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# USAID MADAGASCAR CONSERVATION AND COMMUNITIES (CCP) PROJECT MIDTERM EVALUATION FINAL REPORT

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## **CONTRACT INFORMATION**

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# ACRONYMS

APGL	Aire de Pêche Gérée Localement (Locally Managed Fishing Area)
AVG	Alliance Voahary Gasy
BIF	Land Ownership Office (Birao Ifotony Fananan-tany)
CCP	Conservation and Communities Project
COBA	Communauté de Base (Grassroot Communities, equivalent of Vondron’Olona Ifotony)
CSO	Civil Society Organization
DREDD	Regional Directorate for Environment and Sustainable Development
FIVMPAMA	Fivondronan’ny Mpandraharaha Malagasy (Association of Malagasy Entrepreneurs)
FGD	Focus Group Discussion
GEFP	Groupement des Entreprises Franches et Partenaires (Free Trade Zone Companies and Partners’ Organization)
GEHEM	Groupement des Exportateurs d’Huiles Essentielles, Extraits et Oléorésines de Madagascar (Madagascar Exporters of Essential Oils, Extracts and Oleoresins Group)
GIZ	German Agency for International Cooperation
GNEFM	Groupement National des Exploitants Forestiers de Madagascar (National Loggers Group of Madagascar)
GOM	Government of Madagascar
KII	Key Informant Interview
LMMA	Locally Managed Marine Area
MaMaBay	Makira Natural Park, Masoala National Park, Antongil Bay
MEDD	Ministry of Environment and Sustainable Development
METT	Management Effectiveness Tracking Tool
MI2	Measuring Impact II
MSME	Micro, Small, and Medium Enterprises
NGO	Nongovernmental Organization
OPJ	Officiers de Police Judiciaire (Judicial Police Officer)
ORTANALA	Office Regional du Tourisme for the Analanjirofo Region (The Regional Tourism Office of Analajirofo)
PCDBBA	Plateforme de Concertation pour le Développement Durable de la Baie d’Antongil (Consultation Platform for Sustainable Development of the Antongil Bay)
PPNT	Les Propriétés Foncières Privées Non Titrées (Untitled Private Land Properties)
RAMEX	Ramamandraibe Export
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SEED	Social, Environmental and Economic Development
SIF	Sehatra lombonan’ny Fananan-tany (Solidarité des Intervenants sur le Foncier, Solidarity of Land Stakeholders)
SME	Small and Medium Enterprises

TGRH-EA	Transfert de Gestion des Ressources Halieutiques et Écosystèmes Aquatiques (Fisheries Resources and Aquatic Ecosystems Management Transfer)
TGRN	Natural Resource Management Transfer (Transfert de Gestion des Ressources Naturelle)
USAID	United States Agency for International Development
VOI	Vondron’Olona Ifotony (Grassroots Communities equivalent to COBA)
VSLA	Village Savings and Loans Association
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

# EXECUTIVE SUMMARY

Measuring Impact II (MI2) supports monitoring, evaluation, and learning for the United States Agency for International Development's (USAID) Mission in Madagascar's Conservation and Communities Project (CCP). Two activities under the CCP include:

- USAID Hay Tao, a knowledge management program to provide training and policy support related to managing biodiversity resources, building the capacity of key institutions, and securing natural resource tenure rights.
- USAID Mikajy, a site-based program to improve management of targeted, high-biodiversity areas through support for communities located near protected areas and in areas suitable for community-based natural resource management.

Hay Tao and Mikajy operate site-based activities in two geographic locations: the Makira Natural Park, Masoala National Park, Antongil Bay (MaMaBay) and Menabe land- and seascapes. The overarching objective of CCP is to conserve biodiversity and secure natural resources while promoting resilient livelihoods. Hay Tao and Mikajy have been operating in MaMaBay and Menabe since August 2018.

The purpose of the midterm evaluation was (1) to evaluate the performance of current CCP programs and (2) to address critical technical information gaps, all with the primary objective of designing future biodiversity conservation programming.

To meet these objectives, MI2 and data collection firm Consulting Associates conducted a qualitative study consisting of key informant interviews (KIIs) with subject matter experts and focus group discussions (FGDs) with CCP beneficiaries in the areas of conservation management, sustainable livelihoods development, conservation governance, and advocacy. From March 16, 2022 through June 28, 2022, the evaluation team conducted 49 KIIs with subject matter experts and 19 FGDs with over 100 CCP beneficiaries, including representatives from Vondron'Olona Ifotony (VOI, Grassroots Communities), locally managed marine area networks (LMMAs), and various committees, associations, cooperatives, and civil society organizations (CSOs). The MI2 research team used a Grounded Theory approach to code and analyze the data. A summary of key findings and recommendations for future programming, organized by research question, is provided below.

## **Evaluation Question 1: To what extent have USAID-supported capacity-building efforts enabled target groups (such as protected area managers, CSOs, local government/authorities, and communities) to achieve expected results pertaining to conservation goals?**

Hay Tao and Mikajy are operating in a context with few enabling conditions for conservation advocacy. By contrast, barriers to participation in conservation advocacy are significant, including a high level of corruption and lack of law enforcement. In addition, concurrent political, environmental, and economic crises have resulted in a population focused more on immediate survival than on long-term conservation efforts, most acutely migrants from the south of the country seeking refuge from droughts (and resulting widespread crop

failures) in and around west and northwestern PAs. Although local communities have authority to develop their own natural resource management strategies according to Dina (local traditions and customs), among VOIs there is a lack of meaningful engagement in the implementation of the Dina, a lack of clarity around roles and regulations, and the VOIs have little meaningful power in decision making. Meanwhile, the national government has provided little strategic leadership on the related challenges of environmental degradation and internal migration. CSOs attempt to bridge this gap but are confronted with the additional challenges of low capacity and equipment; outdated, ineffective, and unenforced policies and regulations; and a fear of retaliation against whistleblowers by those in power.

