering the current capacity of the relevant government departments and ministries, sole dependence on them will unlikely achieve the sustainability of the services.

Based on the JMTR team recommendations included in each section, ASOTRY should develop a tool to ensure proper and transparent follow-up on actions made toward these recommendations.

Annex I: Evaluation Protocol



2017

March 25, 2017

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ACRONYMS

ACC	Agricultural Collection Centers
ACF	Action Contre la Faim
ADRA	Adventist Development and Relief Agency
AIM	Association Inter cooperation Madagascar
ALA	Agriculture and Livestock Agent
ALA	Agriculture and Livestock Agent
BDEM	Bureau du Développement de l'Ecar de Mananjary
BNGRC	Bureau National de Gestion des Risques et des Catastrophes
CCDS	Comité Communal de Développement de la Santé
CCFLS	and Community Complementary Feeding and Learning
CCFLS	Community Led Complementary Feeding and Learning Sessions
CCGRC	??
CDD	Caritas Morombe, and Conseil Diocésain de Développement
CHV	Community Health Volunteer
C-IMCI	Community-based Integrated Management of Childhood Illness
CIREF	??
CLTS	Community Led Total Sanitation
CLW	Community Livestock Worker
CAN	Community Nutrition Agents
CoP	Chief of Party
CRENA	Centre de Récupération et d'Education Nutritionnelle Ambulatoire
CRENAM	Outpatient Nutrition Recuperation for Moderate Malnutrition

CRENI	Centre de Récupération et d'Education Nutritionnelle Intensive
CRS	Catholic Relief Services
CSA	Agriculture Service Centers
CSB	Centre de la Santé à la Base
CSO	Civil Society Organizations
DCoP	Deputy Chief of Party
DiNER	Diversity for Nutrition and Enhanced Resilience
DPMP	Disaster Preparedness and Mitigation Plans
DRMC	Disaster Risk Management Committees
ECHO	Humanitarian aid and civil protection
EGA	Evergreen Agriculture
EHA	Essential Hygiene Actions
ENA	Essential Nutrition Action
F2F+I	Farmer to Farmer approaches
FAFSA II	Food Aid and Food Security Assessment II
FBA	Farmer Business Associations
FFA	Food for Assets
FFP	Food for Peace
FFS	Farmer Field School
FMNR	Farmer Managed Natural Regeneration
FY	Fiscal Year
GbV	Gender-based Violence
GFWSS	Gravity Flow Water Supply Systems
GMP	Growth Monitoring and Promotion

GoM	Government of Madagascar
GRC	??
HH	Household
ICRAF	World Agroforestry Center
IP	Implementing Partner
J&P	Justice & Peace Commissions
JMTR	Joint Mid Term Review
LF	Leader Farmer
LF	Lead Farmer
LM	Lead Mothers
LM-G	Lead Mother Gardener
LoA	Life of Activity
LOL	Land O'Lakes
LSP	Local Seed Producers
MAM	Moderate Acute Malnutrition
MCP	Mother Child Pairs
MEAL	Monitoring, Evaluation and Learning
MFI	Microfinance Institutions
MIKOLO	??
MoH	Ministry of Health
MT	Metric Tons
NCBA CLUSA	National Cooperative Business Association-CLUSA
NRM	Natural Resource Management
ODDIT	Organe de Développement du Diocèse de Toamasina

ONN	National Office of Nutrition
PISP	Private input Service Provider
PMT	program management team
PNAN	National Action Plan for Nutrition
PNC	National Policy for Community Health
PNNC	??
PSP	??
SAM	Severe Acute Malnutrition
SBC	Social and Behavior Change
SILC	Savings & Internal Lending Communities
SISAV	Système d'Information sur la Sécurité Alimentaire et la Vulnérabilité
SMART	Skills for Marketing and Rural Transformation
SRI	System of Rice Intensification
SSSA	Système de Suivi de la Sécurité Alimentaire
SUN	Scaling Up Nutrition
TSN	Techniciens de la Santé et de la Nutrition
USAID	U.S. Agency for International Development
USD	United States Dollar
VDC	Village Development Committees
VMG	Village Model Garden
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation and Hygiene
WUA	Water User Associations

I. INTRODUCTION

In fiscal year (FY) 2014, the U.S. Agency for International Development's (USAID) Office of Food for Peace (FFP) entered into two new cooperative agreements for development food assistance projects in Madagascar (1) the ASOTRY Project, implemented by the Adventist Development and Relief Agency (ADRA) and partners Land O'Lakes (LOL) and Association Inter cooperation Madagascar (AIM) and (2) the *Fararano* Project, implemented by Catholic Relief Services (CRS) and partners *Organe de Développement du Diocèse de Toamasina* (ODDIT), *Bureau du Développement de l'Ecar de Mananjary* (BDEM), *Caritas Morombe*, and *Conseil Diocésain de Développement* (CDD).

The combined budget for the two projects is \$75 million USD over five years (2014-2019) with an overarching goal to *reduce chronic malnutrition and food insecurity among chronically food insecure households in the most vulnerable regions of Madagascar*.

ADRA implements “ASOTRY” (“harvest” in Malagasy) Project in the targeted regions of Amoron'i Mania, Haute Matsiatra, and Atsimo Andrefana that aims to improve nutrition, agricultural productivity, and household and community resilience by addressing the underlying causes of food insecurity. To accomplish this goal, the project implements interventions to (a) improve nutrition of women of reproductive age and children under two years of age; (b) increase crop management and diversification knowledge, promote improved technologies and crop diversification; and (c) invest in infrastructure to strengthen resilience.

CRS implements the “*Fararano*” project (“harvest season” in Malagasy) in regions of Atsinanana, Vatovavy Fitovinany and Atsimo Andrefana. The goal of the *Fararano* Project is to reduce food insecurity and chronic undernutrition and increase resilience in the *Atsimo Andrefana*, *Atsinanana* and *Vatovavy Fitovinany* regions. The project aims to accomplish this goal with three purposes: (a) undernutrition is prevented, especially during the first 1,000 days, and nutritional status is improved among children under five years of age; (b) households have increased and diversified agriculture production and sustainable economic well-being; and (c) communities' resilience to shocks is enhanced and natural resource degradation is reduced.



Both projects began implementation early in FY 2014, and are approaching the mid-points of their planned Life of Activity (LoA). FFP, ADRA and CRS have been organizing a Joint Mid-Term Review (JMTR) with a team of nine core evaluators. The evaluators include representatives from FFP and the USAID Mission in Madagascar, and representatives from CRS and ADRA. The review team is tasked to review the projects and formulate realistic and achievable recommendations for improving the effectiveness and efficiency of the two projects over the remainder of their implementation. This protocol describes the plans and procedures that will be used to implement the JMTR.

II. JMTR PURPOSE & OBJECTIVES

A. Purpose

The JMTR is a formative review exercise intended to review the quality of implementation of the two projects in producing planned outputs and outcomes, to assess the intended and unintended effects of these outputs, and to examine the progress to formulate recommendations to be implemented in the remaining life of the two projects. These recommendations will be oriented around (a) scaling up effective interventions, (b) modifying interventions to improve effectiveness, (c) suspending interventions that are not effective enough relative to investment, (d) piloting new interventions relevant for targeted impact groups, (e) improving the effectiveness of implementation systems, or (f) improving efficiency in use of resources. The review process will tailor and prioritize recommendations for each project and ensure that they are implementable within the remaining time frame and with the resources available to the two projects. The process will also facilitate the sharing of ideas on good practices between the two projects.

B. Specific Objectives

The objectives of the mid-term review are presented below:

1. Assess the **overall strategy** of each project in terms of its relevance for addressing food insecurity with targeted impact groups, taking into account contextual changes that may have occurred since the projects began implementation. This will entail reviewing the strategies that ensure that the target groups are reached by the projects, reviewing the theories of change, and assessing the hypotheses, risks, and assumptions made during the design of the projects.

Key Overarching Questions. What are the strengths and challenges of the projects' (ADRA/ASOTRY and CRS/Fararano) management/implementation so far? Are the assumptions made in the theory of change that informs program design still valid? What changes have occurred in the context since the projects began implementations that have resulted in new or changed target groups or the need for new types of assistance to address food insecurity. How have the program strategies been designed to put in place the elements needed to contribute to higher-order social change? How effectively has the management responded to management challenges? What lessons can be learned from their management/implementation approach? How should the projects' theories of change and results frameworks be refined or modified?

2. Assess the quality of **project inputs, implementation and outputs** to identify factors that enhance or detract from the efficiency, quality, acceptability, and effectiveness of the activities' implemented and the likelihood that they will contribute to sustained achievement of projects' goals.

Key Overarching Questions. In each technical sector, to what extent have the two projects adhered to the initial technical approach, implementation plan, outputs, and participant targets included in the initial technical narrative? What are the strengths and challenges to the program inputs, implementation of activities and processes, the quality of outputs and

the sustainability of the outcomes achieved? How have problems and deterrents been managed? How well do implementation processes adhere to internationally acceptable technical standards (for sustainable social and behavior change communication, experiential learning or learning-by-doing) and proven approaches, methodology and processes? To what extent good operational practices influence effectiveness and efficiency of project implementation? How effective are the SBC strategies? Does the SBC strategy address critical social determinants of food insecurity, health and nutrition; and target household, community, cultural, environmental, and systems level change, above and beyond individual change? What commercial opportunities have been created to enable beneficiaries to expand engagement in value chains? How could they be improved?

3. Review the level and effectiveness of **coordination and collaboration** with external organizations that are critical to achieve the projects' goals and purposes. This includes actors that provide complementary services necessary to achieve the project outcomes, actors that will provide essential services to sustain the outcomes after the end of the two projects, actors that influence people's access to goods and services, and organizations that promote or impede an "enabling environment".

Key Overarching Questions. What has been the effect of the various collaborative relationships cultivated by the two projects toward enhancing the effectiveness of the project or efficiency in use of resources? How effectively the projects have been taking advantages of the other USG and non USG investments in the same space to achieve cumulative impact? How aligned are the strategies of the projects toward the development strategies of USAID and the GoM? What changes can be made in these collaborative relations to further enhance effectiveness and efficiency?

4. Present, through quantitative data and qualitative information, evidence of **changes**³⁴ (**intended and unintended outcomes**) associated with project interventions and outputs, assess how well the observed changes support the theories of change and logic of the logframe, and identify factors (both internal and external) in the implementation or context that impede or promote the achievement of targeted results.

Key Overarching Questions. What changes do community members and other stakeholders associate with project interventions? Are there signs of early outcomes? Which factors appear to promote the apparent changes, and which have deterred intended changes? How do the changes correspond to those hypothesized by the projects' theory of change and LogFrame? Are some members in the community benefitting from project activities more than others? Are some left out? For some, are project effects negative rather than positive? Madagascar has experienced several shocks during the course of the project to date, how projects have adjusted to these shocks to respond to emerging needs and priorities?

5. Related to **collaborative learning and action**, review systems for capturing and documenting lessons learned and assess the extent to which they are used in project implementation and refining project design, including feedback from the perspective of stakeholders and participants. Assess processes to use evidence including baseline results

³⁴ These changes can occur at the individual, household, community and higher levels, including systemic changes.

and monitoring data for adjusting project strategies. Assess how well the project is seeking out, testing and adapting new ideas and approaches to enhance projects' effectiveness or efficiency.

Key Overarching Questions. How have ASOTRY and Fararano management and technical specialists used data to inform programmatic decisions, referral and follow up? What processes have been instituted to improve data collection and data quality? How has the project improved effectiveness or efficiency as a result of new ideas or approaches brought into the activities? How is information generated by the projects used to inform decision-making? How can this be made more effective?

6. Related to **sustaining project impact**, determine the extent to which outcomes, systems, and services are designed and being implemented to continue after the project ends and assess progress made on implementing sustainability strategies. What activities are being implemented to ensure that the service providers will have continuous access to required resources, capacity strengthening support, creating demand and influencing the motivations of the beneficiaries and service providers, establish and strengthening critical linkages necessary to sustain resources, and sustain capacities, and the external factors that may positively or negatively influence sustainability? Have the projects identified the indicators and planned for a phased transfer of responsibilities yet?

Key Overarching Questions. Have the projects' developed and implemented sustainability strategies? What organizations, services or relationships are required to sustain the outcome changes observed by the review team? Have the projects' identified the outcomes to be sustained, and the necessary services required to sustain these outcomes? Have the projects identified the potential service providers? What are the motivations of the service providers to continue service provisioning after the projects end? What has been done so far to increase the motivation? What would be the motivation of the beneficiaries to receive these services? Have the projects identified the resources and capacity strengthening supports for the service providers? What has the project done to ensure that this motivation does not diminish after the project ends? To what extent are government officials, formal and informal local leaders (whose support and understanding will be critical for continuing program initiatives once the project has ended) involved in project activities and included in ongoing program discussions?

7. Relative to the major **cross-cutting themes** in both projects, determine the appropriateness and effectiveness of support for gender equity in terms of access to, participation in, and benefit from project interventions. Assess the extent to which project interventions target youth, support greater capacities for local governance and address sources of environmental risk.

Key Overarching Questions. How effective are program design and implementation mechanisms in addressing the cross-cutting issues of gender, governance, the environment and targeting of youth (ASOTRY and Fararano)? What (if any) challenges have projects encountered in these areas that may not have been anticipated in the project design, and how have the projects responded? To what extent do project interventions and implementation mechanisms reflect integration of these cross-cutting priorities? What steps have the activities taken to ensure that staff has adequate capacity for addressing these cross-cutting issues? In what ways is the project changing roles, relationships, communication and decision making dynamics among women and men, young and old, in

relationship to food security at the household and community levels? How were the findings and recommendations of the Year 1 gender analysis considered in the program strategy and project activities? What specific changes were made? Have gender gaps and related concerns been addressed adequately? Is the project drawing on the potential of women, men, boys and girls as much as possible?

III. PROJECT DESCRIPTIONS

Brief descriptions of the two projects are provided below. The information that is provided focuses on information about the projects relevant for planning the JMTR, e.g., the types of outputs being produced by each project, the types of participants that will need to be interviewed, and the key partners that will also need to be interviewed. Prior to undertaking the JMTR, team members will review key background documents to understand the theories of change for each project, the approaches that are being used in producing outputs, and the outcomes and impact that are expected from the achievement of outputs. Note that the following section does not provide an exhaustive list of interventions. The review team members must read the project proposals to get a comprehensive understanding about the two projects.

Project background

ADRA ASOTRY³⁵

ADRA, in partnership with Land O'Lakes (LOL) and Association Inter cooperation Madagascar (AIM), both of which have extensive experience in Madagascar and expertise in food security, has been implementing ASOTRY, a five-year program with the goal of *reducing food insecurity and vulnerability among food insecure households and communities in Madagascar*. ASOTRY has been designed with the experience of successes and lessons learned from the SALOHI project in Madagascar, and started its implementation in December 2014. The project is expected to end in September 2019.

ASOTRY targets 32 vulnerable communes of 10 districts in the three regions of Atsimo Andrefana, Hatue Matsiatra and Amoron'i Mania. The project prioritizes and targets the most vulnerable, achieving approximately 75 percent coverage of the population in the 408 fokontany of the targeted communes with highest rates of food insecurity, stunting, and poverty. Specifically, ASOTRY targets women of reproductive age, children under five, subsistence farmers and their communities, with special attention to adolescents and youth, the elderly, and the disabled. Over the five years ASOTRY plans to reach 264,380 direct project participants with an integrated package of nutrition and health activities focusing on pregnant and lactating women and children under 5 year old, agriculture and income generation activities targeting vulnerable households and disaster risk reduction activities at community level. It will also include aspect like environment, gender, governance, socio-organization as cross cutting aspects

³⁵ Lifted from the project proposal

in all the project components. In addition to the three core partners implementing the project, ADRA works with various technical partners, including Dimagi for implementation of CommCare methodology in nutrition and health, Lecofruit, WFP and SMTP³⁶ as partners for farmers groups supported by the project, Tillers International for introduction of adapted farming technology, with UN agencies through the Food Security Clusters, and with 10 government departments at national and decentralized levels to ensure coordination in technical sectors and work towards sustainability of the project impacts.

