

ASOTRY DFAP Final Performance Evaluation

Summary Brief

INTRODUCTION

The ASOTRY Development Food Assistance Project (DFAP) was launched in Fiscal Year 2014 and aimed to improve nutrition, agricultural productivity, and resilience in Madagascar through a focus on three purposes:

- Health and nutrition of women of reproductive age and children under five years of age (CU5)
- Sustained access to food for vulnerable households
- Improved disaster mitigation, preparedness, and response in vulnerable communities

This brief summarizes the results of the final evaluation conducted by [TANGO International](#). The evaluation measured ASOTRY's development outcomes and presented evidence that:

- There was a significant decrease in the prevalence of underweight, stunting, and wasting among CU5
- Some water, sanitation and hygiene (WASH) indicators improved, but not all WASH and dietary diversity objectives were achieved
- Use of financial services increased significantly, particularly through the growth of Village Savings and Loan Associations (VSLAs)
- Community resilience to disasters had improved the most, in particular regarding immediate preparedness and response

ABOUT ASOTRY

ASOTRY means "harvest" in Malagasy

Primary Focus Areas: 1) Health and nutrition of women of reproductive age and CU5; 2) Sustained access to food for vulnerable households; and 3) Improved disaster mitigation, preparedness, and response in vulnerable communities

Implementing Organizations: The Adventist Development and Relief Agency, Land O'Lakes, and Association Intercooperation Madagascar

Funding Source: United States Agency for International Development (USAID) Office of Food for Peace

Implementation Period: FY 2014 – FY 2019

Implementation Areas: ASOTRY was implemented in two geographic areas with distinct climactic characteristics: the Central Highlands (Amaron'i Mania and Haute Matsiatra), which have adequate rain and cool temperatures, and the South (Atsimo Andrefana), which is dry and hot.

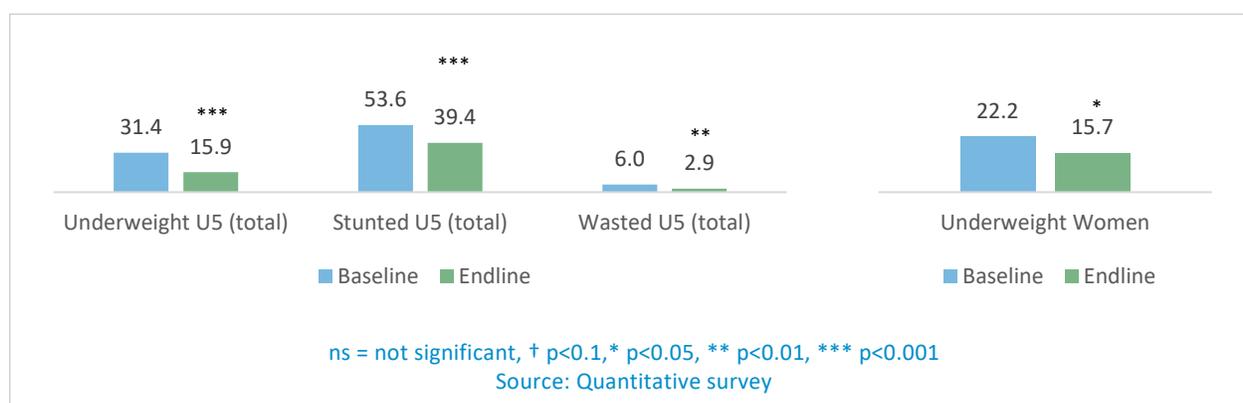


KEY FINDINGS

Health and Nutrition of Women of Reproductive Age and CU5 (Purpose 1)

There was a significant decrease in the prevalence of underweight, stunting, and wasting among CU5 in all intervention areas and all target populations (Figure 1). The percentage of underweight women also decreased. ASOTRY’s health and nutrition approach employed a Care Group model in conjunction with Community Health Volunteers and lead mothers (who modelled and taught about good health and nutrition practices) as well as lead fathers who worked independently. The effectiveness of the Care Group approach is supported by a small but significant improvement in the percentage of men and women with children under two who have knowledge of project-promoted child health and nutrition practices (from 72.1 percent at baseline to 78.2 percent at endline). There was no significant change in the Household Dietary Diversity Score (HDDS) or Coping Strategies Index (CSI) overall, but some statistically significant differences were found in the Central Highlands, where the HDDS improved and the CSI deteriorated slightly between baseline and endline. Nevertheless, focus group discussions in all areas indicated increased awareness of dietary diversity. Many focus group participants spoke highly of the *Tsikonina*¹ approach and how it helped them to take steps to adopt new, more diverse recipes.