Despite these challenges (and the challenges of operating during the global COVID-19 pandemic), USAID has had several notable successes in improving the enabling environment for conservation advocacy in Madagascar. Hay Tao's support of environmental legal clinics (*clinique juridique*) has improved local capacity to ensure compliance with and enforcement of environmental laws and regulations. Capacity-building tools—including tools for developing natural resource management plans, developed with the Ministry of Environment and Sustainable Development (MEDD); natural resource management transfer (TGRN) tools for spatial planning, organization of VOIs, and monitoring and evaluation; communal and regional development plans; and tools to support reforestation and land tenure—have all been embraced by current and future users as highly adaptable and sustainable. Evaluation key informants and CCP beneficiaries lauded Mikajy's capacity-building activities to improve environmental monitoring and patrolling (with the Regional Directorate for Environment and Sustainable Development [DREDD]), firefighting, reforestation, and strengthening Dina ownership, engagement, and enforcement as greatly improving local capacity to manage conservation efforts.

Despite these successes, evaluation participants identified several areas for improvement of current activities, and areas for either continued or new investments for future USAID programs. These include:

- **Improve coordination among government organizations (at all levels from national to local), bi-lateral and multilateral partners.** A key objective of the evaluation was to garner feedback on how capacity-building results achieved under this project can be scaled up at decentralized levels. Key informants were united in their feedback that achievement of long-term, sustainable results relied on government engagement and support. Key recommendations include:
  - Improve USAID coordination with Government of Madagascar (GOM) development projects, and other international donor projects (e.g., German Agency for International Cooperation (GIZ), World Bank).
  - Work with GOM to improve existing laws and regulations and disseminate these to regional and local levels to ensure implementation and enforcement.
  - Improve USAID collaboration with the International Organization for Migration, United Nations Development Programme, GOM, and regional stakeholders to draft or lobby for a policy on migration and to develop regional strategies to ensure implementation and dissemination.
- **Continue to strengthen capacity of CSOs.** As mentioned, one of the key successes of CCP activities has been in building the capacity of CSOs. However, the chain of results linking capacity-building efforts to improved conservation (and eventually, to improved biodiversity targets) is long. Institutional



strengthening is a long and iterative process, and although the provision of tools, training, and equipment is a fundamental first step, the “on-the-ground” impacts of Hay Tao and Mikajy’s capacity-building efforts may not be measurable within the lifetime of the project. Key recommendations include:

- Continue investing in current capacity-building activities (including refresher trainings and Training of Trainer approaches).
- Strengthen CSOs working on similar efforts through the creation of a federation (to improve coordination and collaboration across CSOs).
- Similarly, support a platform that improves communication and exchange of information between CSOs and government (at all levels).
- Expand capacity-building efforts to other actors, such as local radio and journalists.
- Strengthen CSOs to be able to protect members when reporting environment crimes by those in power. As mentioned above, the implementation of legal clinics is considered a CCP success, as evidenced by increases in the number of reports and investigations at the district (Hay Tao) and community (Mikajy) levels. However, the evaluation found that local nongovernmental organization (NGO) staff are afraid of exposing themselves as whistleblowers, leaving most of the follow-up to Alliance Voahary Gasy (AVG) (at the national level). Key informants reported that the best option was to report investigation findings to AVG, which is viewed as the only entity with members that have enough power and status to stand against government officials and other perpetrators. However, even staff of AVG (national, Hay Tao) fear retaliation. At the close of the evaluation, more CSOs (including Hay Tao) supported a law protecting whistleblowers. This is an important step in addressing a major constraint on conservation advocacy programming.

- **Recommend building capacity (through training and provision of equipment) to judicial police officers (OPJs) and strengthening anti-corruption activities (specifically targeting civil servants).**
- **Continue to support legal clinics, but with more field presence.** The legal clinics was another success story cited by evaluation participants. However, they also noted that communities must have confidence in the legal clinics to ensure their success. A key recommendation across several key informants was to increase the number of legal clinics, with more staff that are closer to and more heavily engaged with communities.
- **Address basic human needs to address migration pressures.** A recurring theme throughout the evaluation was the need to focus first on addressing basic human needs as a precondition for conservation work. This was especially poignant in discussions of migration pressures. Consistent with the recommendations throughout this report, a key recommendation was to first address the drivers of internal migration: *“USAID deals only with regional departments of justice, prefecture, and OPJ in organizing patrolling. USAID/projects must be engaged in the social and economic aspect of the life of the population to contribute to the solutions. Problems in the south (original dwelling of migrants) must be considered.”* (CODE, Menabe). Although addressing the drivers of migration is a long-term solution, Hay Tao is currently coordinating with the Ministère de l’Aménagement du Territoire (Ministry of Land Management) and Ministère de la Population (Ministry of Population) in setting up the Comité Régional Opérationnel des Ressources Foncières et Agriculture Durable (Regional Operational Committee of Land

Resources and Sustainable Agriculture) to identify potential sites for migration (in collaboration with villagers), prepare migrants and receiving communities, and support livelihoods for both migrants and receiving communities. Hay Tao is currently assessing the drivers and needs of migrants and receiving communities and will communicate results to government stakeholders. These are important first steps in addressing this acute crisis, which is essential for achieving impacts in Menabe.

## Evaluation Question 2: Are current efforts effectively incentivizing communities, including migrants, to use natural resources more sustainably?