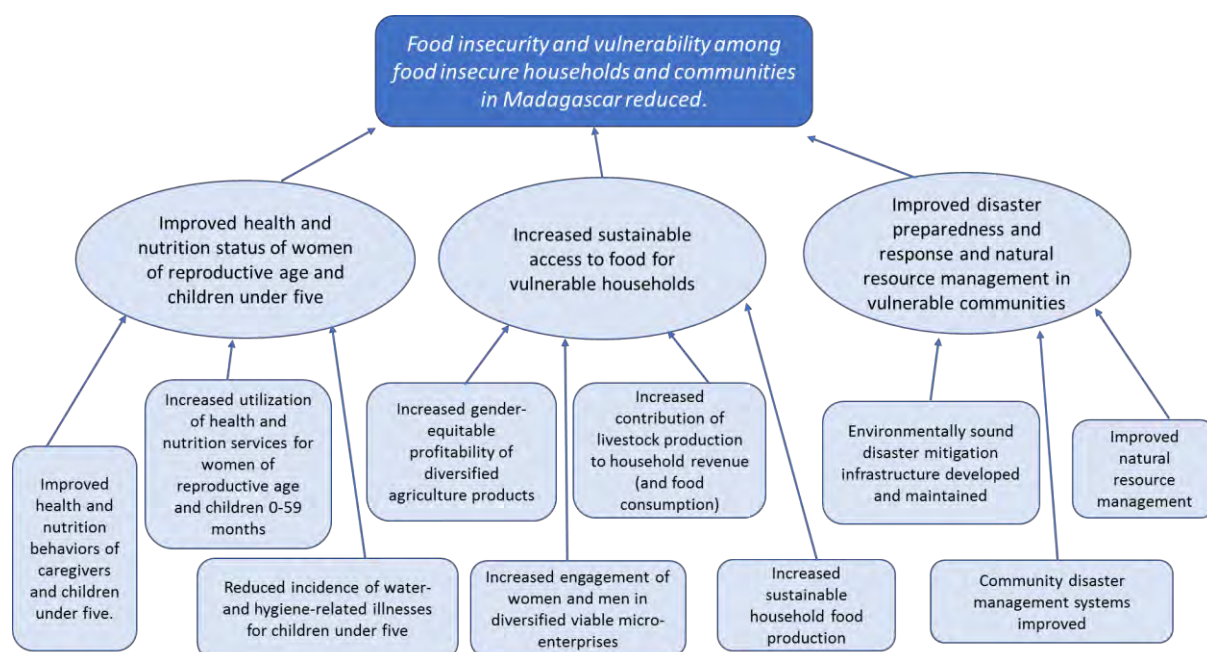
The ASOTRY consortium team includes a central Program Management Unit headed by the Chief of Party and a Deputy Chief of Party, comprising technical lead in Health and Nutrition, Agriculture, Livestock and Livelihoods, Resilience and Infrastructure, Gender and Socio-Organization, Monitoring and Evaluation, Food Commodity Management and Administration and Finances. Each consortium partner have technical specialists in these technical areas while additional specialists in Environment, Behavior Change and Communication, Marketing, Village Savings and Loans, bring in expertise to the whole consortium. The core ADRA team provides support in the areas of finances, human resources and administration, in internal audit and monitoring of food commodity distributions and in MIT. These technical and administrative staff ensures program quality through the development of technical strategies and guides and in monitoring activities, and administrative support and compliance to donor regulations. All three consortium partners also have Health and Nutrition, Agriculture and Livelihoods and Resilience field staff based in communities, and administrative and support staff based in four field offices in Fianarantsoa, Ambositra, Tulear and Bekily, including the M&E team of each partner.

The theory of change that underpins ASOTRY is that households and communities will enjoy sustained food security when:

Sustainably reduce food insecurity and vulnerability among food insecure households and communities in the Amoron'i Mania, Haute Matsiatra, and Atsimo Andrefana regions of Madagascar.	
Utilization	Households consume nutrient rich foods, and practice improved health and nutrition, including WASH and family planning.
Availability	Households' agricultural productivity and livelihoods strategy allow them to produce sufficient food to meet their nutritional needs.
Access	Households and smallholder farmers are connected to the markets and integrated with the profitable value chains;
Stability	Households and communities are resilient to natural and man-made shocks and appropriately manage natural resources valuing the critical roles of both men and women.

³⁶ a conglomerate of 13 Malagasy companies primarily in the production and distribution of agricultural inputs sector

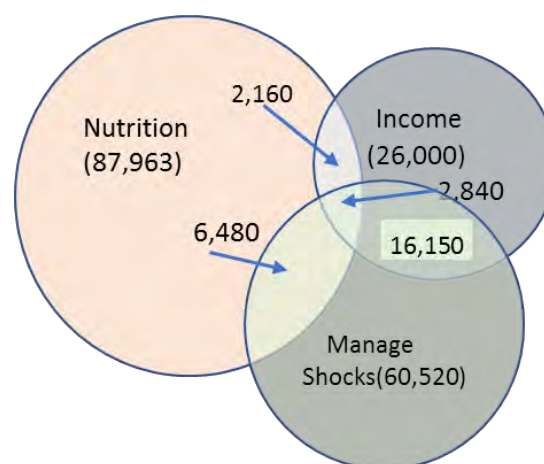
Figure 1: The goal, purposes, and sub-purposes level results framework for the ASOTRY Project.



Availability, Access, and Utilization – How ASOTRY targets interventions

Figure 2: Project participant level integration of services

Approximately 44 percent of the direct participants participate only in purpose I activities. Interventions for purpose I are designed for improving health and nutritional outcomes. Approximately 13 percent of the direct participants participate only in interventions designed to increase access to food while almost 30 percent of the direct participants participate only in activities designed for improved disaster management and natural resource management. Only one percent of direct participants participate in interventions offered by all three purposes. The figure does not show household level integration.



Purpose 1: Health and Nutrition of Women and Children

ASOTRY utilizes three key approaches to tackle the challenges of child malnutrition and illness: *First 1,000 Days*, *Care Groups model*, and *Community Led Total Sanitation (CLTS)*.

- ASOTRY interventions are implemented through the *Community Health Volunteers (CHVs)*, or *Agents Communautaires*. CHVs provide primary care, specifically maternal and child health and nutrition, at the community level. *CoSans* are community health committees comprised of CHVs and managed by *Comité Communal de Développement de la Santé (CCDS)*; *CoSans* are responsible for guiding the implementation of all health activities and ensure technical guidelines are followed at the community level. *CoSans* are involved in the coordination of health and nutrition activities, specifically training, oversight, and management of *Care Groups* and supervision of CHVs. *CoSans* receive additional support and training to undertake these responsibilities and build their capacity for sustainability.
- ASOTRY coordinates and work with the community health centers (*Centre de la Santé à la Base, CSB*), which is the lowest level of formal health facility, and provide referrals for malnourished children for outpatient nutrition recuperation centers for severe malnutrition (*CRENAS*), outpatient nutrition recuperation for moderate malnutrition (*CRENAM*), and intensive nutrition recuperation centers for severe malnutrition (*CRENI*). These children are identified and monitored through Growth Monitoring and Promotion (GMP) and Community Complementary Feeding and Learning (CCFLS) sessions. Additionally, all of ASOTRY's interventions are aligned with the *National Action Plan for Nutrition 2012 – 2015 (PNAN)* as well as the *National Policy for Community Health (PNC)*.
- ASOTRY sensitizes community leaders, including the *Chef de Fokontany*, the 'Tangalamena', religious leaders, predominantly Christian and Muslim in the ASOTRY regions, and other cultural gatekeepers and leaders, such as the *CoSans* and *CCDS*, and improving the service delivery of CHVs and behavior change among caregivers on *nutrition-specific* and *nutrition-sensitive* interventions
- Considering Madagascar is a *SUN (Scaling Up Nutrition)* country, ASOTRY incorporates the *SUN* priorities and provides training of trainers to improve the quality and performance of service providers, primarily *Leader Mothers* and *Community Health Volunteers (CHVs)*, and the *Chef du CSB* (head of the health facility, typically a physician). The training is based on the life cycle from adolescence, women of reproductive age, pregnancy, infants and children with emphasis on conception to two years of age. The training is intended to equip master trainers with the basic theory and hands-on practice to train the CHVs and social mobilizers (*Leader Mothers*) in a community-based *Essential Nutrition and Hygiene Actions (ENA/EHA)* and *Social Behavior Change Communication (SBCC)* approach. Technical areas include adolescent health, maternal dietary supplementation, maternal health (including ante-natal care), breastfeeding and

complementary feeding practices, dietary diversification, disease prevention and management and water, family planning counseling, sanitation and hygiene.

- To increase *male involvement*, ASOTRYs *Techniciens de la Santé et de la Nutrition* (TSNs) facilitate monthly male-only meetings. Through these meetings, TSNs sensitize males on topics that support the messages delivered through Care Groups: nutritional needs of their pregnant or breastfeeding wives, nutritional needs of children, the importance of male involvement in child care, knowing when to seek health care, supporting their pregnant wives to seek antenatal and post-natal care and have a skilled attendant at birth, and family planning. The TSNs also identify *Leader Fathers* who take on the role of leading the care group meetings and supporting and encouraging the fathers in the community to take an active role in the health and nutrition of their households.
- To reinforce the messages related to Essential Nutrition Actions, C-IMCI, WASH, and Family Planning, ASOTRY uses radio campaigns that broadcast one message at a time for twelve weeks in each of the communities, working through the full cycle of messages, and through community video nights. Videos also deliver messages and include demonstrations and other visual aids that capture the attention of all ages. Activities to promote agriculture, WASH and Village Saving and Loans are leveraged to serve as delivery platforms for essential nutrition actions to increase nutrition impact. Behavior change and messaging around ENA, EHA, and maternal health are being delivered through GMP, Farmer Field Schools, Village Savings and Loan Associations, CLTS, and CCFLS as well as media (radio) at the community level.

Purpose 2: Access to Food for Vulnerable Households

- ASOTRY uses a modified Farmer Field School (FFS) approach to enhance the effectiveness of project extension and increase technology adoption. This tripartite smallholder extension model approach combines FFS with Lead Farmer (LF) and Farmer to Farmer approaches (F2F+I). This approach provides the intensiveness of quality training, delivered along the timing of the agricultural and phenological cycle and demonstrated through Leader Farmer demonstration plots; greater capacity to follow-up on the farming activities of FFS members through LF; and expanded outreach of project impact through the F2F+I. This hybrid approach addresses key findings from SALOHI's final evaluation, specifically the low capacity of LFs to deliver training to FFS groups, lack of complementarity of theoretical and practical sessions done in the same day and limited monitoring of farmer's in their individual plots. Using this hybrid approach ASOTRY will train 32,000 farmers. Each FFS Group works directly with an ASOTRY Agriculture and Livestock Agent (ALA), each of whom who will train 12-20 groups (300-450 farmers).
- In ASOTRY, lead farmers facilitate group dynamics, reminding farmers of activities; and conducting spot checks on individual farmers. Every farmer is required to train a neighboring farmer in the same topics using the F2F+I approach. Through the FFS, ASOTRY promotes seven target crops: rice, cassava, maize, soybeans, beans, peanuts, and sweet potatoes. This mix of staple and cash crops was selected based on ADRA's value chain study conducted in the target area as well as their nutritional value for household consumption. The ASOTRY intervention area includes several agro-climatic zones, and within them ADRA plans to select the most

appropriate crops based on suitability for agro-climatic conditions of the zones; nutritional value; and marketing potential.

- ASOTRY plans to select 4,000 farmers, based on farmers' willingness and ASOTRY resources, to engage in *agro-forestry production* combining multi-purpose trees and annual crops. This intervention will benefit farmers through better use of soil, explore mutual benefits trees and plants have for each other; use the benefits of trees to combat erosion; improve soil fertility; and ultimately contribute to the increasing crop yields. The project will train these farmers on reforestation, soil management, and NRM.
- ASOTRY trains farmers on the use of *system of rice intensification (SRI/SRA)*, a successful strategy used in SALOHI and more widely in Madagascar (which uses 30 percent less water; use of proper soil water catchment/retention practices) for vegetable gardening.
- ASOTRY promotes *climate smart agricultural technologies*, which are a group of technologies including a variety of seeds (drought-resistant); soil treatment techniques (using tools from Tillers that have limited disruption to the soil) and introduction to organic matter. The climate smart agriculture technologies also focus on natural resource management, demonstrating the benefits of climate smart technologies on both production and disaster risk reduction.
- ASOTRY plans to link 8,000 farmers to Agriculture Service Centers (CSA), an existing structure of the Ministry of Agriculture, for sustainable agriculture extension services.
- ASOTRY plans to establish 40 seed production groups (20 members per group) to produce high quality seeds. ASOTRY's two-pronged approach to develop local improved seed and demand is an innovative approach in Madagascar, but has been successfully implemented in DRC. ASOTRY incentivizes farmers by providing a subsidy to buy improved seeds from local seed producers. Local seed producers will be established as independent commercial enterprises and will be linked to farmers who will purchase subsidized seeds, also helping to generate a market for LSPs as they grow their business.
- ASOTRY provides subsidy to address failures in the input markets, and target the most constrained farmers. The gradual subsidy will last for three years (the life of the FFS), and make use of vouchers that require cost sharing from farmers. This system will also boost seed production by building capacity; assist LSPs invest in seed production; and increase the availability of locally produced seeds to improve farmers' access to seeds. ASOTRY will develop up to 200 ha for seed production.
- ASOTRY plans to equip 5,800 farmers to use efficient and low-soil disturbance equipment. Through an innovative partnership with Tillers International, ASOTRY will build, test and adapt low soil disturbance and transport equipment. The K2 Toolbar which will be shared on a rotational basis by FFS members. FFS members will receive a 50 percent subsidy on the purchase of soil preparation equipment and carts to enhance labor productivity (Cost: Cart, \$500; Plow, \$50). To assist farmers to reduce transaction costs (such as transportation, handling, packaging, time farmers take to sale produce, storage, losses); ASOTRY will enable these farmers to participate in

joint input purchase and output selling.

- ASOTRY helps farmers to see their farms as a business through FFS training to increase efficiency and benefit from sales of increased food surplus. Farmers are introduced to a series of tools and skills that help manage farms as a business. Farming as a business training includes such topics as: crop selection and specialization; production planning; land configuration and crop rotation; treatment of crop diseases; recordkeeping; use of crop-specific monitoring cards; and managing production risks to contribute of reducing the cost of seeds.
- In addition to increasing the crop yields and qualities through improved practices, knowledge, and inputs, ASOTRY trains farmers in (1) improved harvest and post-harvest practices; (2) engaging farmers in processing opportunities; and (3) training from potential buyers on market standards.
- ADRA implements post-harvest practice interventions through ASOTRYs FFS training curriculum. The curriculum includes a specific module dedicated to harvest, post-harvest, handling and storage.
- Additionally, post-harvest activities are being implemented through FBAs and ACCs. Equipment (such as drying, hulling and grading) and storage facilities are provided to FBA groups to properly store and handle products.
- ASOTRY assists 3,600 male/female farmers to increase the value of their products by engaging in agriculture processing opportunities. ASOTRY recognizes the following potential processing opportunities: peanut oil and peanut paste (for animal and human feeding) extraction; soy powder; and rice chalk for animal feeding and composting.
- ASOTRY trains 5,300 women and men on improved production for zebu, sheep, goats, poultry, fish, and beekeeping. ASOTRY plans to train Agriculture and Livestock Agents (ALA), through training-of -trainers and monitor CLWs. Livelihood agents train 105 CLWs to carry out trainings and provide services to livestock producers. ASOTRY plans to improve husbandry practices; increase access to veterinary support through community livestock workers; increase access to feed and fodder resources; and make animal production available. ASOTRY develops linkages between 4,200 livestock producers and local providers of goods and services; and facilitate a linkage of service and input providers to participate.
- ASOTRY plans to establish 192 women groups for homestead gardening. Agriculture agents train 2,304 LM (from Purpose 1) in vegetable and fruit production and homestead garden techniques. ASOTRYs homestead gardening training curriculum includes theory and practice on composting and organic fertilization; pest management; production of diversified species; mulching; watering and weeding; increasing efficient use of resources including soil, water, space, and seeds; and raised bed gardens. The homestead gardening activities target leader mothers.
- ASOTRY supports 60 primary schools with tools and seeds needed to set-up gardens for two consecutive cycles. Schools selected must invest in the setup of the gardens.