Figure 1: Prevalence (percentage) of underweight, stunted, and wasted CU5, and of underweight women



Some WASH indicators improved. ASOTRY field agents, Community Health Volunteers and Care Groups carried out trainings and raised awareness on water treatment (which sometimes included free distribution of water chlorination products), which contributed to an increase in the percentage of households practicing correct use of the recommended household water treatment technologies from 26.8 percent at baseline to 36.3 percent at endline. Open defecation decreased significantly in the Central Highlands (from 38.7 percent to 18.3 percent), but there was no significant change in the South nor in the overall project area (when averaged together). The percentage of households reporting use of improved sanitation facilities was low at baseline (2.4 percent) and decreased at endline (0.9 percent).

Challenges and unachieved objectives remain related to dietary diversity, source of drinking water and use of sanitation facilities. The qualitative evaluation found three main reasons for this, namely the need to further contextualize the approach for behavior change, late implementation of effective activities (e.g.,

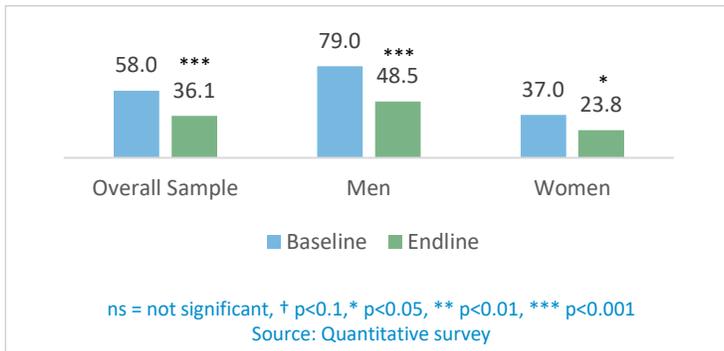
¹ *Tsikonina* is an ancestral children’s game during which they cook food with miniature utensils and eat together. This name was given by the ASOTRY project to a 12-day session during which mothers learn to cook “rainbow food.”

Tsikonina, Care Groups), and inadequate collaboration with public authorities and other stakeholders, which impeded program quality and sustainability. However, respondents in most communities, as well as the quantitative data, indicated that communities experienced shocks the previous year. This could explain the adoption of coping strategies that may negatively impact dietary diversity.

Increased sustainable access to food for vulnerable households (Purpose 2)

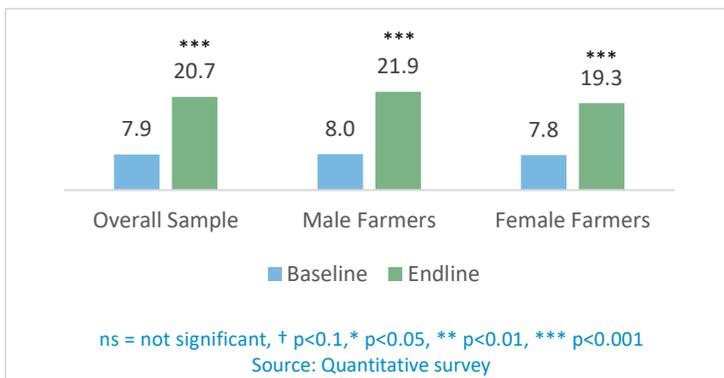
The quantitative survey results showed no change in adoption of improved agricultural practices over the life of ASOTRY, with no significant difference in the percentage of farmers adopting at least three sustainable crop, livestock or natural resource management practices. There was a statistically significant decrease in the adoption of sustainable crop practices among farmers in the Central Highlands (though not in the South). These ambiguous quantitative results may be partly due to the project’s modification of the Farmer Field School (FFS) approach, which likely diminished its effectiveness. They contrast with the more favorable results from focus groups with participants, who appreciated learning about new practices and gaining access to subsidized improved seed varieties, which they could save and plant in subsequent seasons.