A key objective of Mikajy is to incentivize community-level behavior change around the use of natural resources. However, a recurring theme throughout the evaluation is that a lack of access to basic human services presents barriers to adoption of conservation-friendly practices and is even driving threats to biodiversity. When asked “Are things getting better or worse for people in your community?” seven out of eight focus groups reported that things are getting worse. In addition to the impacts of the COVID-19 pandemic and migration crises (described above), Madagascar is particularly vulnerable to the impacts of climate change, including more powerful cyclones, changing rainfall patterns (including flooding and erosion in some areas, with drought in others), threatened marine ecosystems due to rising sea temperatures and ocean acidity levels, and sea level rise in coastal areas.<sup>1</sup> All focus group participants reported experiencing climate-related impacts and displayed varying levels of knowledge of adaptation strategies. Consequently, key informants and CCP beneficiaries emphasized the necessity of immediate benefits to communities to incentivize behavior change around natural resource use. Unfortunately, traditional incentive models may not be successful in the current Malagasy context. For example, there are few successful models for carbon finance in Madagascar, given national policies that centralize any revenues from carbon finance projects. Payment for ecosystem services, including distribution of ecotourism revenues to local communities, is hindered by a drop in tourism due to the COVID-19 pandemic. Given the constraints of multiple, compounding crises and the lack of models with sufficient incentives for near-term behavior change, the evaluation findings suggest that widespread behavior change around natural resource use is unlikely to be seen within the life of a 5-year project. However, the evaluation findings indicate numerous strategies to lay the groundwork for long-term, sustainable behavior change. These recommendations include:

- **Consider the use of small grants to scale up field activities and to enable an increased, longer-term field presence.** To create long-term behavior change, there is a need for increased field presence (more staff, closer to and more heavily engaged with communities). Out of 11 responses, 10 key informants felt that small grants would be a more effective and efficient way to scale up current results and achieve behavior change. However, the high transaction costs of administering grants and required capacity to manage funds under USAID rules and regulations is a potential challenge for future programs. In selecting future beneficiaries, key informants recommended VOIs and cooperatives near PAs, prioritizing select leaders and early adopters before expanding to an entire community.
- **Increase engagement with community members and traditional leaders.** Evaluation participants were united in their feedback that working at the local level with communities and traditional leaders is critically important for catalyzing sustainable change and that the current program does not focus enough on this: *“Elected local authorities are the best at the fokontany level. They must have ownership of the activities for sustainability purposes. For VOI, the fokontany chief should be among the*

<sup>1</sup> USAID. “Environment and Climate Change.” Last modified February 1, 2022. <https://www.usaid.gov/madagascar/environment>.

leaders to avoid conflicts between entities. Traditional leaders should be the point of entry for the enforcement of the Dina.” (MEDD, MaMaBay). The establishment of committees for elders to resolve disputes or conflicts related to natural resources (as part of the territorial defense of natural heritage strategy) is an example of a long-term strategy of community engagement and ownership that will facilitate long-term behavior change.

- **Use multisectoral approaches that address basic human needs while promoting conservation.** As mentioned throughout the report, a key recommendation is to address basic human needs as a critical precondition for conservation work: “The objective of getting well-managed natural resources should be the results of a multi-sectoral approach, which combines conservation, sustainable development (climate smart agriculture, better income and food security), and land tenure.” (Conservation International, Antananarivo). Mikajy has taken steps to address basic human needs through strategic partnerships. For example, Mikajy has started collaborating with USAID’s Access program, in collaboration with Mahefa Miaraka, to support the provision of quality health services and the adoption of healthy behavior and social norms in line with Mikajy’s best conservation practices. Successful activities cited by evaluation participants include the introduction of Mutuel de Santé, health insurance in which Mikajy beneficiaries pay 30 percent of the fees. Another partnership includes work with the Regional Office of Nutrition to train Mikajy beneficiaries in cooking and food conservation, with the goal of increasing resiliency. These partnerships are still in their infancy, so the long-term impacts on conservation programming are not yet observed. However, additional consideration should be given to partnerships that address the most urgent basic needs expressed by evaluation participants, including access to water for agricultural production, on- and off-farm income opportunities, access to arable land, food security, and education.
- **Improve coordination with local partners, including co-design.** In most cases, local partners felt that coordination with CCP activities was insufficient. DREDD felt that coordination was strong on patrolling but that improved coordination is needed during annual planning, monitoring, and follow-up. Local partners such as the Regional Directorate of Agriculture, Farming, and Fisheries Menabe, Force Instrumentale pour Valoriser Ensemble (Instrumental Force to Value Together), and the Wildlife Conservation Society (WCS) all felt that coordination with CCP activities could be improved. Increased coordination with local partners in planning and implementation—including site selection, schedule of interventions, choice of beneficiaries, and selection of activities—is recommended to facilitate achievement of expected results and ensure sustainability of program outcomes.
- **Improve coordination between Mikajy and Hay Tao.** Feedback on coordination between Mikajy and Hay Tao was mixed. Many evaluation participants expressed that there has historically been a lack of coordination between the two projects but that there are signs of improvement. To promote long-term, sustainable behavior change, USAID should consider an alternative program design that brings the (currently) separate activities into closer alignment to improve coordination and sequencing of interventions.

### Evaluation Question 3: What are the best approaches within livelihood investment (e.g., small-scale farming, conservation enterprises, social enterprises, etc.) that best change or support good behavior for conservation? To what extent do beneficiaries of various livelihood investments change their unsustainable practices or adopt sustainable practices?