- ASOTRYs strategy is to increase household production of vegetables and fruits through establishing 300 seedling centers. Seedling centers provide LMs (seed producers) with additional income and provide the community with a sustainable source of seedlings. ALAs will train LMs on soil preparation; transplanting; fertilization; weeding; pest control; composting and harvest and post-harvest practices. ASOTRY will sponsor 100 percent of the cost of seeds, tools, and greenhouses needed in seedling centers for two cycles.

Purpose 3: Disaster Risk Management and Natural Resources

- ASOTRY supports construction and maintenance of environmentally sound disaster mitigation infrastructure with an aim to increase community capacity to prepare for, respond to, and recover from disasters; and strengthen community infrastructure management structures.
- ASOTRY plans to rehabilitate 380 kilometers of road. This will contribute to the success and sustainability of purpose 1 and 2. The Disaster Prevention and Mitigation Plans for the communities will help identify the areas and infrastructure to be rehabilitated or constructed as well as the management plan, based on where the highest impact can be made and to increase community resilience. The Disaster Risk Management Committees and Infrastructure Management Association(s) for the community will be trained in the appropriate maintenance and management.
- ASOTRY plans to construct or rehabilitate 58 irrigation systems. Irrigation system works installation will be closely linked with component 2, which works with farmers to understand the role and importance of irrigation in livestock and agriculture production.
- ASOTRY plans to rehabilitate 64 water points to provide improved access to clean drinking water for 60,000 people, focusing on households with children under five.
- ASOTRY builds the capacity of Water User Associations (WUA) to manage and maintain the infrastructures built and improved by the project. The implementation of these WUA will comply with Malagasy law and these will be linked to DRDR (Regional Directorate of Rural Development) so they can inherit these WUAs and can monitor their activities periodically after project interventions are phased out.
- ASOTRY plans to *implement gender inclusive community infrastructure management structures* through the creation of 154 (12 members each) Infrastructure Management Associations, which were successful in SALOHI. This strategy will strengthen community capacity and increase the likelihood of sustainability of rehabilitated and new infrastructure. ASOTRY will develop a fee for use system for road users. The fees are collected at the point of use, specifically during rain storms when the roads are more likely to be damaged. Additionally, advocacy and sensitization sessions are carried out with the communities for a participatory allocation of a portion of community taxes, as was done under SALOHI. The actual maintenance and management work will be contributed by community members, through routine maintenance days schedule by the municipality.
- ASOTRY develops and strengthen community mitigation, preparedness and response structures by creating or strengthening 520 Disaster Risk Management Committees (DRMC); completing

1,040 community disaster preparedness simulations; and developing 64 community early warning systems. In accordance with the government policies and approaches, DRMCs are created at the commune and *fokontany* levels, are a national policy of the BNGRC that was used effectively in SALOHI as the main community structure for resilience, early warning, and natural resource management. DRMC members are elected by the community and include representatives from other components, specifically CHVs, Leader Mothers, Lead Farmers, and VSLA members. To ensure female perspectives are properly represented in disaster management, ASOTRY will require that DRMCs are composed of a minimum of 30 percent women. ASOTRY provides standard bylaws for these committees that can be adapted to each community.

- ASOTRY assists DRMCs to create Disaster Preparedness and Mitigation Plans (DPMP) that outline actions to be taken before, during, and after a disaster and are driven from a natural resource management paradigm. Plans include components concerning communication, natural resource management, early warning systems, and infrastructure management. DPMPs identify risks and necessary infrastructure to protect the environment and communities, to mitigate against natural disasters such as flooding and landslides, and to support safe water points and irrigation systems.
- DRMC members participate in simulation exercises of specific, contextualized disasters. ASOTRY facilitates exchange visits between committees to provide the opportunity to share knowledge and experiences; learn new approaches; and reinforce their capacity.
- ASOTRY uses the *Système de Suivi de la Sécurité Alimentaire (SSSA)*, a *community-based food security early warning system*. SSSA trains communities to establish food security monitoring systems. DRMC members are responsible for collecting food security data at regular intervals. SSSA is linked with the FAO-managed *Système d'Information sur la Sécurité Alimentaire et la Vulnérabilité (SISAV)*. ASOTRY also provides data to the regional FEWS NET system, based in South Africa, to support the development of that system.
- ASOTRY uses a set of indicators to identify a crisis or risk of crisis, which will be the initial stage of a potential emergency response within the ASOTRY program.

Cross-Cutting Priorities

- **Governance:** ASOTRY provides training, knowledge, and mentoring to all existing and new committees and entities in the target area. The training includes good governance, leadership, management (including financial management), establishing necessary rules or policies, and how to work with the communities.
- **Gender:** ADRA developed strategies and action plans, and incorporated activities and trainings that address the gender disparities and overcome barriers that exclude both men and women in activities.
- *Access to and control over resources:* ASOTRY monitors participation of women in various project activities including VSLAs and the effects on women's control over resources as well as the impact of providing access to financial services to both men and women, with a focus on noting where the money is allocated and spent.

- *Women's Time*: With responsibilities potentially increasing through the program, ASOTRY will provide ways of saving time and labor, including improved agricultural practices and introduction of technologies to reduce women's work load.
- *Gender-based Violence (GBV)*: ASOTRY closely monitors whether the project promoted initiatives directly or indirectly result in increased levels of GBV. ASOTRY incorporates messages in its BCC sessions to decrease GBV.
- *Equitable participation*: ASOTRY facilitates equitable participation by men, women, boys, and girls in all technical interventions. In particular, for health and nutrition interventions, ASOTRY targets men, fathers, or other male caregivers with behavior change messaging and demonstrations in addition to mothers and female caregivers. In agriculture, ASOTRY's interventions are modified and adapted for females, such as the K2 Toolbar. ASOTRY provides literacy and numeracy training to men and women through Functional Adult Literacy and linkages to local schools and the CCDS.
- ASOTRY builds leadership capacity of all community members to analyze problems, provide recommendations, and make decisions in a group setting, particularly for women in mixed-sex groups. Disaster preparedness interventions, activities early warning and disaster preparedness and response will intentionally include women, as they are primarily responsible for caring for the household, children, the elderly, and the disabled.

CRS Fararano³⁷

Based on an analysis of food insecurity, undernutrition, and vulnerability of the population, the CRS Fararano program targets three regions: *Atsinanana*, *Vatovavy Fitovinany*, and *Atsimo Andrefana*. In each region the project activities are being implemented by a different partner.

CRS and partner *Organe de Développement du Diocèse de Toamasina (ODDIT)* implements Fararano project in 12 *fokontanies* in 12 communes of the Atsinanana Region. Forty-two *fokontanies* overlap with the FELANA (predecessor of SALOHI) project. In SALOHI, ODDIT implemented all health and nutrition activities in the Atsinanana region for CARE.

The Fararano Project targets 461 *fokontany* in 16 communes of the Vatovavy Fitovinany Region. *Bureau du Développement de l'Ecar de Mananjary (BDEM)* implements the Fararano program activities in this region. BDEM reforested 400 hectares of land and rehabilitated irrigation systems to bring 420 hectares of rice fields under improved water management in SALOHI.

Twenty-two *fokontanies* targeted by Fararano overlap with the former USAID/FFP funded SALOHI project in Vatovavy Fitovinany. Fararano provides complementary activities to continue to support the sustainability of previous interventions and continued improvement of health, nutrition, agriculture, and money management behaviors promoted through SALOHI. Fararano will tailor its approach in these areas and support the communities for only the first three years

³⁷Lifted from the Project Proposal

of the project.

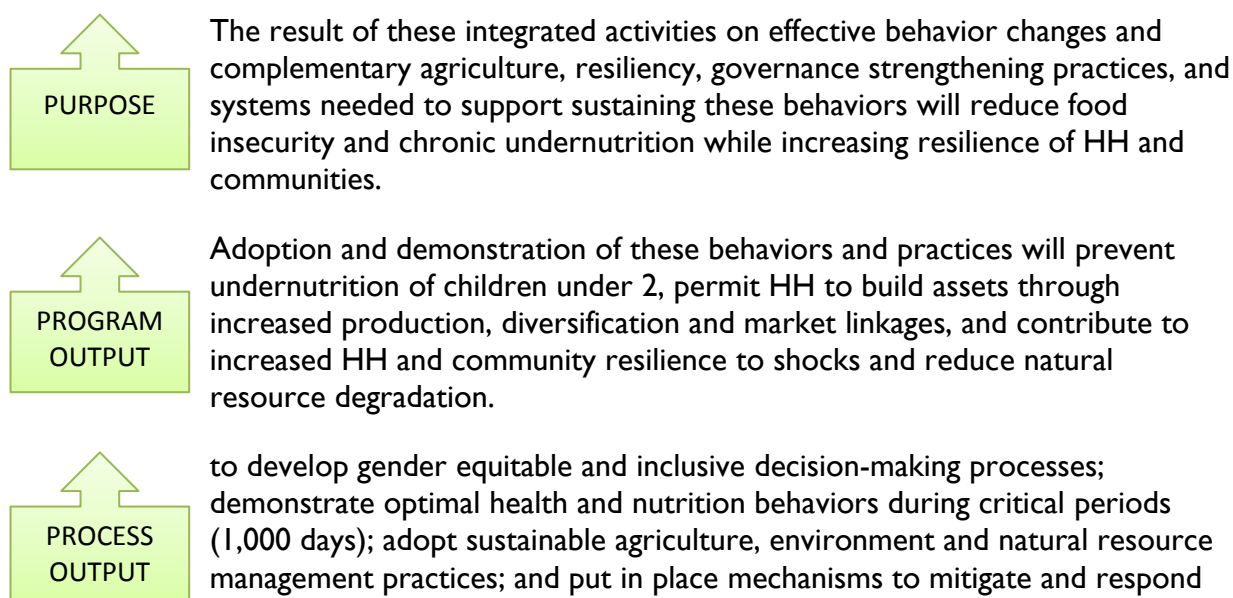
The *Fararano* project targets 169 fokontany in the Atsimo Andrefana Region. *Caritas Morombe* implements *Fararano* activities in 5 communes located in the Morombe district and *Conseil Diocésain de Développement (CDD)* implements *Fararano* program activities in 9 communes.

Fararano targets all “mother child pairs” and their household, extremely vulnerable HH (i.e. female headed, disabled, land restricted) and other vulnerable small scale producers and youth for a total of 72,800 households (approximately 364,000 people) in 49 Communes with an integrated package of activities to promote, produce and protect food security and nutrition while building resilience.

To leverage key technical expertise and research capacity, CRS works with several technical resource partners including NCBA CLUSA, ICRAF, No Strings, J&P Commissions and Tufts University. *Fararano* has established partnerships with private companies AgriVet and Guanomad to provide additional inputs and Sandandrano and Bushproof that will work with private enterprises to manage water infrastructure. Finally, to strengthen activities targeting Gender and youth, *Fararano* works with the SiMIRALENTA gender equity network and the *Federation des Scouts*. CRS plans to progressively transfer ownership of the program’s activities to partners, community organizations, and the private sector over the five year program.

CRS established a program management team (PMT) coordinated by the Chief of Party (CoP) with rotating locations and rotating leads. Members of the PMT include: the CoP, DCoP, Team Leads (Nutrition, Livelihoods, and Community), the MEAL and Commodity Managers, the SBCC, and Gender Specialists, PC, NCBA CLUSA Value Chain Specialist, Finance Manager, and 4 IP Program Managers. *Fararano* has a full time Gender Specialist, a central Environmental Specialist, and an NRM Specialist.

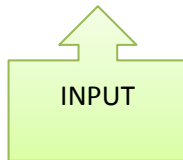
The *Fararano* theory of change is based on the following analysis that outlines elements leading to the development of the theory of change and accompanying interventions and platforms:



to shocks.

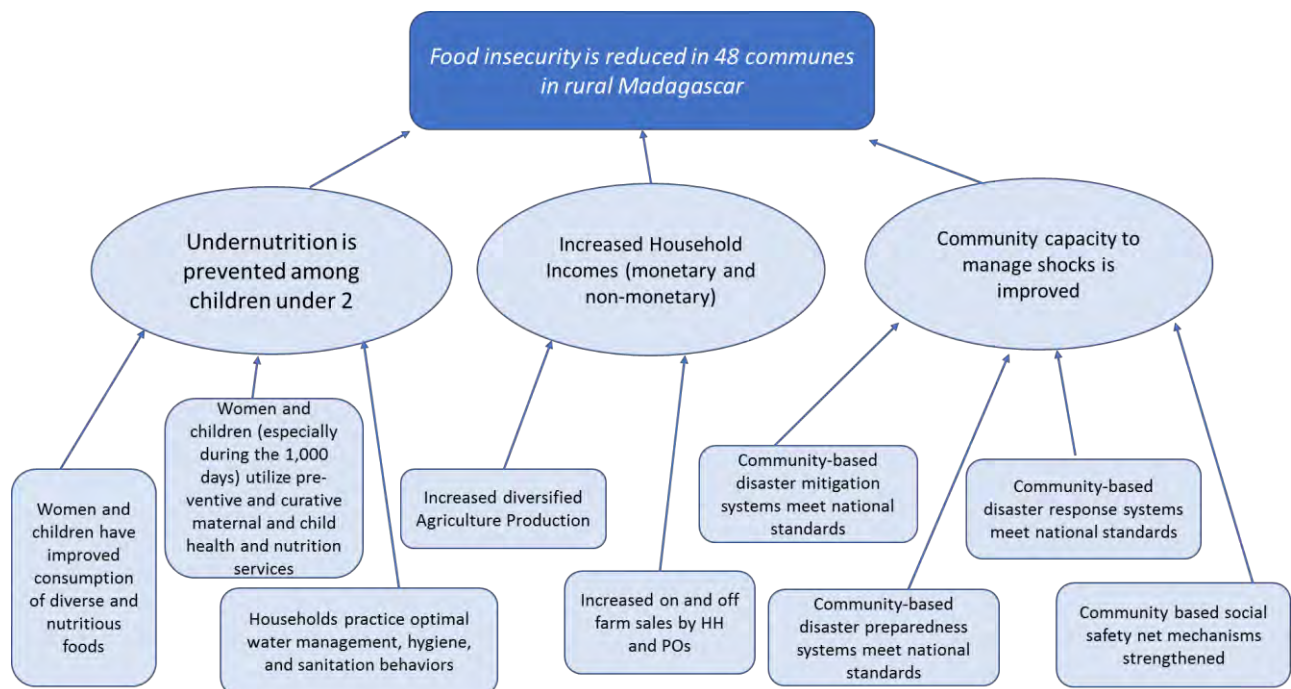


then they will be able to encourage, train and support HH and community members to actively participate in and acquire an integrated set of knowledge and skills encouraging effective social and behavior change.