Figure 2: Percentage of men and women who earned cash in the past 12 months



Based on the ASOTRY Annual Project Survey of 2019, project participants’ agricultural sales did not increase significantly, mostly due to a series of poor harvests, high transaction costs, and a preponderance of subsistence farmers with little surplus to sell. This conclusion is supported by PBS data indicating that over one-third of households experienced shocks: drought, flooding, wind/storm damage, and crop disease, all of which would negatively impact agricultural sales. This would also explain the significant decrease in the percentage of respondents earning cash in the previous 12 months (Figure 2).

Figure 3: Percentage of farmers who used financial services in the past 12 months



While the project tried to address certain constraints to market sales, it could not overcome numerous challenges (e.g., high illiteracy, poor infrastructure, geographical distance). Conversely, use of financial services did increase significantly (Figure 3), particularly through the growth of VSLAs, which are of more relevance to semi-subsistence farmers. The value

chain/marketing method, based on Farm Business Associations, was not well adapted to the rural realities of farmers, who are net buyers, and started too late to bear fruit, whereas all could benefit from VSLA participation – something clearly communicated by focus group participants.

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

The evaluation team found specific short-term, localized improvements to community disaster mitigation assets due to infrastructure rehabilitation. ASOTRY built or rehabilitated community assets such as feeder roads, dams, and irrigation channels, which are productive collective assets and (if well-constructed) support effective disaster response. The productive assets visited were relevant to needs, of reasonable quality, in use, appreciated by their communities, and nominally managed by Infrastructure Management Associations (IMAs).² Environmental considerations seem to have been respected, but infrastructure assets were designed by project staff without coordination with relevant state authorities.

Natural resource management (NRM) was largely limited to reforestation supported by Food for Assets (FFA) programming and mainly in the Central Highlands. However, NRM activities were too small-scale to be effective at reducing the level of degradation in the landscape or as mitigation measures.

Community resilience to disasters has improved the most (and at scale) for immediate preparedness and response through the *fokontany* Disaster Risk Management Committees. While the disaster warning, preparation, and response system is appreciated and works well for cyclones and fire prevention at the local level, there has been no change for other types of disasters, nor at a scale beyond the commune.

“When we were building the road, I was still receiving food rations and did not worry about what we would eat. I prepared the rations distributed by the project, because they were nutritionally balanced foods.”

RECOMMENDATIONS

- **Invest in staff, not stuff.** In order to “help people to help themselves,” the focus needs to be on personnel to facilitate change and not provision of goods to beneficiaries. Staffing levels must be adequate in early project stages to contextualize interventions and provide strong support. Their role should shift gradually from training to coaching. As for material inputs, the focus should be on income generating activities that use local resources and improve a household’s capacity to manage its budget.
- **Involve both NGO and government technical sector specialists.** One of the success factors of ASOTRY was the direct involvement of NGO technical specialists in stakeholder learning and coaching. However, this strategic choice had the unintended consequence of not adequately valuing the involvement of government officials in the health and WASH sectors. Active involvement of both groups of experts/stakeholders at all stages of the life of a project is beneficial – during the targeting stage, in quality assurance, and in post-project monitoring.
- **Engage and empower local governance.** Intentionally working with local leaders can strengthen their ability to do their jobs. Joint goal setting and monitoring with communities helps empower them for positive change. Future projects should include more explicit governance activities, going beyond

² ASOTRY promoted two types of IMAs: *Association des utilisateurs d’eau* (AUE) or Water Users Association; and *Association des utilisateurs des pistes* (AUP) or Road Users Association.

forming committees to act on pre-selected activities. An example from ASOTRY is GoGreen³, where communities chose and monitored an activity and were recognized for their success.