The types of livelihood investments made by CCP included small-scale farming or Small, Medium Enterprises (SMEs), conservation enterprises, social enterprises, and engagement with large export enterprises. The evaluation included respondents from small-scale farming or SMEs (notably, cooperatives assisted by Mikajy) and large enterprises. To assess future opportunities for private sector investments, respondents also included Micro, Small, and Medium Enterprises (MSMEs) and industry groups from the ethanol, essential oil, and timber sectors to explore further livelihood activity opportunities in current CCP target areas. Overall findings suggest that it is too early to assess the impact of livelihood investments on behavior change, notably in terms of adoption of conservation practices. Most livelihood activities started mid-2021 as a result of COVID-19 delays during 2020 and the first part of 2021. In Menabe, the activities focused on peanut conservation agriculture with soil fertility restoration, local chicken production, and vegetable production. In MaMaBay, the activities focused on vanilla production, quality improvement, and commercialization, but there were also interventions on local chicken and duck, fish pond, and vegetable production at smaller scales. The Village Savings and Loans Association (VSLA) is common to both sites, and some groups are entering the second year and have gone through a first cycle of saving and lending.

The following livelihood activities are often cited as the most promising in achieving long-term impacts per type of investment:

- **Small-scale farming and SMEs:** Findings on SMEs stem from FGD respondents, which were all cooperative members. Peanut production emerged to be most successful, because farmers and cooperative members are adopting conservation techniques resulting in higher yields while using smaller quantities of seeds. In addition, the technique involves soil fertility restoration so that farmers may take back land left uncultivated for years and thus reduce the pressure of agriculture expansion to restricted areas surrounding PAs or within PAs. The activity is likely to result in good conservation practices if the requests from cooperatives about expanding support to post-harvest activities (e.g., commercialization, edible oil processing, improved warehousing) are met.
- **Engagement with large enterprises:** Findings on engagement with large enterprises are mostly within the vanilla sector. Findings indicate the need to increase partnership between farmers and aggregators or vanilla processors so that beneficiaries can get higher yields and sell their products to large enterprises such as Ramamandraibe Export (RAMEX) and Esperance Company. Indeed, although it is too early to assess the impact of activities, beneficiaries in the vanilla value chain do not appear to benefit from this collaboration with their request for more commercialization assistance through Mikajy and RAMEX's partnership; this may be a sign that Mikajy needs to enhance monitoring of their collaboration with RAMEX. Scaling up collaboration could also open opportunities for communities to access alternative funding sources to grow their business. An interviewee from RAMEX confirmed

that they expect to take over these activities when Mikajy ends, so enhanced collaboration could also be a way to ensure sustainability of activities beyond the life of the project. With revenue from cash crops (mainly vanilla, bananas, and cloves) and the practice of organic production (no use of chemicals), farmers are likely to restrict deforestation. However, local governance (VOIs and cooperatives) must be strong because higher revenue from cash crops may also increase the incentive for farmers to expand cultivation in areas surrounding PAs or in PAs.

- **Future opportunities to further engage with the private sector (in fuels and timber):** Opportunities to partner with the private sector are primarily focused on SMEs and farmers under the CCP providing and securing raw materials for MSMEs in the fuel and timber sectors. MSMEs expressed shortages in the raw material supply chain where the quantity of raw materials is insufficient for production, which puts their business at risk. Indeed, strengthening collaboration between the public and private sector and MSME (collectors, exporters, processors) can help to improve the quality and access to raw materials. CCP should therefore seek to find more partners in currently ongoing project value chains and secure a place in the MSME supply chains (i.e., cooperative is a contracted supplier of a given raw material to a given local MSME). There is also an opportunity to research alternative energy to power the production of essential oils or ethanol, in addition to avoiding the use of unsustainable fuels that further exacerbate deforestation. The interviewed timber company and industry groups are not specifically focused on producing timber as fuel, but mostly to feed domestic need and use (i.e., for the furniture market). Two projects that currently support alternative fuel production emerged as potential partnership opportunities for USAID CCP. The first is the World Bank's Public Information Center and UN Industrial Development Organization project on improved stoves (in terms of fuel efficiency improvements). The second project was mentioned by timber producer association Groupement National des Exploitants Forestiers de Madagascar (GNEFM, National Loggers Group of Madagascar), which is GIZ's green (highly efficient equipment, less waste) charcoal-making program training community members on how to build and use economic charcoal stoves and increase village reforestation. In addition, USAID could partner with GNEFM to promote more planted timber production as a source of sustainable fuel, with livelihood projects centered around the production of raw materials feeding directly into the supply chain of private sector companies as a new USAID investment opportunity.

A strong theme throughout the evaluation was that beneficiaries must have their basic needs met (for example, on- and off-farm income) as a precondition for adoption of conservation behaviors and that livelihood support activities are the key interventions to achieve that. This suggests that Mikajy is the starting link in a causal chain that, in time, will support the longer-term adoption of conservation behaviors. Therefore, beneficiary engagement, through meeting basic needs, is central to improving the conservation outcomes of CCP's livelihood investments. The midterm evaluation yielded useful data on recommendations and approaches to more efficiently and effectively engage beneficiaries to encourage conservation behaviors and change their unsustainable practices. Furthermore, the evaluation findings demonstrated how to scale up the most successful livelihood investments under the current CCP program and also explored how partnering with private sector entities (large enterprises) could contribute to scaling up livelihood programs and investments. Further overarching recommendations and findings for evaluation question 3 are listed below:

- **Improve market linkages and capacity-building:** CCP beneficiaries requested that future Mikajy interventions continue to focus on a small number of strategic value chains (but to broaden the scope of support to the entire value chain). A major gap they identified is insufficient support for market access as programs are primarily focused on production. Indeed, feedback from both community beneficiaries and interviewed expert stakeholders highlighted the need for a more holistic support to full value chain activities, notably in commercialization and market access. To build sustainable market relationships beyond the duration of the activity, it is crucial that the intervention starts by identifying buyers and market demand and analyzing those gaps between producers and buyers that USAID may help bridge. This could then include supporting producers in producing to quantities, qualities and consistency required (e.g. input provision, seeds, capacity building, certification, veterinary products, equipment), strengthening market linkages (post-harvest treatment, transportation, infrastructure, negotiations) and finally commercialization. For example, in one cooperative, the organic production methods required by the market were in place, but the cooperative did not have the capacity to deal with pest attacks in an organically friendly manner, which resulted in almost no onion production in 2021. Nevertheless, some key informants remain skeptical that cooperatives would be able to reach the level of professionalism needed to participate in processing and export without significant investments in capacity-building. Cooperatives also stressed the need for more commercialization support. For example, in one case cooperative members had to look for surplus buyers (of vanilla) because the contracted purchase was reduced. In another case, a cooperative did not have market access (due to low or no demand) despite following organic production processes and high productivity. There is also the physical barrier of market access, rendering logistics (exports) and obtaining needed inputs (e.g., seeds, equipment) difficult. Therefore, to improve livelihoods, future CCP programs will need to explore ways to overcome these significant barriers. CCP may need to review transportation and export with buyer participation in logistics. To build sustainable market relationships that will continue beyond the life of the project, CCP should identify key private sector partners (buyers), understand their demand and identify the current gaps that the project can bridge to connect supply and demand, including product quality and certification, reliable production quantities, physical market access, inputs, post-harvest losses and bargaining power of producers.
- **Provide funds and equipment to scale business:** Beneficiaries requested equipment to scale business to increase income, to diversify production (i.e., an oil processing unit to produce peanut oil from produced peanuts), and to enhance professionalization (e.g., establish shops, office facilities, warehouses for storage). However, more equipment entails the need for more funding to acquire this equipment. Promoting financial schemes for community self-reliance, in addition to alternative donated funding sources (such as government funding or donor funding) may be key to sustainably scaling up livelihood investments for the long run. Beneficiaries repeatedly expressed that VSLAs have been useful in helping them meet their basic needs and also acquiring funds to grow their business. There is an opportunity and a link in boosting VSLA training and tailoring it to help the community members solve the lack-of-equipment issue on their own. There is also the opportunity to explore microfinance schemes, and looking at collaborative partnerships such as funneling tourism revenue as a funding source for livelihood activities. Based on the above market analysis, help community members understand which specific products are most likely to sell at a profitable rate and target their new equipment on producing

those products. Strong private sector partnerships with companies higher up the value chain may also be mobilized to support community members in acquiring the equipment needed to produce the products the private sector partner is interested in.

- **Employ best practices in land rehabilitation in livelihood activities:** Among interviewed experts, there was consensus that 5 years, the usual span of a USAID-funded activity, is typically insufficient for land rehabilitation projects. Respondents provided recommendations on how to best select sites for rehabilitation, based on geographical criteria, enabling conditions, and the appropriate technical approach. The most critical recommendation is that for land rehabilitation activities to be successful, certain enabling conditions must be established, such as ensuring community land tenure first (for agriculture) or setting up nurseries of perennial crops (for reforestation). The criteria can be organized in a sequential and logical manner to (1) select the geographical area for rehabilitation implementation, (2) employ a technical approach for selection, (3) ensure enabling conditions are appropriate to soil conditions and climate of the area, and finally (4) determine the amount of time needed for rehabilitation in addition to ensuring sustainability beyond the project. For livelihood activities, the most relevant criteria are selecting sites close to VOI/TGRN to ensure that opportunities can be given to people who are closest to the vulnerable sites.

In conclusion, looking at Mikajy's Year 3 Work Plan (FY 2021)<sup>2</sup>, although there do not appear to be direct or explicit mentions of improving market access and links, partnerships are in place, notably for vanilla purchase, with McCormick Spices and RAMEX, Madagascar Consulting and Magasin Espérance, and Sambava Epices (a subsidiary of Tozzi Green). However, because implementation only started last year, it is difficult to assess whether these partnerships have proved successful although findings in the evaluation seem to suggest the contrary. From the six interviewed cooperatives' points of view, Mikajy ought to enhance its effort in linking cooperatives with these private sector partners, because beneficiaries are not feeling the full support of Mikajy in commercialization efforts. This further expresses that efforts to link beneficiaries with buyers were not sufficient enough due to no significant increase observed in their revenue. Therefore, commercialization entails creating a clear pathway to connecting cooperatives and beneficiaries to contracted buyers (whether international or local buyers) who are bound by contract to purchase a predetermined quantity of the beneficiary products. The latter could mitigate situations in which cooperatives would have to look for buyers of their surplus production. To attract these buyers, quality standards of products must be met. However, expert informants remained skeptical that cooperatives would be able to reach the level of professionalism and quality standards needed to participate in processing and export (hence better commercialization) without significant investment in capacity-building.

Lastly, for other products, Mikajy's Year 3 Work Plan planned buyer partnerships with Sahanalafor certified peanut purchase and Kirindy Relais, La Saline Lodge, and Centre National de Formation, d'Etudes et de Recherche en Environnement et Forestier (National Center for Training, Studies and Research in Environment and Forestry) for livestock purchase. However, no mention of onion production buyers may suggest that Mikajy is creating income-generating activities in new value chains and products without necessarily establishing a clear commercialization plan with buyer partnership for new value chains.

<sup>2</sup> USAID Mikajy Year Three Work Plan: October 1, 2020–September 30, 2021

## Evaluation Question 4: To what extent has USAID support to the enforcement of land and natural resource tenure rights improved management of and access to natural resources?