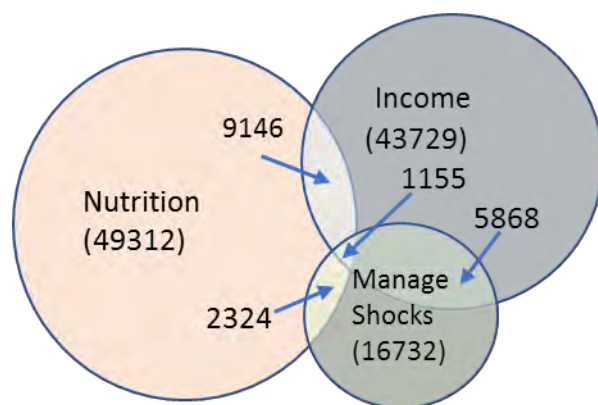
If community based agriculture, nutrition and service providers and structures have the appropriate (context and gender sensitive) and necessary skills, resources, motivation and linkages at-hand (building on local knowledge, lessons learned and best practices with technical support from CRS and IPs),

Figure 3: The goal, purposes, and sub-purposes level results framework for Fararano Project.



Availability, Access, and Utilization – How *Fararano* targets interventions

Figure 4: Project participant level integration of services



A little over 38 percent of the direct project participants participate only in interventions designed to improve maternal and child health, and nutrition. Thirty-four percent of the direct participants participate only in activities that will facilitate on and or off farm income generation, and 13 percent of direct participants participate in activities designed to enhance community capacity to better manage shocks. Less than one percent of the participants participate in interventions cover all three purposes.

Purpose 1: Undernutrition prevented (1,000 days) and nutritional status improved (under five)

- *Fararano* implements 1,000 days approach. While it provides a conditional supplementary ration to all women and children during this period to increase the direct intake of quality foods, it plans to provide emphasis on gender sensitive social and behavior change communication (SBCC) integrated with production and community based resiliency to improve income earning skills and resources necessary to sustain key nutrition behaviors. It uses Care Group approach.
- The SBC sessions designed to promote the seven ENA with a focus on 4 that have low and/or decreasing adoption in Madagascar, require minimal resources and can have the most impact on women's and children's nutritional status. Messages on the intake of iron, folic acid, vitamin A and iodine are integrated into LM curriculum related to maternal and child feeding and is part of standard ONN curriculum provided to all CHVs. Considering the importance of healthy timing and spacing of pregnancies on nutrition outcomes, lessons on the optimal nutrition of women are included in Care Group curriculum.
- In addition to basic skills around health and nutrition, *Fararano* works with the *miranjaka* who will integrate sessions on conflict resolution and joint decision making especially in regard to child care and nutrition and communication skills to improve communication among family members.
- *Fararano* engages men in the discussions during LM home visits and with Lead Farmers (LF) understanding that decisions around the issues require joint efforts. Since most information on family planning methods for men (15%) and women (13%) are received via the radio, *Fararano* takes advantage of local radios to produce messages with local users and supporters (men and women) who can share their experiences.

- Building on SALOHI's experience with modified *Trials for Improved Practices* (TIPS) methodology introduced and tested in collaboration with USAID/ TOPS *Fararano* will focus on small doable actions related to Frequency, Amount, Density/Quantity, Utilization, Active Feeding and Hygiene (FADUAH). The modified TIPS approach is integrated into the initial counseling trainings with field practice led by field staff with LMs. LMs will also be provided job-aids (counseling cards, posters, flip-charts) to use during home visits to promote adoption and sustainability of behaviors related to ENA.
- The project designed its food ration program strategy to transition from program rations (CSB+ and Vegetable Oil) to local foods via an innovative cash voucher scheme to phase out, allowing households to self-finance purchases of diverse and quality foods for the household, specifically for women and children during the first 1,000 days. *Fararano* combines the MCH rationing with *Community Led Complementary Feeding and Learning Sessions* (CCFLS) sessions that correlates with seasonal variations in food availability. It provides protective family rations only during the lean season due to decreased food availability and accessibility during this time and based on the current caloric gap per person.
- *Fararano* uses CCFLS to promote the use of locally-produced high-nutrient-value-crops (and the FFP ration) and recipes alongside techniques for active feeding, proper preparation, preservation and gardening techniques to improve dietary diversity and quality of target groups. CRS targets two major seasons: 1) harvest season to provide/share recipes on how to use available foods which are often abundant during this time, and 2) end of harvest season to provide/share techniques on preserving foods (pickling, fermenting, drying) throughout the hunger season.
- The CHVs organize *cooking demonstrations* at a central community site in line with ONNs PNNC strategy. *Fararano* trains and support CHV in a community location to lead a cooking demonstration once per month. *Fararano* produced a video to demonstrate *cooking* to facilitate community dialogue. The program identifies 1-2 LM or CHV (with at least 1 father) per region who are also seen as good cooks, have healthy children and are dynamic to star in the short productions. These video sessions are organized by project staff and community leaders on a rotating basis in each *fokontany*. These videos will be shown in conjunction with puppet videos through a mobile unit.
- The project plans to test and scale up an innovative fresh food voucher approach for children between the ages of 18-24 months. This will lend to 6 months of food vouchers per MCP and transition from the FFP food ration to local foods. *Fararano* staff and community members identify a number of local vendors who carry a set of pre-approved quality products based on local recipes and can be purchased using a monthly voucher. The project works with vendors who are registered and reimbursed for barcoded vouchers via mobile money mechanisms. These activities planned to be started in FY 15 (Y2) to begin the process of developing the voucher system and ensure that the system is in place before the first cohort reaches the 18 month mark. CRS will then use private resources to finance vouchers in Y3 and will work with Tufts University and a local research organization, PENSER, to conduct operational research to assess HH choices, cost-efficiency and its impact on dietary behaviors nine months after the start of the program.
- *Fararano* focuses on three primary approaches to improve HH production techniques and facilitate

access to diverse nutrient-rich foods at the HH and community levels: 1) HH members with women and children within the 1,000 days period are encouraged to participate in SILC activities and LF demonstrations to learn new agricultural techniques; 2) when LF production techniques are not in line with CG priorities, training are organized by field staff for specific techniques identified by the CGs including a start-up supply to be managed by the LM (including small animals such as chickens and rabbits) to be used for the group in a communal garden, individual plots or via a rotational mechanism (for animals); and 3) a pilot Village Model Garden (VMG) is developed in 8 *fokontany* starting in Y2 (and will scale up to 40 *fokontany* in Y3) where a LM-Gardener (LM-G) with land in the community are identified, trained and supplied with nutrition sensitive inputs for gardening and small animal production on her own land.

- LMs conduct home visits covering fewer households and focusing on counseling and support to mothers and children (within 1,000 day window) on nutrition focused topics. Lead Mothers work to increase the demand for services at both the community level –strengthening linkages with USAID/MIKOLO and GoM CHV— and facility level – through linkages between LM, CHV and CSB. Promoters work with CHVs (which are 2-3/commune) to build capacity and standardize messaging on specific topics, strengthening their ability to mentor Lead Mothers (who are all part of the Care Group). CRS closely work with Ministry of Health and ONN to ensure that LMs are not built as a stand-alone unit, but rather as a complementary structure that can intensify the implementation of nutrition and health interventions within the scope of the PNAN II and the PNNC.
- In collaboration with UNICEF and USAID/MIKOLO, *Fararano* works with the GoM to update national policies in line with global scientific evidence and best practices to then roll-out for improvement of quality at health facilities. *Fararano* understands that the CSB still require significant investment to improve infrastructure; obtain necessary equipment and medications; and improve overall human resource capacities. As the CSB's play a critical role in providing support to CHV and Lead Mothers as well as ensuring that information is consolidated and transmitted to the District, *Fararano* works closely with USAID/Mikolo to build the capacity of CSB health personnel to strengthen their prevention and treatment services, with a focus on nutrition.
- *Fararano* supports the MoH activities and work closely with CHV, LM and other program actors (USAID/Mikolo peer educators, CNA) to identify, refer and follow up on severely acute malnutrition cases requiring community or facility based services. Based on current protocol, ONN and MoH work together on moderate (MAM) and severe acute malnutrition (SAM) community based treatment (i.e., ONN identifies and refers cases, MoH manages treatment, ONN supports follow-up post-treatment via home visits).
- The project developed a *self-financing* mechanism with water infrastructure using a Public Private Partnership (PPP) approach to improve overall access to water and sanitation resources resulting in phase out of project support. Areas will be prioritized where access to potable water remains a problem, especially in Vatovavy Fitovinany where less than 20% has access to clean water.
- The project plans to rehabilitate or construct *four Gravity Flow Water Supply Systems (GFWSS)* that capture and distribute surface water from large watersheds with standing forests. In special circumstances a pumping-storage-distribution scheme designed to extract and distribute groundwater. All water distributed by GFWSS will be treated on-site with chlorine and will meet

or exceed national quality standards for potable water. *Fararano* will not support the construction of entire GFWSS systems (for populations > 3,000 people), rather will work with the private sector and communities to expand or rehabilitate existing systems.

- *Fararano* plans to construct or rehabilitate 20 monoblocks. These are single structures designed for multi-purpose use by public that include toilets and showers for men and women, as well as laundry facilities. The construction and location of monoblocks will take into account the distance and access to these facilities to ensure that women's and girls' workloads, distances to travel and safety are prioritized. Monoblock construction will be cost shared with private entrepreneurs who will manage the service as part of the GFWSS.
- The project plans to install Canzee wells. The project used a more conservative ratio (200 people per pump) in estimating the number of wells compared to what the Madagascar Government recommends. In installing deeper wells, it plans to use two government approved hand pumps. Canzee pump is a water lifting technology used in combination with manual drilling. Both pumps are manufactured locally in Madagascar and approved in the national procedures manual.

Purpose 2: Households have increased and diversified agriculture production and sustainable economic well being

- *Fararano* implements a modified nutrition sensitive approach called the *Diversity for Nutrition and Enhanced Resilience* (DiNER) fair to allow vulnerable female and male farmers to access nutritious (fruit, vegetable, orange fleshed sweet potato) or staple (rice, corn, cassava) food seeds, saplings and cuttings; organic fertilizer and tools; and veterinary inputs (chicks). A total of 11,000 HH will receive one-time barcoded vouchers in Y2 (between \$10-15/HH) and participate in a total of 44 DiNER fairs (1/Commune). LM's, LM-G and LF will also receive vouchers for a one time start-up kit in Y2 to promote production activities.
- It promotes the five SMART skills through the SILC approach. The SILC approach builds skills on group management; knowledge on savings, loans, reimbursement, benefits; increased access to credit (through the internal lending process); but also it provided emergency funds in times of need, increased social cohesion and provided skills on numeracy, accountability and discipline. A new 3 month add-on to the existing SMART skill #2 modules will strengthen skills around financial education.
- *Fararano* works with households to select crops that may be best used and could provide the most food for household use and/or sale. To support this process, and in line with the Ministry's interest in diversification and intensification, *Fararano* applies CRS's "whole farm – whole family" approach to food and nutrition security.
- The project uses Lead Farmers (LF) approach. The LFs play an important role in creating linkages between the community and the CSA, which is the government entity at the commune level providing resources for farmers. To sustain the LF approach and ensure that new techniques are rolled out and that knowledge is transferred across community lines—and also aligned with the *Fararano* Exit Strategy— LFs receive project certification and are registered at the CSA when s/he demonstrates the capacity to continue supporting farmers based on 4

criteria: 1) adequate technical knowledge and skills on improved practices they are promoting; 2) sufficient access to resources required to continue promotion and adoption of new techniques; 3) motivation needed to continue promotion and adoption; and 4) partnerships to support continued promotion and adoption.

- *Fararano* uses two primary approaches to strengthen livestock, aquaculture and other production techniques: 1) introduction, demonstration and adoption of new techniques via LF if these specific production areas are prioritized, and 2) improved veterinary inputs and services via collaboration with other partners and a network of PiSP linked to the private sector. CRS and partners plan to train 44 community (1/Commune) PiSP (primarily boys and girls 18-24 years of age) on vaccinations and basic remedies for major animal diseases, and then will be linked to regionally certified veterinarians to obtain a supply of materials and/or services to be provided on fee-basis to farmers in the target areas.
- The project prioritizes three types of hydro-agricultural infrastructure depending on the region: 1) small scale irrigation systems diverting water from sources or rivers; 2) small dams to reduce flooding and/or hold water for irrigation or linked to aquaculture; and 3) drainage systems. Approximately 26,000 HH will be engaged in FFA activities during the dry season. FFA daily rations are in line with FAFSA II recommendations and best practices to reach the most vulnerable and contribute to dietary quality and diversity during the lean season.
- *Fararano* works with HH and buyers to extend the reach of value chains into rural communities. Any farmer with excess production and interest can participate. The value chain approach integrates a nutrition-sensitive lens to determine potential areas to improve the nutritional value of the product, the use of incomes to purchase more nutritious foods and to mitigate the potential negative effects such as overselling HH production to the detriment of women's and children's nutrition. *Fararano* supports a total of 360 Producer Organizations to identify new market opportunities, develop their own business plans and have strong relationships with private sector by the end of the project to facilitate sustainability and gradual phase out of project support.
- It plans to provide SMART³⁸ skills training to approximately 24,000 members via 1,317 (3 x 439 *fokontany*) groups. As each group places differently along the vulnerability spectrum (*Recover-Build-Grow*), trainings are conducted only when members are ready.
- *Fararano facilitates linkages with buyers*. The lead farmers play an active role as partners, providing stable markets for producers, carrying out training as necessary, and facilitating access to value chain financing. The project also facilitates *linkages with input providers*. The project plans to build demand for inputs (seeds, tools, natural fertilizers and pesticides, storage and processing technologies) and services (tillage, veterinary) through CPOs, which have a larger production

³⁸ *Selecting products, analyzing markets, calculating costs, incomes and profits for a new agro-enterprise, working with business development services, building business plans, collective marketing; and reviewing actual costs, income and profits at the end of the season*

base to incentivize dealers.

- The project facilitates linkages with financial service providers. The project facilitates contact with Microfinance Institutions (MFI) for larger CPOs looking to access credit to expand their business. NCBA CLUSA works with existing MFIs to provide basic training in loan application directly to producers. Training on basic numeracy is integrated into SILC, and additional training on literacy or other basic skills are considered depending on group needs. Where relevant, training on mobile banking services will be conducted with considerations on male and female access and control issues expanded upon in Gender Analysis.
- Road rehabilitation activities using FFA target vulnerable HH (with members able to work) just prior to the on-set of the lean season to allow for families to have additional resources available and stocked away in preparation for this period. Maintenance and sustainability of roads will be led by IMA members with increased governance capacity.

Purpose 3: Communities' resilience to shocks is enhanced and natural resource degradation is reduced

- The National Bureau for Risk and Disaster Management (BNGRC) has established Risk and Disaster Management committees at district, commune, and *fokontany* levels (via VDC) whose mandate is to develop measures to prevent/mitigate, improve preparedness plans and respond to disasters.³⁹ , *Fararano* plans to align its activities with the BNGRC.
- To strengthen community based VDC-led GRC capacities and strategies, *Fararano* facilitates integrating simplified image-based plans and conduct participatory simulations into training and coaching activities led by FA. *Fararano* coordinates activities with other partners at the national (BNGRC and civil society platforms), regional (WFP and ACF in southwest, ECHO funded DIPECHO activities in Vatovavy Fitovinany) and commune levels through participation in cluster meetings, and regular communication.
- *Fararano* FAs train and support VDC to develop disaster risk reduction (DRR) and emergency preparedness plans that are aligned with national norms, validated by the CCGRC and in line with (or will inform) commune level plans.
- The project works with *No Strings*⁴⁰ using puppets with children ages 6-14 to broadcast-quality puppet films – *Tales of Disasters* (short 10-15 minute films about cyclones and floods⁴¹) produced and translated in Malagasy. Puppets form a vehicle through which to communicate essential information, especially (though not limited to) children who will return home and share with

³⁹ BNGRC Activities on BNGRC website: <http://www.bngrc.mg/mission/43-les-activites-du-bngrc.html>

⁴⁰ *No Strings* was founded in 2003 by a former War Child and Goal humanitarian aid worker and two of the leading talents of the original Muppet Show and Fraggle Rock, after spontaneous use of an old puppet at a displacement camp in Sudan attracted hundreds of people at a time when important messages were proving difficult to disseminate clearly. Short clips of *Tales of Disaster* can be found <http://www.bing.com/videos/search?q=Tales+of+Disaster+youtube&docid=4883104190497289&mid=D11317A329A9976D48D3D11317A329A9976D48D3&view=detail&FORM=VIRE5#view=detail&mid=D11317A329A9976D48D3D11317A329A9976D48D3>

⁴¹ It is important to note that activities focused on cyclones and floods will take place three months before the cyclone season.

other family members.