- **Apply an integrated natural resource management approach that engages local government.** First, ensure better awareness, governance and ownership at local and commune levels for the management of community/natural resources through joint goal setting and monitoring, e.g., through the *fokontany* Development Committee and the *fokontany* Development Plan. Second, integrate NRM across components, particularly farming and FFA/infrastructure activities and VSLAs. Third, activities must suit the local agro-ecological context, be timely, and minimize risk of failure. For example, work with local governance structures to facilitate dialogue and change around landscape management, and use holistic approaches such as forest/landscape restoration.
- **Contextualize interventions according to household resources, livelihood types, and socio-economic and ecological contexts.** The project intervention package needs to be contextualized socially, economically, and environmentally, and for households with differing levels of vulnerability, resources, and needs. Use Year One of a new project as an inception year, to deepen understanding of the characteristics, challenges, and opportunities of the socio-economic-ecological context in the project area and its different livelihood groups. Fine-tune activities so that they are doable with the resources available to households and not dependent on subsidies, even at the start. Fine-tune interventions to households' resources, needs, and vulnerability, and conduct thorough community sensitization and mobilization around project messages and activities.
- **Involve local government and institutions.** To be sustainable/supported long-term, projects need to work with communities to strengthen local governance and institutions. This also means actively working with government departments/ministries at the local and regional level from the beginning. This can work both ways – ensuring that project activities align with government priorities and reinforcing the capacity of those same institutions.
- **Use the Farmer Field School approach as intended.** The FFS approach developed by FAO is based on people-centered learning. It encourages learning by doing through field exercises that employ direct observation, discussion, and decision-making. Working with farmers through a multi-year engagement based on the FFS approach has the greatest likelihood of initiating a transformation process to more productive, sustainable and resilient agriculture, which is not achieved by letting farmers randomly choose a crop and plant a new (but unknown to them) variety of seed. Proven approaches adapted to smallholders like Conservation Agriculture, System of Rice Intensification, and Farmer-Managed Natural Regeneration, as well as dry season vegetable gardens and backyard gardens, can all be experimented with using the FFS approach.
- **Be intentional about integration across sectors and involvement of various subgroups, especially youth.** Focus on project integration, impact quality, and sustainability from the start with specific strategies, tools, and monitoring. By being intentional about this integration, it is possible to strengthen project outcomes, as each reinforces the other. An intentional approach to youth engagement, such as through school youth clubs, would help to integrate efforts across groups of people as well as across activity sectors. Given that youth are the future of all communities, it is

³ GoGreen was an ASOTRY activity to motivate the population of each *fokontany* to actively engage in environmental issues.

important to include schools/youth clubs/parent associations for specific project activities as they encourage sustainability and longer-term behavior change.

- **Exploit opportunities for communication.** Where people gather for an activity, it is an occasion to share information relevant to multiple objectives. For example, take advantage of FFA activities and food distribution events to share information and messaging around best practices in nutrition, agriculture, NRM, and DRM.
- **VSLAs and Care Groups are foundational activities and should be a core component of future work.** VSLAs build social cohesion and develop important skills. They are the foundation of other nutrition and livelihood interventions. Care Groups empower people to take charge of nutrition and health. Other interventions and activities can build on them.
- **Community branding should take precedence over donor branding.** While also acknowledging donor support, find ways to implement community branding of assets to encourage local ownership and empowerment. Management tools (e.g., registration forms, monitoring forms) should also reflect community branding.
- **Engage the faith community in social and behavioral change communication.** Work with local religious leaders to identify how their religious texts and teachings are relevant to community development and social change – and can be applied to motivate positive change. For example, some religious groups have developed resources on gender and the role of men and women in families.
- **Review and streamline measurement and monitoring tools.** The use of standard food security and nutrition indicators is important and should be continued. However, future surveys should consider ways to streamline data collection, and when a single project is implemented in two very different regions and contexts, as was the case with ASOTRY, design ways to collect information that would allow comparisons and analysis by region.
- **Sustainability.** It is important that projects facilitate a process whereby community members develop a shared vision of their future. A facilitated visioning process that encourages thinking about where people would like their community to be, for example, five years from now helps to motivate and empower people to take charge of the changes they want using the resources that they have.

MIXED-METHODS METHODOLOGY

- Population-based survey (PBS) (June 2019)
 - 980 households in the two project regions
- Quantitative analysis compared baseline and endline indicators
- Disaggregation by geographic zones
 - Central Highlands: Amoron'i Mania and Haute Matsiatra
 - South: Atsimo Andrefana
- Qualitative study (28 *fokontany*) (Sep – Oct 2019)
 - 489 focus group discussion participants (316 F, 173 M)
 - 54 key informant interviews (16 F, 38 M)
 - Observations of 27 infrastructure investments (water, sanitation, irrigation, feeder roads)
- Review of project documents, project monitoring data and secondary sources