Overall, land and natural resource tenure rights enforcement in marine and terrestrial areas both face similar barriers and challenges, including governance, low capacity or knowledge, increasing pressures from migration, and a lack of (or unfavorable) regulations at both local and national levels. Prior to this evaluation, USAID interventions in Madagascar in marine areas have been identified as lagging behind terrestrial interventions. Evaluation findings suggest that climate change has impacted marine areas, including changes in local ocean temperatures and circulation patterns and changes in fishing patterns. The latter affects livelihoods and fisheries management, and local regulations and law enforcement also lag in LMMAs. For terrestrial interventions and management, national regulations affect land tenure rights and impede communities from acquiring land titles. Recommendations and findings for evaluation question 4 include the following:

- **Address low access to land certification (land management):** Although communities seem aware of the importance of land tenure and that land certificates remain relatively more affordable than land titles, it remains difficult for communities to acquire a land certificate, as indicated by the relatively low number of community members with certifications. For instance, according to the Land Ownership Office (Birao Ifotony Fananan-tany [BIF]) in Befasy, out of the 5,000 applicants in the commune, only 400 certificates have been issued since 2005 (accounting for less than 10 percent of total applications). Findings pointed toward the need to simplify land certificate processes to empower communities via capacity-building, equipment, and offices (land tenure offices like BIF), which should be as close as possible to the localities of these communities. BIF offices are barely operational, due in part to the 2021-016 law (described further below) but also due to lack of equipment. CCP could focus on reinforcing the capacity of BIF through funding access or participation in opening new offices to increase proximity of offices to communities (especially because the Ravinala project was canceled). Currently, there are fewer than 500 communes with a BIF or land office out of more than 1,000 communes concerned,<sup>3</sup> raising the question of whether the remaining 500+ communes are being served. There is therefore a need for funding to finance or support the needs of BIF and increase BIF offices in intervention areas to increase proximity of communities to BIF offices. Another proposed solution to increase certification access is to promote and encourage group certification or Opération de Certification Foncière Massive to reduce costs and increase awareness in different communes and to then establish land certificates. CCP activities could research feasibility and potential barriers of group land certificates to secure land tenure. In Mikajy's Year 3 Work Plan (FY 2021), Mikajy is planning to support the establishment of a land tenure office in four communes of MaMaBay and in Voloina to issue tenure certificates.
- **Address the 2021-016 law (land management):** The 2021-016 law caused many setbacks in improving land tenure and management. First, it caused BIF's activities to slow down. Next, it took away presumption of ownership (*présomption de propriété*), which rendered communities without title or land certificates living in fear of spoliation. An individual must have used and cultivated a given land for

<sup>3</sup> Recueillis par JRR. 2022. "Va-t-on vers une révision de la loi foncière 2021-016?" Lakroan'i Madagasikara. [https://www.lakroa.mg/item-2914\\_articles\\_dossier\\_18-va-t-on-vers-une-ravision-de-la-loi-fonciere-2021-016-ij.html](https://www.lakroa.mg/item-2914_articles_dossier_18-va-t-on-vers-une-ravision-de-la-loi-fonciere-2021-016-ij.html).



at least 15 years to have presumption of ownership and may thus receive a land certificate;<sup>4</sup> however, this certificate is not an absolute means of proof. It simply indicates a presumption of ownership, which can be challenged. The new regulations also facilitated the designation of untitled land as mining areas if deemed necessary and of public interest by the government.<sup>5</sup> However, it does not appear that current CCP target areas overlap with any potential mining areas. CCP activities could advocate for removal or amendment of the presumption of ownership. In Mikajy’s Year 3 Work Plan (FY 2021),<sup>6</sup> there were no mentions of the 2021-016 law or difficulties encountered by BIF as a result of the law. It is unclear how Mikajy is planning to address this new law. For example, on April 22, 2022, CSO groups and mayors joined forces to protest this new law in a joint declaration, cognizant of the danger it presents the Malagasy farmers.<sup>7</sup> USAID Mikajy and Hay Tao could play a role in advocating for the amendment or removal of the presumption of ownership clause.

- Address marine management challenges:** A key finding of this evaluation is that a lack of regulation and legal framework has resulted in many different (and sometimes conflicting) strategies for marine management. For example, World Wildlife Fund (WWF) works with VOI mangroves in habitat conservation and fishing, whereas Blue Ventures promotes management of crabs (only), and both NGOs split their intervention zones (north and south) with no common orientation. In addition, some villagers are unwilling to join LMMA, with the view that LMMA internal regulations add more constraints on the life of villagers (unable to fish where they want to and unable to sell to whoever they prefer, such as to illegal collectors for a higher price), which results in persistent illegal fishing activities. The fact that not all community members participate in the management of marine areas impedes the communities ability to manage their common goods effectively. Although there is an overall depletion of fish stocks identified by expert organization respondents, LMMA members are experiencing some encouraging improvements in their catches. However, additional advocacy work is needed to demonstrate the long-term benefits of LMMA conservation activities to community members who are currently reluctant to join LMMAs. Furthermore, expert key informants reported that illegal activities are exacerbated by migrants and foreigners who benefit from the protection of corrupt regional government representatives or by mafia. When asked about the lack of interventions in marine areas, key informants attributed this to three main causes: (1) a lack of marine expertise and staff within USAID and CCP activities, accompanied by only 30 percent of the Mikajy allocated budget dedicated for marine interventions, compared to 70 percent for land activities; (2) the inherent difficulty of managing marine areas with delineation challenges (there is no clear and permanent way to delineate managed zones); and (3) a lack of a legal framework or mandate to manage LMMA natural resource management activities. Indeed, although TGRN has been established for over 20 years, the similar concept for marine areas, Transfert de Gestion de Ressources Halieutiques et Écosystèmes Aquatiques (TGRH-EA, Fisheries Resources and Aquatic Ecosystems Management Transfer), is relatively new, as would be any legal framework or mandate that would follow.

4 Repoblikan’i Madagasikara. “LOI n° 2021-016 portant refonte de la Loi n°2006-031 du 24 novembre 2006 fixant le régime juridique de la propriété foncière privée non titrée.” [https://www.assemblee-nationale.mg/wp-content/uploads/2021/07/Loi-n%C2%B0-2021-016-propr%C3%A9t%C3%A9-fonc%C3%A8re-priv%C3%A9e-non-titr%C3%A9e\\_corr%C3%A9.pdf](https://www.assemblee-nationale.mg/wp-content/uploads/2021/07/Loi-n%C2%B0-2021-016-propr%C3%A9t%C3%A9-fonc%C3%A8re-priv%C3%A9e-non-titr%C3%A9e_corr%C3%A9.pdf).