- *Fararano* establishes Early Warning System (EWS) in all 44 communes. The EWS is integrated directly into the Commune level development plan. *Fararano* works directly with Communal GRC Committees and with the VDC at the community (*fokontany*) level to develop these plans. A total of 44 gender-responsive GRC pictorial plans are developed at the Commune level that consider specific needs of men, women, girls and boys and the disabled.
- Among the NRM activities, *Fararano* supports: (1) watershed development and protection, (2) management of resources using Farmer Managed Natural Regeneration (FMNR) of trees and Evergreen Agriculture (EGA), and (3) deploy agroforestry practices to protect water recharge and sensitive areas. All activities are aligned with the GOM's strategy to promote a sustainable green revolution as part of the MAP.
- *Fararano* plans to develop an action plan to work together with CCGRC and VDC to establish (if not in place), review/revise (if exists) their GRC plans, modify indicators to collect and responsibilities for each involved party (commune, *fokontany*, CHVs, LMs, CSB, etc.). *Fararano* plans to have 42 communal based plans in place by the end of Year 2 (40% in year 1 and 60% in year 2). The EWS will be led by female and male members of the VDC at the community level and community members participate on a voluntary basis. For data collection, already identified volunteers (LF, CHV, *miranjaka*, LM) will provide information based on finalized set of indicators (both standard and locally adapted as needed) to be collected.
- FA provides community members (VDC) and volunteer farmers (including LF) the necessary skills and tools to conduct assessments of the ecology, the most appropriate types of indigenous trees and agroforestry interventions (e.g. riparian buffer zones, hedgerows, wind breaks, woodlots, etc.) for reforestation activities and work closely with irrigation and water infrastructure activities to develop comprehensive micro watershed plans that consider water needs for agriculture (including animal husbandry), HH use and other uses by communities.
- *Fararano* will provide the SMART Skills training that include natural resource management principles and practices so that they can develop, implement and monitor their own NRM programs. Watershed planning techniques are incorporated into LF and SMART PSP training programs to ensure that more sustainable practices are used to increase soil fertility and reduce deforestation while labor and energy saving technologies for cooking (sustainable charcoal production, energy saving cookstoves from local materials) are integrated into CG, CCFLS and CBMGP activities. *Fararano* supports reforestation activities to strengthen watersheds and reduce soil run-off.
- ICRAF facilitates training of "Trainers" (FA, LF and SMART PSP) on FMNR starting in the southwest to focus on areas that have sustained prolonged droughts and suffered significant environmental degradation and will be scaled up to other regions where appropriate.
- ICRAF plans to facilitate ToT with *Fararano* technical staff and provide technical assistance to identify and develop Evergreen Agriculture (EGA) management strategies to enhance crop/pasture productivity, develop communication materials, and build capacity of *Fararano* partners and communities. In 44 communes, demonstration plots on farmland and rangeland

currently under threat of land degradation will be established while EGA activities are integrated into trainings for 230 SMART PSP and approximately 600 LF (those focused on crop based agriculture).

- *Fararano* closely work with the Cantonment and CIREF to collaborate and provide support to VDC for the establishment of watershed management plans and reforestation activities. These plans are validated and approved by the Ministry to establish them as part of the government system and will allow for additional support beyond the life of the project.
- *Fararano* implements activities to raise community awareness, especially land-restricted and FHH, on the process of acquiring land and obtaining titles to secure land ownership. Through technical assistance provided by the J&P⁴², assessments of land use, land tenure and natural resources utilization sessions are conducted at the commune level, starting first in the eastern regions where access to land is more restricted and scaling up to the south-central and southwest. The J&P Commission conducts three fundamental trainings at the commune level with existing Civil Society Organizations (CSO) focused on 1) Good Governance principles; 2) Advocacy; and 3) Land Tenure and Natural Resource Rights and Responsibilities).
- The project works with the communes, *fokontany*, and private sector partners to establish and scale up Private Public Partnership (PPP) business models. *Fararano* business models aims to decentralize the input supply chain for infrastructure and maintenance services, as well as create small enterprise opportunities for men, women, and associations.
- *Fararano* staff invites mayors in each of the participating communes to learn practices on good governance – participatory budgeting processes, transparency in communication, advocacy to regional and national levels for community issues. The *Fararano* program plans to build capacity around good governance including developing local networks of civil society and government that allows for community conversations and accountability to local authorities to ensure good governance practices are upheld.
- The project staff work with community and religious leaders to target HHs with unmet basic needs and sensitizing them on possible revenue generating activities, including SILC groups and existing on and off-farm community activities. VDCs are sensitized on the importance of integrating and including the most vulnerable in existing off farm community groups (i.e. bee-keeping, basket weaving) and the project provides basic training on selected both on- and off-farm activities via LF. *Fararano* also works with the Ministry of Population and Social Protection to identify the most vulnerable to determine how government or other partner-sponsored programs can support these individuals.
- *Fararano* staff work with local authorities to find fallow land which can be exploited for agriculture activities including: land that belongs to the state or is owned but not utilized by certain members of the community.

⁴² CRS Madagascar has worked with the J&P Commission since 1994. Since 2009, J&P Commission has worked with CRS and advocated for good governance of mining revenue and provided training and debates on land tenure issues. Through private support from CRS, J&P Commissions have provided advice on land tenure procedures.

Table I. Summary Overview of ADRA/ASOTRY and CRS/Fararano (LOA)

CATEGORY	CRS/Fararano	ADRA/ASOTRY
Total Value (Commodities + CASH)	39,177,000 USD • 20,013,300 202e • 3,892,900 ITSH	•
Total MT	20,820 MT	•
Regions	• Atsinanana • Vatovavy Fitovinany • Atsimo Andrefana	• Haute Matsiatra • Amoron'i Mania • Atsimo Andrefana
No. Districts	1. Brickaville 2. Toamasina II 3. Ifanadiana 4. Mananjary 5. Toliara II 6. Sakaraha 7. Morombe	10
No. Communes	49	32 (6 SALOHI)
No. fokontany (including any that were also targeted under the former MYAP "SALOHI")	464 (22 SALOHI)	408
Population	539,480	491,169
Beneficiaries (individuals)	363,945	264,380

IV. EVALUATION TEAM

The JMTR will be implemented by a team of development professionals, including representatives from FFP, USAID Mission, CRS, and ADRA. Some members of the team are designated as core team members while others are designated as observers, as indicated in the list below. **Core Team Members** are expected to participate in the full review process for both projects, or as much of the process as possible, and will have responsibility for leading investigations in assigned areas. These persons will develop data collection tools in their areas of responsibility and will also prepare presentations for Ground Truthing/ Verification

Workshops and will analyze the findings and formulate the recommendations linked to the findings. For the three program components in each project (corresponding to Purposes), one of the Core Team Members will be designated as the lead for that component and will have the final say on the formulation of recommendations in the assigned areas and on the content and the recommendations. **Observers** will provide ideas and input to the Core Team Member in their areas of expertise, however, the core team may or may not incorporate their input into the analysis.

A. Team Members

Arif Rashid (JMTR Team Leader, Senior M&E Advisor, **Core Team Member**). Arif Rashid will be responsible for coordinating implementation of the JMTR, including facilitation of meetings/workshops/ debriefings, working with FFP, Mission, CRS and ADRA to develop implementation schedules, facilitating the sharing of information between team members, providing support to the project implementers in developing recommendations, and putting together the analysis from team members. In addition, he will have Core Team Member responsibilities associated with Disaster Management, Resilience Capacities to manage shocks; and climate change and environmental compliance of both projects, Sustainability, Targeting, Management Systems, and Partnerships. He will also contribute to the review of monitoring and evaluation systems.

Adam Reinhart (FFP Agriculture/Food Security Advisor, **Core Team Member**). Adam Reinhart will lead the review of Agriculture, Natural Resource Management, Livelihoods and Food security. He will review the agriculture, natural resource management, on and off farm income opportunities, and the processes used to achieve these outcomes.

Chris Seremet (CRS Technical Advisor -WASH, **Core Team member**). Chris Seremet will be responsible for reviewing the quality of infrastructures, and contributing to the WASH component. He will closely work with Nicole Van Abel to review the WASH activities (both infrastructure and social and behavior change) and contributing to the analysis and formulation of recommendations.

Jefferson Shriver (CRS Senior Technical Advisor, Value Chain and Markets, **Core Team Member**).

A Value Chain Specialist, Jefferson will be responsible for reviewing the implementation of value chain and agri-business development activities and processes, including market opportunities and constraints. He will analyze the opportunities and challenges for targeted beneficiaries to participate in value chains and market. He will analyze current economies of scale and farmer organization models, value chain

upgrading strategies, producer access to services (inputs, finance), government policies that help or hinder value chain agriculture development, and business linkages / alliances. He will review a range of value chain dynamics to understand how the projects are performing.

Justin Mupeyiwa (USAID M&E Specialist, **Core Team Member**) Justin will be responsible for M&E. He will lead the review of the monitoring system for both of the projects. This would

include the review of the M&E plan, efficiency and effectiveness of the monitoring system, data quality assurance mechanism, data use in general with a particular focus on the use of baseline data in refining project design. He will coordinate with other members to receive inputs.

Melanie Thurber (FFP Nutrition Advisor, **Core Team Member**). Melanie will lead the review of the interventions and processes being used to promote maternal and child health, nutrition, infant and young child feeding practices under the 1000 days approach. She will coordinate with Natsayi to investigate the MCHN components in both projects. She will review the ration basket and size, and the quality and effectiveness of the social and behavioral change approaches.

Natsayi Nembaware (ADRA Senior Technical Advisor for Nutrition, **Core Team Member**). Natsayi will team up with Melanie Thurber to review the MCHN activities and the processes used by both of the projects to promote MCHN. She will review the quality and effectiveness of the social and behavior change processes and contributing to the analysis of the observations and interviews and formulation of recommendations.

Nicole Van Abel (FFP WASH Advisor, **Core Team Member**). Nicole Van Abel will be responsible for the WASH components. She will coordinate with Chris Seremet to review the WASH components in both projects and will be taking the lead in analyzing the observations and interviews and formulating recommendations.

Bridget Ralyea, (FFP HQ, **Observer**). Bridget is the Geo Team Leader for Southern Africa Region and will be joining the JMTR from April 27 through May 11. She will provide input to Arif Rashid on the overall review process.

Elizabeth Brown (FFP Nutrition Team Lead, **Observer**). Elizabeth will be joining the JMTR from April 10 through 26. She will team up with Carla Bousen to review gender and youth integration and targeting of the ASOTRY project and will provide input to Carla Bousen.

Eddy Rasoanaivo, (Madagascar Mission, **Observer**). From April 27 through May 11.

Martin Zafy, (Gender and Socio-organization coordinator of ASOTRY, **Observer**). He will participate from April 11 to 26. He will also liaise with the ASOTRY to take the team to the field and coordinate with the field staff.

Beth Ceryak and Holly Tripp (FFP HQ) will participate in the review to document the discussions and analysis. They will also document case studies in the field. Beth will participate from April 10 through 26 while Holly will participate from April 27 through May 11.

Tantely Randrianarisoa (Logistics Coordinator for the MTR team). Tantely will join the MTR team from April 10 through May 12. He will provide logistical support to manage the use of the six rented vehicles (3 from ADRA and 3 from CRS), and any other vehicles that may join the MTR. He will also manage hotels reservations or changes to these reservations, confirm appointments with project staff in field locations, and cater for the logistical needs of the MTR team members.

B. Assignment of Responsibilities

Table 2 indicates core team member responsibilities in the JMTR.

Table 2. JMTR Core Team Member Responsibilities

INVESTIGATION TOPIC		CORE TEAM MEMBER
ASOTRY	FARARANO	
Overall Program Design		
Theory of Change, including risks and assumption		Arif (With support from all team members)
Targeting of Beneficiaries		Arif (With support from all team members)
Collective Impact at the Goal Level		Arif (With support from all team members)
Collective Impact at the Purpose level - P1 Health & Nutrition		Melanie (Lead), Natsayi, Nicole, & Chris
Collective Impact at the Purpose level - P2 On and Off farm Income		Adam (Lead), & Jefferson
Collective Impact at the Purpose level - P3 Disaster Management & Household Resilience		Arif (Lead)
Inputs, implementation, Outputs, Outcomes and Sustainability		
SP 1.1 Improved health and nutrition behaviors of caregivers and children under five.	SP1.1 Women and children have improved consumption of diverse and nutritious foods	Melanie & Natsayi
SP1.2 Increased utilization of health and nutrition services for women of reproductive age and children 0-59 months	SP1.2 Women and children (especially during the 1,000 days) utilize preventive and curative maternal and child health and nutrition services	Melanie & Natsayi
SP1.3 Reduced incidence of water- and hygiene-related illnesses for children under five	SP1.3 1.3-Households practice optimal water management, hygiene, and sanitation behaviors	Nicole & Chris
SP2.1 Increased Agriculture Production	SP 2.1-Increased diversified Agriculture Production	Adam
SP 2.2 Increased Agriculture	SP 2.1 Increased on and off farm sales by HHs and	Jefferson

Sales	POs	
SP 2.3 Increased engagement of women and men in micro-enterprises	---	Jefferson and Carla
SP 3.1 Community disaster mitigation Assets improved	SP3.1 Community-based disaster mitigation systems meet national standards SP3.2 Community-based disaster preparedness systems meet national standards SP 3.3 Community-based disaster response systems meet national standards	Arif, Nicole and Chris
SP 3.2 Community response capacities improved	SP 3.4 Community based social safety net mechanisms strengthened	Arif and Adam
Cross Cutting Areas		
Gender Equity		Carla
Governance		Arif
Environmental Management		Arif
Targeting of Youth		Carla
Natural Resource Management		Adam
Implementation Systems and Resource Management		
Monitoring and Evaluation		Justin
Management & Partnerships		Arif
Collaborative Learning and Action		Justin and Arif
Integration & Complementarity		Adam
Targeting		Arif, Adam and Melanie
Sustainability		Adam, Melanie, and Arif

V. INFORMATION TO BE OBTAINED

The following sections outline the information that will be obtained to achieve each of the seven objectives of the JMTR while meeting the purpose of the JMTR to generate recommendations for the remainder of the lives of the *ASOTRY* and *Fararano* projects.

A. Objective 1: Relevance of Project Strategies

To accomplish Objective 1, the JMTR will review the theories of change for the two projects. These have been developed around a vision and pathways of change for particular types of targeted impact groups, so the JMTR will review the targeting systems for the two projects to identify strengths and weaknesses in how the projects identify participants compatible with the Theories of Change that have been developed.

The JMTR team will also examine the history of the projects, particularly how they have evolved since inception and the critical features of the operating environment that have affected, positively or negatively, project implementation and the impact that has been achieved. The JMTR will review the baseline study, formative research and all other studies to determine what changes may be needed to project activities and implementation mechanisms to ensure that the strategies remain valid for the local context. The analysis will inform the formulation of recommendations associated with the overall strategy of the program toward achieving the goals of the two projects.

Information for understanding the history of the program and contextual factors affecting implementation will be obtained from project monitoring reports, as well as through interviews with project implementation staff and partner leadership representatives.

B. Objectives 2 (Outputs) and 4 (Outcomes): Project Inputs, Approaches, Outputs and Outcomes

The JMTR will examine the outputs produced under each Sub-Purpose to identify what the projects have accomplished on the ground. The team will review inputs and processes used to produce outputs as well as the quality of the outputs in terms of achieving change. The JMTR will use both qualitative information and available quantitative data to assess the effects and impact of the outputs produced by the project at different levels, including effects at the immediate outcome level, effects at the Sub-Purpose Level for clusters of outcomes, effects at the Purpose level for the set of Sub-Purposes and impact collectively at the project Goal level. JMTR team members will look for evidence on how members of target groups have changed their ideas, attitudes, and practices as a result of project activities and will identify potential reasons for why some beneficiaries have started applying project promoted practices while others have not. At every level, the evaluation will assess the sustainability and replicability of the changes that have been observed. The review team will consider staffing and activity resources, community participation, participant targeting, asset transfers, the extent to which activities and outputs demonstrate a commitment to the cross-cutting issues of gender, youth, governance and the environment, and sustainability strategies. The review will investigate the expected change as per the project documents, but will also be observant for new areas of unexpected effects and impact, both positive and negative, that are occurring as a result of project activities. Recommendations may be formulated to include these in the projects' monitoring and evaluation tools.

The team will obtain information on processes, outputs and outcomes through observation of sessions and training, interviews and reviews of project monitoring reports, including quarterly and annual reports, reviews of key secondary data, interviews/focus group discussions with project participants, and interviews with project implementation staff. JMTR team members will analyze performance monitoring data collected by the projects, as well as review the performance management plans and IPTTs. JMTR team members will review technical guidance, including implementation manuals, on key processes and approaches used by the projects and observe learning/training sessions that are planned by the projects when the JMTR team is in the area.

C. Objective 3: Coordination and Collaboration

The JMTR will obtain information on external actors, i.e., other projects and service providers that are being implemented on the same space and relevant to the strategies of the *ASOTRY* and *Fararano* Projects. These include external actors who provide complementary services necessary to achieve and sustain project outcomes, external actors that influence people's access to goods and services, and external actors that promote or impede an "enabling environment". The JMTR team will work with project implementation staff to identify the most important of these external actors for each component of the project and will then analyze the quality of the coordination and collaboration with the relevant project. Particular attention will be given to interaction with other USG-funded activities as well as coordination with GoM services.

The team will obtain information on the quality of coordination and collaboration with key external actors from project monitoring reports, interviews with project implementation staff, and interviews with representatives of these key external actors.

[Objective 4 is combined with Objective 2]

D. Objective 5: Collaborative Learning and Action

Collaborative Learning and Action refers to (a) facilitating collaboration internally and with external stakeholders; (b) making adjustments to project's theories of change and implementation strategies based on continuous learning; (c) how monitoring and evaluation systems provide information for decision-making and reporting, and (d) how best practices and lessons learned emerging from project implementation are documented and shared outside the project. The JMTR will obtain information to understand the systems being used for capturing, documenting and disseminating lessons learned and best practices. The M&E systems for both projects will be examined to understand how information generated from the systems is being used to enhance the effectiveness or efficiency of the project in achieving impact. Emphasis will be placed on the collection, analysis and management of data to enable iterative learning and evidence-based improvements to project design and implementation. The JMTR will identify changes that have already occurred in the project strategy or implementation as a result of new ideas or approaches brought into the project from outside sources and will formulate recommendations for how to seek out appropriate new ideas and approaches in the remaining life of the projects.

The team will obtain information for collaborative learning and action from a review of the revised theories of change, projects' PMPs, monitoring reports and other reports, interviews with project management, interviews with project implementation and technical staff, interviews

with the leadership of partner organizations, and interviews with knowledge management staff.

E. Objective 6: Sustaining Project Outcomes and Impact

The JMTR will review the sustainability strategies, interview staff and management, interview project participants, and interview private and public stakeholders to determine how likely project-generated outcomes and impact are to be sustained after the projects end. The review will identify the organizations, services and relationships that are being developed that are necessary to sustain the service delivery after the project ends to sustain each of the outcomes planned by the projects and will analyze the threats to these that could affect likely sustainability. Specific attention will be paid to the appropriateness, efficiency and efficacy of capacity building activities targeted to participants and local partners to enable them to sustain project impact.

F. Objective 7: Cross-Cutting Themes (Gender, Governance, Targeting Youth, Climate Change and Environment)

For each of the five major cross-cutting themes in each project, including gender, governance, targeting of youth, climate change and environment, the JMTR team will assess how well the projects are operationalizing the cross-cutting themes to achieve the proposed impact. The team will obtain the information on cross-cutting themes through interviews with project management, project implementation staff, leadership of partners and stakeholders, and project participants. The team will review project monitoring reports, and specific strategy documents related to each cross-cutting theme, including assessment reports and barrier analyses.

VI. EVALUATION PROCESS

The JMTR will be undertaken over a period of approximately six months from February through end of July of 2017 and will be implemented in four phases:

- Phase 1: Evaluation Preparation (February 1 through April 10)
- Phase 2 (in Madagascar): Review of the ASOTRY Project (April 11-26)
- Phase 3 (in Madagascar): Review of the *Fararano* Project (April 27 – May 12)
- Phase 4: Evaluation Recommendations Finalization and Processing (May 15 – July 28)

The current schedule for the JMTR is provided in Annex A. The sections which follow describe the major activities planned in each phase.

A. JMTR Preparation (February 1 through April 10)

During the JMTR preparation period, the composition of the review team was finalized (as indicated in section V.A. above), a draft protocol including a basic operational plan (this document) was drafted, the JMTR team will review the background documents (listed below), draft the key questions and data collection tools, and select the sites for field visits. The Core Members of the JMTR team will assemble in Antananarivo by April 9. On Monday, April 10, the team will hold an initial meeting to meet each other and to discuss the JMTR plan. Also on that day, an orientation meeting will be held with USAID/FFP Madagascar. The following sections describe these JMTR outputs and processes in more detail.

I. JMTR Protocol. This document is the protocol that guides implementation of the JMTR.

The Zero Draft of the protocol will be released for review by organizers of the JMTR and members of JMTR team 7 March. Comments, questions or suggestions on the zero draft should be sent to Arif Rashid (arashid@usaid.gov). On or about March 20, a conference call will be organized to discuss the protocol toward finalizing it into a working draft that will be widely circulated by March 24, as the final planning guide going into the implementation phase of the JMTR. Further changes will be made once the JMTR arrives in-country and has a chance to discuss the projects with project implementers.

2. Background Document Review. There are many documents that could be reviewed to prepare for the JMTR. However, given time limitations for team members, the available documents have been divided into two sets. One set represents required reading for all team members in order to be able to understand the full strategy for each project as well as the range of activities being undertaken. The second set of documents should be reviewed by individual team members when possible.

Required Reading. The following documents are required reading for all team members and must have been reviewed before the Core Members assemble in-country on April 10.

- Approved Project Technical Narratives
- Theories of Change and Logical Frameworks (from the Monitoring and Evaluation Plans)
- Indicator Performance Tracking Tables (from the Performance Monitoring Plans unless there has been a subsequent revision)
- Annual Results Reports for 2015 and 2016
- All Quarterly Monitoring Reports
- Baseline Study Report

Other Reference Documents. The following documents are also available and should be reviewed by team members when possible.

- Performance Monitoring Plans
- Gender Analysis Reports
- Barrier Analysis Reports
- Value Chain Analysis
- Site Activity Records and Training Summaries
- Project Implementation Manuals (or training curricula and training materials in lieu of a PIM)
- Participant Registration Data
- Environmental Mitigation and Monitoring Plan
- Data Quality Assessments

Obtaining Documents. A directory has been established on the USG Google Platform for access by USG members of the JMTR <https://drive.google.com/open?id=0B-z6z4EtEFroWHI0UCIYM3BEbWVs>. For others who do not have access to the USG platform, the documents are available on the DropBox <https://www.dropbox.com/sh/7rm2ugijfydxm66/AAA0C-2rPvgtQsxoAWKo6Oeza?dl=0>.

3. Data Collection Tools. Section VII below provides guidance on the data collection tools, primarily topical outlines, that will be needed for the JMTR. Core Team Members with support from Observers will be responsible for developing the initial draft of the data collection tools. The deadline for completing these is March 28 so that team members will have time to review

background documents and this protocol. These drafts will be sent to the JMTR team leader who will review them, provide feedback and then incorporate working versions of the tools in this protocol in Annex B.

4. Site Selection. Section VII provides guidance on how sites will be selected for field visits for the JMTR. During this preparation phase, CRS and ADRA should assemble the lists of sites that have been requested in Section VII. The JMTR Team Leader will arrive in-country by April 8 and will meet with ASOTRY and Fararano management teams shortly after arriving to finalize the preliminary selection of sites by April 11.

5. Orientation Meetings. Four meetings are planned for April as described below.

Initial JMTR Team Meeting, April 10. The initial meeting of the JMTR Team will occur immediately after core team members have assembled in Antananarivo. In this meeting, team members will be introduced to each other, and the JMTR team leader will provide an overview of the evaluation process and answer any questions that team members may have.

Orientation Meeting with USAID/FFP Madagascar, April 10. Following the initial team meeting, an orientation meeting will be held with representatives of USAID/FFP Madagascar at which the JMTR Team will be introduced, an overview of the review process will be provided by the team leader and the JMTR team will answer any questions that USAID/FFP may have about the review. In addition, the JMTR team will seek to understand the expectations of USAID/FFP and any specific interests that they would like to see covered by the review.

Project Orientation Meetings, April 11 (Fararano) & April 12 (ASOTRY). In these half-day meetings, project management staff will present an orientation to the project for the JMTR Team. The key content of these presentations should include an overview of the strategy of the project, an overview of the resources (money, commodities and staff) available for the project, a map showing geographic locations, a description of the outputs and activities under each component, a description of the SBC/ service delivery mechanism, a description of the roles and responsibilities of partners, and a description of the key challenges affecting the project. The purpose of these meetings is to obtain clarity on the types of outputs produced by the project, the stakeholders that need to be interviewed to understand the impact of these outputs, and additional data sources for information to support the review. Discussions will also be held around the site selection for the qualitative interviews to determine what the sites represent in terms of outputs and quality. Attendees to this meeting include the project management and technical team, selected representatives from implementing partners, and anyone else from the project likely to be involved in implementing or supporting the JMTR.

After the overview presentation, the JMTR technical specialists will meet with the technical specialists from the projects who will make a detailed presentation on processes, outputs, indications of outcomes, challenges, any recommendations that s/he may have.

Meeting with the interpreters, April 13. The JMTR team will meet with the interpreters and will orient them about the key questions and the field work processes.

B. Phases 2 & 3: Reviews of ASOTRY and Fararano

On April 13, the JMTR Team will travel to Amoron'i Mania region. From April 14 through 22, the team will review the ASOTRY Project and from April 27 through May 10, the team will review the Fararano Project. A Debriefing meeting with the USAID will be held on May 11.

The reviews of the two projects will follow the same process as described in the next section. Descriptions of the two debriefings to be held before the team departs the country are described at the end of this section.

I. Project Review Process for ASOTRY and Fararano. Over the 15 days with ASOTRY and the 14 days with Fararano, the JMTR Team will undertake the following process.

Meetings with Project Stakeholders in Antananarivo, April 10 through 12. On these days, JMTR Team members will meet with the key stakeholders that are based in Antananarivo. The primary purpose of these meetings to explain the objectives and the processes of the midterm review. The team may also conduct interviews depending on the availability of the staff. Given the limited time, the JMTR will need to be strategic on the use of this time and will consult with the project management teams for each project to determine with whom meetings should be arranged and for which members of the JMTR Team.

Field Data Collection, April 15-22 (ASOTRY) & April 28- May 6 (Fararano). Over this period, the JMTR team will conduct interviews, hold group discussions; observe SBC, care group, and farmer field school sessions as they take place in the field; and observe project activities to obtain qualitative data. The JMTR will plan to spend two days in each region covered by the two projects. The specific data collection process in each region is described in section VII.C below. A detailed itinerary for the field work will be developed in collaboration with project management staff as described above.

Information Processing & Preparation for the Ground Truthing Workshop, April 24-26 (ASOTRY) & May 8-10 (Fararano). During the field work, JMTR team members will process data as it is obtained, and in this period the team will continue analyzing information to identify major findings and recommendations that will be presented for discussion at the Ground Truthing Workshop. Each JMTR team member will use this time to prepare the Powerpoint presentation(s) that she/he plans to present in the Ground Truthing Workshop.

Ground Truthing Workshop, April 25 (ASOTRY) & May 9 (Fararano). During and following the field work, the evaluation team will start formulating preliminary observations on outputs produced, the outcome being achieved, the processes being observed, interventions being implemented to promote sustainability (resources, capacities, motivation, and linkages), and lessons learned captured. Given the time available for this workshop, however, only the major observations and recommendations resulting from the JMTR investigations will be shared in the Ground Truthing Workshop with project implementation staff. These will be discussed to ensure that they reflect reality and are described appropriately. Two major outputs are targeted for the workshop. These are (1) agreement on the validity of key observations assembled so far from the review and (2) preliminary agreement on major recommendations for the remaining life of each project. Participants in each workshop will be project implementation staff and the JMTR team. This is an in-house event, only for those participants who are fully engaged in the project.

Post-Workshop Processing, April 24 (ASOTRY) & May 8 (Fararano). This one day period is required to ensure that results of the discussions in the Ground Truthing Workshop are captured before the JMTR team moves on from ASOTRY to Fararano and from Fararano to stakeholder debriefings. JMTR Team members who would present in the Ground Truthing Workshop will revise their presentations to incorporate changes as a result of discussions.

Each Core Team Member will also prepare a condensed version of her/his presentation that can be consolidated with other team member presentations for the stakeholder and USAID/FFP debriefings.

2. Pre-Exit Debriefings. A debriefing will be conducted by the JMTR team before they leave Madagascar, as described below.

USAID/FFP Debriefing, May 10. The JMTR team will debrief the review findings to USAID/FFP Madagascar. Participants in this meeting will be the representatives from USAID. The JMTR team leader will facilitate the presentation, and all JMTR core team members, if they are still in-country, will attend.

C. Phase 4: Recommendation Finalization and Processing

After departing the country, the JMTR will work remotely to produce a report documenting the analysis of the findings and finalizing the recommendations by June 5. The JMTR team will not produce a report rather it will formulate recommendations, supporting observations and the analysis of the findings. Following this workshop, the analysis of the findings and the recommendations which will be incorporated in the PREP for IY 4 for each project.

JMTR Recommendation Processing and Planning Workshop, June 12-14. Over this three day period, the recommendations from the JMTR will be reviewed and finalized. Since the project management staff will have seen most, if not all, of the recommendations, they will have already begun strategizing on how to respond to the recommendations. The JMTR team leader and other members of the JMTR team who can be available for the workshop will be present to facilitate the processing and planning. Should any of the projects find any of the recommendations un-implementable, the project will be asked to develop alternative recommendations that can be implemented during the project life. By the end of the workshop, each project will have developed provisional implementation plans to be incorporated in the coming PREP.

Debriefing at FFP HQ including partners, TBD. The JMTR final recommendations and preliminary plans for operationalizing recommendations developed in the workshop will be presented to HQ-based stakeholders.