5 “Madagascar: fortes inquiétudes autour de la nouvelle loi foncière.” Foncier & Développement. <https://www.foncier-developpement.fr/actualite/madagascar-fortes-inquietudes-autour-de-la-nouvelle-loi-fonciere/>

6 USAID Mikajy Year Three Work Plan: October 1, 2020–September 30, 2021

7 “REVISION DE LA LOI SUR LA PROPRIETE FONCIERE PRIVEE NON TITREE: Les organisations de la société civile et maires demandent la suppression de certains articles.” 2022. Journal Madagascar. <https://www.journalmadagascar.com/revision-de-la-loi-sur-la-propriete-fonciere-privee-non-titree-les-organisations-de-la-societe-civile-et-maires-demandent-la-suppression-de-certains-articles/>.

- **Address marine management recommendations:** To address identified challenges in marine management, the findings provided several recommendations. First, law enforcement must be strengthened to monitor and sanction those involved in illegal activities (i.e., Dina Be) and to address corruption and law enforcement challenges. One recommendation from key informant experts includes enhancing collaboration with GOM for better law enforcement. This could be achieved at the local level through mandating Dina, and through lobbying for increased government funding for equipment and training. Furthermore, key informants recommended collaboration with the International Organization for Migration to address migration issues. Next, community LMMA members would benefit from a greater understanding of legal procedures, and non-LMMA members would benefit from stronger incentivization (notably economic incentives, which could perhaps entail stronger paths to commercialization, as identified in evaluation question 3 findings) with awareness of the benefits of joining LMMAs. Lastly, to address the lag in marine activities, there should be an increase in budget allocation for marine activities and increased investment in staff with marine expertise. Given the current lack of legal structure (no enforceable mandates, and the inability of community members to establish common LMMA management approaches [too many approaches by different implementers]), the proposed solution is to establish and develop more TGRH-EAs (only a few are currently in existence and are recent). To accomplish all aforementioned recommendations, future CCP activities should further strengthen collaboration among existing projects and CSOs at the regional level. A study of lessons learned in LMMA management from the first-ever LMMAs in Madagascar (Velondriake LMMA has been established for 15 years, managed by Blue Ventures) is analyzed and discussed in the findings and provides some insights and potential implementation suggestions for CCP.

In conclusion, more structure is needed to better manage LMMAs. A first recommendation is to convene a consortium of implementers to construct unified solutions on identified LMMA weaknesses, such as the lack of common legal framework. This consortium could further discuss the implementation of more TGRH-EAs. In terms of enforcement, Dina enforcement, especially in terrestrial landscapes, remains a key element of Mikajy's Strategic Approach 4 and Strategic Approach 5, but achieving a legal mandate for LMMA Dina appears to be a priority. Similar to marine areas, migrants and settlers in terrestrial areas are benefiting from land ownership, often through illegal means (corruption) or simply because they have the purchasing power to afford land titles. Increasing land office access (in terms of the number and proximity of BIF offices to the communities) is a first step in simplifying land certification; however, overcoming financial issues remains a true challenge. Interviewed experts recommended promoting grouped certification schemes to reduce costs.

# 1.0 INTRODUCTION AND BACKGROUND

MI2 supports monitoring, evaluation, and learning for the United States Agency for International Development's (USAID) Mission in Madagascar's Conservation and Communities Project (CCP). Two activities under CCP include:

- USAID Hay Tao, a knowledge management program to provide training and policy support related to managing biodiversity resources, building the capacity of key institutions, and securing natural resource tenure rights.
- USAID Mikajy, a site-based program to improve management of targeted, high-biodiversity areas through support for communities located near protected areas and in areas suitable for community-based natural resource management.

Hay Tao and Mikajy operate site-based activities in two geographic locations: MaMaBay (the Makira Natural Park, Masoala National Park, and Antongil Bay) and Menabe land- and seascapes. The overarching objective of CCP is to conserve biodiversity and secure natural resources while promoting resilient livelihoods. Hay Tao and Mikajy have been operating in MaMaBay and Menabe since August 2018.

The purpose of the midterm evaluation, which was conducted from March to June 2022, and this midterm evaluation report, is (1) to evaluate the performance of current CCP programs and (2) to address critical technical information gaps, all with the primary objective of designing future biodiversity conservation programming. Key questions to be addressed through this evaluation include:

- To what extent has capacity-building supported by USAID projects enabled target groups (such as protected area managers, CSOs, local government and authorities, and communities) to achieve expected results pertaining to conservation goals?
- Are current efforts effectively incentivizing communities, including migrants, to use natural resources differently?
- What are the approaches within livelihood investment (e.g., small-scale farming, conservation enterprises, social enterprises) that best change negative behaviors impacting biodiversity or support good behavior for conservation? To what extent do the beneficiaries of various livelihood investments change their unsustainable practices and adopt sustainable practices?
- To what extent has USAID support for the enforcement of land and natural resource tenure rights (e.g. transfer of management, LMMAs) improved management and access to natural resources, such as private property land, community land, and marine resources?

To address these questions, MI2 and data collection firm Consulting Associates conducted a qualitative study consisting of key informant interviews (KIIs) with subject matter experts and focus group discussions (FGDs) with CCP beneficiaries in the areas of conservation management, sustainable livelihoods development, conservation governance, and advocacy. This report outlines the evaluation methodology (including research and instrument design, sampling plan, data collection protocol, data quality review, and approach to qualitative analysis), and key findings and recommendations for the design of future biodiversity conservation programming in Madagascar.