VII. QUALITATIVE DATA COLLECTION

Qualitative data will be collected primarily through interviews and group discussions with representatives of project implementation staff, project participants, non-participants, and project partners including consortium, technical and GoM partners. The JMTR team members will also observe SBCC sessions, care group meetings, and farmer field school sessions as they are being implemented. Based on the review objectives and review questions, each team member will develop key questions for each topical areas. These topical outlines or a set of key questions or tools will be used to guide interviews and group discussions. Annex B (to be completed by JMTR team members by April 13) contains the working draft tools that will be used to start the field work. Ideally, the JMTR will gather information from all of the partners and participants listed in Section III above describing the two projects. JMTR Team members will provide project management staff with a list of the meetings, interviews and Focus Group Discussions (FGDs) that they would like to have arranged, and the JMTR team will work with

project management staff to develop schedules for meetings.

A. Composition of Interviews and Group Discussions

Key informant interviews are normally held with between 1 to 4 persons, ideally no more than two, and these interviews typically last no more than one hour. Using semi-structured tool, in-depth interviews are normally held with individuals to gain an in-depth knowledge about a topic of interest. FGDs are organized with from five to no more than ten persons. They are called focus groups because all of the members of the group have a common feature, so FGD facilitators must ensure that participants meet the desired common criterion, i.e., members of a VSL or SILC group, farmers who received seed from the project, lead mothers, lead fathers, etc. FGDs should normally not extend beyond two hours. In both cases, interviews and discussions should be held in secluded locations so that bystanders or passersby cannot influence the discussions.

B. Topical Outlines or Checklists

JMTR Team members will develop topical outlines or checklist, which include key thematic questions to be used in key informant interviews or focus group discussions. These tools will be drafted by the individual Core Team Member assigned to specific investigations and tailored to the types of participants and approaches being used by each project. The questions in a topical outline are fairly general and used to stimulate discussion. Reviewers will keep in mind at all times that the purpose of the information gathering is to understand what the project has done, what changes have occurred as a result, what has helped or hindered achievement of these changes, and how likely are the changes to be sustained after the project ends. The discussion facilitator will be free to explore in more depth any interesting topics that may come up during each discussion, related to these objectives.

A suggested sequencing of questions in a topical outline, drawn from a Program Constraints Assessment (PCA) approach, would be as follows.

1. Are you familiar with the *ASOTRY* or *Fararano* Project? (Describe the project, if the name is not familiar.)
2. How would you describe what this project seeks to accomplish?
3. How have you or other members of your household participated in this project? For how long have you/they been involved?
4. Please describe how you or your family has benefitted from the project.
5. Please describe how you or your family has been negatively affected by the project.
6. Who, in your opinion, has benefitted most from the project?
7. Are there other people who should be benefitting from the project but are not? Please describe them for us.
8. What constraints do you believe inhibit the project from fully accomplishing its purposes?
9. What suggestions do you have for addressing these constraints or otherwise enabling the project to have greater impact?

For each question, the interviewer/facilitator should have an idea on what kind of response to expect, based on a review of the background documents, but should avoid leading the respondent to make these responses. After a respondent has completed answering a question

and an expected topic has not come up, the interviewer/facilitator can then ask...what about this?... noting that the respondent did not spontaneously report on the topic.

Before beginning an interview or discussion, an introduction and explanation of the purpose of the review will be provided with stress put on the importance of obtaining useful information that reflects reality. **The evaluation team will seek consent from the participants, and no names will be recorded in interviews and group discussions.** If portable recording devices are used, the device should be shown to respondents and not activated until after respondents have introduced themselves.

C. Observation of Project Activities

In addition to conducting interviews and group discussions, JMTR team members will observe implementation of project activities and physical sites where project investments have been made. These should be regularly scheduled project activities, not activities organized only for the JMTR. Section III, describing each of the projects, lists the different types of sites that the members of the JMTR team should visit.

D. Region-Level Data Collection

A two day process is envisioned for data collection in each region in which the ASOTRY and Fararano Projects are being implemented, as described below.

Field Visits to Communities and Sites. In each region, the JMTR team will conduct interviews and group discussions with representatives of project participants, including both targeted beneficiaries and intermediaries. Over the two-day schedule, the full team will conduct information gathering in four villages.

In addition to conducting interviews and group discussions, JMTR team members will also observe, where possible, implementation of project activities and physical sites where project investments have been made. Section III, describing each of the projects, lists the different sites and activities that should be targeted for site visits.

Team Analysis and Sharing of Information Between JMTR Members. In order to be able to identify synergies and interaction between different interventions in each project and to share information that is relevant for investigations being conducted by other JMTR team, JMTR team members every evening. The purpose of these meetings is to share insights and observations.

Translation. It is expected that some meetings with local staff and project partners will be carried out in English. Many meetings especially at the community-level, however, will require translation assistance. This assistance in translation will be arranged by CRS and ADRA and logistics plans for travel and lodging should include interpreters.

Documentation. Team member notes will be taken by individual team members during the data collection process. Wherever possible, same sex interviewer and participant will be utilized. Team members will also use photography as a data collection tool.

E. Sampling and Participant Selection

Since this is a Mid-Term Review, the sample of participants and sites for field visits will not be chosen randomly. These will be selected strategically, so that the review team can observe what is working and what is not working in each project, as well as any particularly innovative

approaches. The recommendations to be generated by the JMTR will propose scaling up interventions that are contributing to achieve the project's goal, modifying interventions to have greater impact, suspending interventions that do not contribute enough to achieve higher level outcomes relative to investment, piloting new interventions relevant for targeted impact groups, improving the effectiveness of implementation systems, or improving efficiency in use of resources. Reviewers need to see the problems in order to be able to propose recommendations to fix them.

The JMTR will collect data from each of the regions being covered by each project. For each district, ASOTRY and Fararano will classify villages according to the following criteria.

1. Participated in the previous projects (SALOHI and / or FELANA)
2. Accessibility in terms of proximity to major infrastructure (markets, main roads, basic services)
3. Demonstrating good impact (e.g., early adopters) or demonstrating poor impact - This criterion is difficult to assess at this stage in the project life. However, front-line staff usually has a pretty good idea on villages which have been adopting the project-promoted messages more readily than other villages. The objective of the JMTR is to see examples of both.
4. Intensity of intervention, i.e., activities under only one purpose being implemented, activities for two purposes, or activities for all three purposes

Once the lists have been compiled, the JMTR team will purposively select sites in collaboration with project management to ensure clarity on classification, representative balance on types of sites, a wide representation on interventions, and logistical considerations. For interviews and group discussions in each site to be visited, project staff, volunteers and village leaders will identify individuals for interviews and discussions to ensure that households selected represent the economic and geographic diversity of a village.

F. Data Analysis

The information gathered by the JMTR team will be analyzed at multiple points during the review process. As the reviewers are holding interviews and group discussions, they will probe and explore topics in more depth with respondents to ensure clear understanding. This represents the first level of analysis.

A second level of analyses occurs at the JMTR team meeting scheduled for every evening, through the sharing of notes on observations, interpreting the observations, cross checking with other team members and immediately before the Ground Truthing Workshop when the evaluation team is processing information individually and sharing information with other team members. The advantage of qualitative methods is to have the ability to conduct real time analysis of the information. As individual team members encounter information from other team members that they may not have had a chance to discuss with respondents, they will have

Project Interest in Selecting Sites

Organizers of mid-term reviews are often reluctant to rely too much on projects to select the sites for field visits in an evaluation. The perception is that project implementers will want the reviewers to produce the best view possible about the project. This, however, is not in the best interests of development, the project or organizations implementing projects. Just as all projects are achieving at least some good impact, all projects also have implementation challenges and problems. Mid-term reviews are opportunities to fix these problems and address the challenges. Moreover, if they do not get addressed by the time of the final evaluation, final evaluators will find them and criticize the project for not addressing them. The project that has used the Mid-term Review to really improve the effectiveness and efficiency, will ultimately have greater impact and be viewed more favorably in the final assessment.

the opportunity to do so when they go again to conduct interviews/discussions.

A third level of analysis occurs when reviewers cross-reference responses from interviews and discussions with existing data bases. In addition, the evaluator will query project implementation staff as a third source of information. The result of this level of analysis is that each evaluator will formulate his/her own key observations relative to the assigned topics.

A fourth level of analysis occurs in the Ground Truthing Workshop in which preliminary observations and findings are presented to project implementation staff. If project implementation staff seriously question a particular finding or the interpretation of an observation that has been presented by the evaluation team, the opportunity exists in the workshop to further discuss and analyze the finding to reach the truth.

Finally, a fifth level of analysis will occur after the JMTR team disperse and begin assembling the content that will go into the draft report. Team members will have the opportunity to look at the information that has been gathered in more depth as they are writing.

VIII. IMPLEMENTATION SCHEDULES

The complete schedule for implementing the JMTR is provided in Annex A. The scheduled for site visits with ASOTRY and Fararano team will also be included in Annex A, but will be added to the protocol in late March after the JMTR Team Leader has worked with project management teams to develop preliminary plans that can be reviewed by core team members.

ADRA and CRS RESPONSIBILITIES

CRS and ADRA will ensure that the necessary information has been passed to the GoM to allow the team to implement the review in the communities that will be selected.

ASOTRY and **Fararano** project staff (including ADRA, CRS and partner representatives) will serve as informants to the JMTR and support the review process by supplying lists of project sites, sharing project documents, advising about local protocols, making orientation presentations to the JMTR, arranging meetings with the stakeholders, and making logistical arrangements. In addition, ADRA and CRS will ensure that their project partners are informed of the process and that implementing partners will need to make staff available as possible for interviews and other consultations with the JMTR team. ADRA and CRS will also provide professional interpreters (as required) for team members and facilitate in-country travel and logistical arrangements for the JMTR team members including vehicles, printing/copying and access to data bases. Members from USAID will pay for their own accommodation and food. They will need assistance, however, with hotel bookings.

JMTR SUMMARY REPORT

There will be one report for the two projects. The JMTR Summary Report, not to exceed 50 pages excluding annexes, will seek to meet the following criteria:

- Represent a thoughtful and well-organized effort to objectively review what has been working well and should be continued as is, what did not and why and how to modify?
- Address all review questions included in the protocol;
- Include the protocol as an annex;
- Explain the evaluation methodology in detail. All tools used in conducting the evaluation,

such as questionnaires, and checklists will be included in an Annex in the final report;

- Disclose limitations to the evaluation, with attention to the limitations associated with the review methodology;
- Findings should be specific, concise, and supported by evidence from the analyses of the quantitative secondary data from annual monitoring and/or qualitative interviews and observations;
- Properly identify and list all sources of information in an annex;
- Include recommendations that are supported by evidence and will inform adjustments to the remaining period of the project life.

An illustrative format for the report is provided in Annex C

ANNEX A: JMTR Schedule

#	Step	Responsible Person	Date(s)	Comments	Participation of FFP/PVO Team Members
<i>Review Preparation</i>					
1	JMTR Team Meeting by Conference Call	Call organized by FFP AoR	January 30 (Monday)	The AoR will introduce the team and the JMTR Team leader will facilitate the meeting to discuss the review process and development of the review protocol	JMTR members and CoPs will participate in call
2	Provision of initial background documentation required to develop the protocol	CRS & ADRA	January 20 (Friday)	Required background documents at this stage are the Approved Technical Narratives, Current Results Frameworks, Annual Results Reports and Project Staffing Structures	CoPs will upload the documents into a dropbox
3	Completion of first draft of Review Protocol	JMTR Team Leader	January 31 (Tuesday)	The draft protocol will include the description of methodology and operational plan for the review.	Team leader
4	Provision of feedback on draft Review Protocol	FFP, ADRA & CRS	February 7 (Tuesday)	Written feedback on the draft protocol sent to JMTR Team Leader	Review and comment on draft
5	Completion of Working Draft Review Protocol	JMTR Team Leader	February 14	Draft protocol revised, incorporating feedback received	Team leader

			(Tuesday)		
6	Second JMTR team meeting by Conference Call	Call organized by FFP AoR	February 23 (Thursday)	The FFP AoR will facilitate a conference call with the JMTR Team, ADRA, CRS and Mission to discuss the review protocol and preparations that need to be undertaken	Participate in call
7	Provision of remaining background documents (via DropBox)	ADRA, CRS, & FFP	March 2 (Thursday)	These include the full Performance Monitoring Plan, Baseline Report, Gender Analysis, Reports on Other Formative Analyses, Quarterly Performance Reports, a list of available project databases, Environmental Mitigation and Monitoring Plan, Consultancy Reports, and Trip Reports.	ASOTRY and Fararano CoPs, and PVO Country backstops
8	Categorization of participating communities by criteria specified in the Draft Review Protocol	ADRA and CRS	February 28 (Tuesday)	Community lists sent to the JMTR team leader/ members	CoPs of ASOTRY and Fararano
9	JMTR members develop Draft Data Collection Tools	JMTR Team Members	March 15 (Wednesday)	Draft tools sent to the JMTR team leader to be reviewed and incorporated in the Review Protocol	Review documentation and develop draft tools for technical area
10	Preliminary selection of field work sites	JMTR Team Leader	April 3 (Monday)	Field work sites will be selected by JMTR Team Leader as per the Review Protocol	Team leader with the team members and ASOTRY and Farararno

11	JMTR Team Arrives in Madagascar	JMTR Team	April 8/9 (Saturday/Sunday)	Logistical arrangements by ADRA/CRS JMTR Working Group.	Arrive in-country
12	In-briefing meeting with the Mission, ADRA and CRS Country Office Management	JMTR Team	April 10 (Monday)	To clarify review process and begin obtaining information. Meeting attended by JMTR team	Full participation
ADRA – ASOTRY					
13	Project Orientation ASOTRY	ASOTRY CoP and Key Staff	April 11 (Tuesday)	Project orientation for JMTR team to further clarify project activities, stakeholders, best practices, and challenges. Individual interviews by JMTR team members with ASOTRY implementation staff, with Implementing Partners, Technical Partners, Government Stakeholders, Private Sector Stakeholders and others based in Tana	JMTR team members will participate
14	Meeting with the interpreters, finalizing the tools and finalizing the field schedule	JMTR Team with the ASOTRY staff	April 12 (Wednesday)	To finalize the field work schedule, orient the interpreters, finalized the tools and continue interviews by JMTR team members with ASOTRY Implementing Partners, Technical Partners, Government Stakeholders, Private Sector Stakeholders and others based in Tana.	ASOTRY team will facilitate

15	Travel to Amoron'i Mania region in morning and field work in afternoon	JMTR Team Members	April 13 (Thursday)	Logistics by ADRA.	Travel to ASOTRY Areas <u>Hotel</u> USAID Hotel (L'Artisan 0340464353) (Electricity normally stable-few cuts, Wifi available)
16	Field work	JMTR Team Members	April 14 (Friday)	Logistics by ADRA.	
17	Field work	JMTR Team Members	April 15 (Saturday)	Logistics by ADRA	
18	JMTR team travels to Haute Matsiatra region	JMTR Team Members	April 16 (Sunday)	Logistics by ADRA	<u>Hotel</u> Zomatel (USAID Hotel?) 0340725527 (Electricity normally stable-few cuts, Wifi available)
19	Easter Monday (rest day)	JMTR Team Members	April 17 (Monday)	Logistics by ADRA	
20	Field work in Haute Matsiatra	JMTR Team Members	April 18-19 (Tuesday and	Logistics by ADRA	Some communes may not be possible

			Wednesday)		to include in the MTR due to time to travel. These include Ambinanindovoka and Mahazony in Ambalavao, and possibly Soavina, Ambondromisotra and Vohitrafeno north of Flanarantsoa.
21	JMTR team travels to Atsimo Andrefana region (Betioky)	JMTR Team Members	April 20 (Thursday)	Logistics by ADRA	<u>Hotels</u> Hotel Tsaramandroso 0330941479, Hotel Mahasoia 0331216037, Hotel Odette (Electricity available only a few hours a day, no Wifi)
22	Field work	JMTR Team Members	April 21-22 (Friday and Saturday)	Logistics by ADRA	Some communes may not be possible to include due to time to travel. These include Marosavoa, Lazarivo and Soaserana in Betioky, and Belafika

					Haut, Vohitany, Gogogogo, Ankilimivory in Ampanihy. To all other locations, travel time is at least 2 to 3 hours to get there and the same to come back. In this case the only option to increase coverage, is to add one day to the time in the region, and to have 1/3 of the team sleep in the town of Ejeda, which would give then easier access to Belafika Haut, Gogogogo, and Vohitany. <u>Hotel in Ejeda</u> Guest house of Lutheran Hospital 033 08 987 32 (Electricity a few hours a night, No Wifi, maximum 8-10 people)
23	JMTR team travels to	JMTR Team	April 23	Logistics by ADRA	<u>Hotel</u>

	Tulear in the morning	Members	(Sunday)		USAID Hotel (Hippocampe) (Alternative if # of rooms limited: Amazone 0337921965) (Electricity normally stable-few cuts, Wifi available)
24	Information processing	JMTR Team Members	April 24 (Monday)	Logistics by ADRA	
25	Verification (Ground Truthing) Workshop	JMTR Team Members	April 25 (Tuesday)	Presentation of preliminary findings to ASOTRY implementers for verification and refinement	
26	Post-Workshop Processing	JMTR Team Members	April 26 (Wednesday)	Documenting the key points and analysis	JMTR team members
<i>CRS – Fararano</i>					
27	Project Orientation Fararano	Fararano CoP and Key Staff	April 27 (Thurs)	Project orientation for review team to further clarify project activities, stakeholders, best practices, and challenges. Individual interviews by JMTR team members with Fararano implementation staff, with Implementing Partners, Technical Partners, Government Stakeholders,	Full participation

				Private Sector Stakeholders and others based in Tana	
28	Meeting with the interpreters, finalizing the tools and finalizing the field schedule	JMTR Team with the Fararano staff	April 28 (Friday)	To finalize the field work schedule, orient the interpreters, finalized the tools and continue interviews by JMTR team members with Fararano and ASOTRY Implementing Partners, Technical Partners, Government Stakeholders, Private Sector Stakeholders and others based in Tana.	Fararano team will facilitate
29	In-Briefing with CRS team in Atsimo Andrefana	JMTR Team Members	April 29 (Saturday)	Logistics by CRS	<u>Hotel</u> Toliara: USAID Hotel (Hippocampe), Wifi and electricity
30	Field work	JMTR Team Members	April 30 (Sunday, Day Off), May 1-2 (Mon-Tues)	Logistics by CRS	<u>Hotels</u> Toliara: USAID Hotel, Wifi and electricity
TEAM I (Vatovavy Fitovinany)					
31	Travel by car to Ranomafana	JMTR Team Members	May 3 (Wed)	Logistics by CRS	<u>Hotel:</u> Ranomafana: USAID Hotel (Setam or other), electricity

					and no wifi at hotel but phone service network does work
32	Field work continues	JMTR Team Members	May 4-5 (Thurs-Fri)	Logistics by CRS	<u>Hotels:</u> Ranomafana: USAID Hotel (Setam or other), electricity and no wifi at hotel but phone service network does work
33	Travel to Tana	JMTR Team Members	May 6 (Saturday)	Logistics by CRS	Travel
TEAM 2 (Atsinanana)					
34	Travel by Plane to Tana	JMTR Members	May 3 (Wed)	Logistics by CRS	Travel
35	Travel by Car to Toamasina	JMTR Members	May 4 (Thurs)	Logistics by CRS	<u>Hotel</u> Toamasina: USAID Hotel (Calypso), electricity and wifi
36	Field Work	JMTR Members	May 5-6 (Friday-Sat)	Logistics by CRS	<u>Hotel</u> Toamasina: USAID Hotel (Calypso), electricity and wifi

37	Travel to Tana by car or plane	JMTR Members	May 7 (Saturday)	Logistics by CRS	Travel
TEAMS BACK TOGETHER in TANA					
38	Information Processing & Preparation for Verification Workshop	JMTR Team Members	May 8-9 (Mon-Tues)	Information processing, and preparation for Verification Workshop	Full participation
39	Verification (Ground-Truthing) Workshop	JMTR Team Members with Fararano Implementing Staff	May 10 (Wednesday)	Presentation of preliminary observations to Fararano implementers for verification and refinement.	Full participation
40	Interview/meeting with Fararano Stakeholders	JMTR team	May 11 (Thursday)	Interview/ meeting with selected Government stakeholders	JMTR Members
41	Out-briefing meeting with USAID Madagascar	JMTR Team	May 12 (Friday)	Presentation of preliminary findings and discuss next steps	Full participation
42	JMTR team leaves Madagascar	JMTR Team	May 12 (Saturday)		
<i>Recommendations Finalization and Processing</i>					
43	Individual team members will analyze findings and draft notes and develop recommendations by	JMTR Team Members	May 15 through June 5	JMTR team members continue analysis and draft their analysis to support recommendations	Continue analysis remotely and draft content for report

	sector areas				
45	In-Country JMTR Recommendation and Planning Workshop	FFP AOR	June 12 - 14 (Monday thru Wednesday)	Based on the analysis, the JMTR team will present the recommendations. ASOTRY and Fararano will have an opportunity to develop alternative recommendations in case if any recommendation deemed unimplementable. The workshop will help to agree on a set of recommendations.	AoR and PVO Country Backstop participation is expected.
46	The Review Notes – Analysis linked to recommendations finalized	JMTR Team Leader with the help of JMTR team members	June 22	Based on revisions made in the workshop to recommendations, the recommendations report finalized	JMTR Team members
47	De-briefing to DC-based Stakeholders	FFP AOR and JMTR Team Leader	June 19 - 20	Review final recommendations and preliminary plans for operationalizing recommendations presented to HQ-based personnel	---
47	Action Plans drafted and submitted to FFP	ADRA & CRS	July 20	Draft Action Plans for operationalizing review recommendations submitted to FFP	FFP AoR
48	Review/revise Draft Action Plan with ADRA	FFP & ADRA	July 27	Meeting in DC with Madagascar Staff joining remotely to finalize action plan	FFP AoR
49	Review/revise Draft Action Plan with CRS	FFP & CRS	July 28	Meeting in DC with Madagascar Staff joining remotely to finalize action plan	FFP AoR
50	Action Plans Finalized	ADRA and CRS	August 15	Final Action Plans, incorporating	FFP AoR

				feedback from FFP, submitted to FFP	
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Annex 2: Additional Case Studies

Case study 6: Two women are familiar with the program but receive minimal benefit from it

Iako and Mahomy
Ambondromisotra commune, Ambondromisotra fokontany

Iako and Mahomy are two young women who live in Ambondromisotra. Iako is 18 and Mahomy is 20. They are familiar with the ADRA name and know that they rehabilitate the road and distribute oil, beans, and seeds. Iako said people received seeds if you have a child over six months, and Mahomy said pregnant women were weighed and received CSB+. Iako knows who the mother leaders are but receives no training; she said only hospital staff and ADRA staff work with the mother leaders. She knows someone who works with a mother leader, but does not get information from that person. She said that the field agent decides who participates in the program.

Iako breastfeeds her one-year old, Eddie. She also receives CSB+ and oil for him. Mahomy has a three-year old, Ratino, and does not benefit from the program because her child is too old. Her parents gave her information about how to raise her child and they help her. She has not attended meetings about the project.

Case study 7: Woman begins participating in farmer field school and farmer business school

Anjranomesoa
Soaserana commune, Soaserana fokontany

Anjranomesoa, 33, was born in Majinka, but when she was five, she moved to Soaserana because her father had work there. He was a military man, her mother a housewife, and she had two sisters and a brother. Her childhood was very comfortable, but around age 10 there was a drought that affected the families' food production. The family farmed for consumption and sales; they used their earnings to buy soap. At age 20, Anjranomesoa married and moved in with her husband. Together they have four children, ages 3 – 10. With her husband, she farmed cassava, onions, chickens, turkeys, and had 20 head of zebu. Around two years ago her husband passed away, and weeks later cattle raiders stole all her zebu, and with them, most of her wealth.

Today was her first day participating in the farmer field school and farmer business association. The morning of our visit she learned about planting, harvesting, and selling crops. She participated in Food for Work when it was available, but so far it has only been available once, for about a month. She worries about her children and says they are deprived growing up without a father.

When asked why she came to today's meeting, she said the previous day the field agent said people were needed to join a farmer field school. She was selected by a village elder to participate in the meeting, but did not know before yesterday what ASOTRY, farmer field school, or farmer business association were. She left her children in the care of her parents, leaving her home at 6am to arrive at the church at 8am. She then attended a two-and-a-half hour meeting about the farmer field school – what it is and what she will learn – before the evaluators arrived. She would not get home until evening. If she were not at the meeting, she would have been planting sweet potatoes.

Case study 8: A husband is unfamiliar with the program but wife and grown daughter benefit from the program

Norbert, Marie Noeline, and Marie Noeltine

Ambondromisotra commune, Ambondromisotra fokontany

Norbert, 59, lives in Ambondromisotra, where he inherited his farm. He has seven kids, ages 14-30, and lives with the younger ones and his wife, Marie Noeline, 60. He farms rice and a few vegetables for consumption and sale. He thinks the problem with food security is that people can only plant rice; there is no mountainside or other suitable land to plant different crops. Not everyone has access to own land; they can only do day labor.

Norbert began farming when he completed third grade. He is not familiar with ADRA or ASOTRY.

Marie Noeline in her home



However, his wife Marie Noeline participated in a VSLA last year, is currently in the farmer business association, and will be in the farmer field school when it begins – a president and members have been chosen already. The chosen president said that he is happy to work on it if it will improve life. He knows they will provide seeds.

Marie Noeline used a VSLA loan for school fees. The VSLA has 21 people and the collective investment is 500 ariary a day, up to 2,500 ariary a week. It meets weekly. There are three VSLAs in the community, split by the age of the members. Norbert and Marie Noeline have two children in college in Antananarivo, though it was unclear if those were the school fees being paid with the VSLA loan.

Their daughter, Marie Noeltine, 26, has been a leader mother since 2015. Previously she participated in SECCALIN. Current she assists 12 mothers; 2 of the original 14 recently moved away. She has taught them about ASOTRY and maternal and child health and nutrition. For example, promoting prenatal care for pregnant women, such as educating them on the necessity of going to the doctor when there are problems with the pregnancy. She said it is very enjoyable to be a leader mother, but she would like it if the mothers could learn to cook for the kids. Being a leader mother, she spends 1-2 hours a month with the neighborhood mothers, and chooses the participants: willing women who are pregnant with children under

five or planning to get pregnant. She volunteered to be a leader mother at a meeting with a man from ASOTRY who was looking for volunteers. She was told to invite any pregnant women, those with children under five, or those who were planning to get pregnant to participate in the program. Being a leader mother, she benefits by receiving education on diseases and learning when to go the doctor or CSB (local clinic). Marie Noeltine also receives a CSB+ and oil ration for her youngest child, who is almost two, and says this child is heavier and a faster learner than her older child, who is four.

Marie Noeltine lives with her husband, and she has her own farmland, which she got from her in-laws'. She knows that ASOTRY ends in 2019 and intends to continue with her leader mother teaching in the community.

Case study 9: A wife and husband participate in the program; they and their children benefit

Josiane

Mahatsinjony commune, Ambatazana fokontany

Josiane, 33, was born at the CSB II health center in the Mahatsinjony commune. She grew up in Ankinjana village of the Ambatazana fokontany. As a child, the family had enough to eat; her parents bought crops from the village and sold them for profit in the city. She attended school until she was 19, completing sixth grade, and is able to read and write. Josiane met a man in the village and they knew each other for two years before they got married when she was 20 and her husband, Razozy, was 21. When they got married, they moved to their current house, where he had land. Her parents still live in Ambatazana and help her with the children. She and



Razozy have six children, the youngest only three weeks old. One of their children is adopted. Her sister-in-law died after giving birth to a daughter, so they adopted Antsaina. Since the baby was only a week old when her mother died, the family purchased milk powder and formula for her and she was bottle-fed. She is now a healthy 15-month old baby.

Josiane said rice is expensive so the family eats cassava and sweet potatoes. They have a large farm with rice, cassava, and sweet

Razozy's sweet potato plot

potatoes. They also share their harvest with their parents.

Because of the drought, they have not been harvesting as much as usual. Razozy works cutting rocks for the foundation of houses, and Josiane she works as a reseller independently from her parents. Her children are exclusively breastfed for six months and then introduced to complementary foods. She subsidizes with breast milk until they are two.

In the village, there is not enough water in the hot days of summer. The community works together to dig holes by the rice field for drinking water; each family has a hole. They boil water because chlorine gives them stomachaches. If there is enough rain, the family eats comfortably.

Josiane also receives CSB+ and oil for the two youngest children. She goes to care group meetings once a month and has learned how to take care of the babies and cook for them, and about sanitization. She started one year ago when Antsaina was only three months old; she feels her daughter is heavier and smarter than the older children because she ate more. The next-oldest child is three years and three months, so was too old to receive benefits from the program. She said the younger kids get fevers because they cannot support the heat of the summer. If her kids get a fever she takes them to the CSB to get medicine. The medicine is affordable so the family buys it.

Razozy participates in ASOTRY as a father leader; he sensitizes mothers to the growth monitoring schedule and encourages parents to go to growth monitoring meetings. He has participated for one month and Josiane said his behavior on sanitation has changed; he also cleans the food well now before he prepares it. Josiane said the program ends in 2018, but wants it to continue, as things are going well. She is not planning to have more children.

Case study 10: Fokontany chief participates in FFA road rehabilitation

Chief

Mahatsinjony commune, Andohananatara fokontany

The chief of this fokontany is also leader of the disaster committee. He lives with his four children and wife, and they have a garden. On the day of our visit, his fokontany had gone to the distribution center in Mahatsinjony to receive their rations for Food for Work – they were rehabilitating a road. Unfortunately, at noon they were notified that the distributors were short on food, and another truck was coming with more. The chief arrived at 8am and did not leave until 4pm, when all his fokontany had received their food (rice, beans, oil). He only lives half a kilometer from the distribution site, but was there both to receive food and attend his chief responsibilities. For nine days of work, he received 35 cans of rice, 3 cans of beans, and .75 liters of oil. The Food for Work program had been happening for about a month; the chief said it is critical because it provides food and a road. Currently 250 people have rehabilitated about 2 km of road (working approximately four hours per day), but in the next 10 days they will complete 3 km with the helpful addition of 100 more people (combining two fokontany) working five hours a day. Once the full 5 km of road is complete, they will clean ditches in the rice fields.

The chief feels the program is important for health because it cares about mothers and children. He feels the health of the kids and their growth is supervised. He appreciates that the farmers receive seeds (rice, beans, and soy).

In his fokontany, there have been multiple programs; in 2000, FID built a school; in 2008, FJKLM did a road rehabilitation program; in 2009 ONN did a nutrition program; ASOTRY was implemented in 2015.

Case study 11: Elderly female farmer is unfamiliar with the programs

Ravelo

Ambondromisotra commune, Ambondromisotra fokontany

Ravelo is a very elderly woman, unable to remember her age, born and raised in Ambondromisotra. She has three children who live about 30 km away and does not see them often. She owns her home and grows rice, cassava, corn, and sweet potatoes. It is difficult for her to work in the field, but she does not have money to hire laborers so she must do it all herself. She sells some of the food she grows. She has heard of ADRA but knows nothing about the program. She has not heard of ASOTRY. She does not go to community meetings, or have any information about the activities. No one has mentioned anything to her. She was quite destitute and frail and without any support.