## 2.0 EVALUATION FOCUS AND CONTENT

The first step in the design process was to refine the research questions to be addressed through the evaluation. To achieve this goal, the MI2 team met with the USAID Social, Environmental and Economic Development (SEED) team and CCP implementing partners to review the current CCP situation model, with a focus on the current program’s strategic approaches. During the design meeting, MI2 facilitated an exercise to prioritize strategic approaches for future programming. Through this process, MI2 identified critical information gaps and performance evaluation questions for potential inclusion in the midterm evaluation. To be included in the evaluation, information gaps needed to meet the following criteria:

1. Questions must be true information gaps (e.g., the information is not available through existing data sources) or must evaluate the efficacy, impact, and sustainability of current CCP programs.
2. Questions must be able to be addressed within the scope of the evaluation (e.g., viable given methodological [qualitative], timeline, and audience constraints).
3. Data collected to address the question must inform strategic planning for follow-up activities.

It is important to note that MI2 did not select all CCP approaches for inclusion in the evaluation plan: some strategic approaches had sufficient information for design of a follow-on program, whereas others had substantial information gaps that did not meet criteria for inclusion (e.g., would require data collection methods outside of the evaluation scope or would be best addressed through review of existing literature or secondary data sources).

Key research questions and sub-questions linked to CCP strategic approaches, data collection tools, sources, and sites are provided in Appendix I and Appendix II.

### 2.1 Instrument Development

The evaluation team developed a total of nine data collection instruments for the evaluation. The team administered KII guides with subject-matter experts in their areas of expertise and FGD guides with CCP beneficiaries. A summary of the content of each guide is provided below.

*Table 1. Data Collection Instruments*

Key Informant Interview Guides
Conservation management (threats, drivers, and barriers to behavior change; payment for ecosystem services and carbon financing; land rehabilitation; fisheries management)
Governance (capacity-building; conservation advocacy)
Livelihoods (SME development; tourism)
Land tenure

Table 1. Data Collection Instruments (continued)

Private-sector engagement (questions for SMEs, enterprises, and cooperatives involved in key identified value chains; questions for industry groups and associations)
<b>Focus Group Discussion Guides</b> (Engagement in and Satisfaction with CCP Programs; Program Gaps and Future Design Recommendations)
Conservation management
Governance
Livelihoods
Land tenure

First, MI2 translated the core concepts from the approved questions in the evaluation matrix into semi-structured guides, including key questions with probes to facilitate discussion. The USAID/SEED team, CCP implementation teams (Mikajy and Hay Tao), and Consulting Associates reviewed these guides for clarity. The MI2 team also held a series of test KIIs to clarify and simplify the highly technical content included in the KII guides. Upon approval, MI2 shared the data collection instruments with Consulting Associates for translation to Malagasy.

Data collection instruments are provided in Appendices VII–XV.

## 2.2 Data Collection Methods and Sources

### 2.2.1 Data Collection Team and Timeline

MI2 and Consulting Associates conducted the CCP evaluation. MI2 was responsible for the study design, instrument development, analysis, and reporting. Consulting Associates was responsible for site selection, data collection, and the first level of analysis. MI2 and Consulting Associates received support from CCP activities in reviewing study materials, informing site selection, and facilitating access to evaluation participants. The USAID/SEED team provided overall guidance, technical direction, and oversight throughout the evaluation process.

Table 2. Evaluation Timeline

Task	Completion Date
Data collection and transcription	March 16, 2022 – April 29, 2022
Completion of preliminary data analysis	May 2–4, 2022
Presentation to USAID/SEED	May 5, 2022
Presentation to CCP	June 1, 2022
Presentation to design team	June 2, 2022

Table 2. Evaluation Timeline (continued)

Response to presentation questions and incorporation of feedback	June 9, 2022
Collection of additional private sector interviews	June 22–28, 2022
Draft report	August 9, 2022
Final report	August 31, 2022

### 2.2.2 Key Informant Interview Recruitment

Table 3 provides a breakdown of KIIs by topical areas and by geographic region. USAID/SEED and CCP activities generated the preliminary KII recruitment list during a design workshop conducted in November 2021. MI2 and Consulting Associates selected key informants based on their subject matter expertise in at least one of the CCP evaluation topical areas (conservation, governance, livelihoods, land tenure, and private-sector engagement). As they completed each KII, interviewers asked for the names of additional experts who might be willing and able to participate in an interview. Through this snowball sampling approach, the evaluation team was able to conduct a total of 49 interviews. KIIs included representatives from local, regional, and national government, international NGOs, local CSOs, the private sector, and representatives from Mikajy and Hay Tao.

Table 3. Key Informant Interviews Conducted by Topic and Location

Key Informant Interviews	Antananarivo	Menabe	MaMaBay	Total
Conservation	8	4	5	17
Governance	6	4	4	14
Livelihoods	0	0	4	4
Land tenure	2	1	1	4
Private sector engagement	10	0	0	10
Total	26	9	14	49

### 2.2.3 Focus Group Discussion Recruitment

Table 4 provides the final breakdown of FGDs that were conducted within each region and each topical area. Selection of focus group locations began with a review of a complete list of communes, VOI, and other entities participating in CCP activities. From this list, the interview team selected locations based on the extent of their experience with CCP (depth of involvement in one or more CCP interventions). Using this final list, the

interview team held a total of 19 FGDs with over 100 CCP beneficiaries, including representatives from VOI, LMMAs, and various committees, associations, cooperatives, and CSOs.

*Table 4. Focus Group Discussions by Topic and Location*

FGDs	Menabe	MaMaBay	Total
Conservation	4	4	8
Governance	2	1	3
Livelihoods	3	3	6
Land tenure	1	1	2
Total	10	9	19

#### 2.2.4 Interviewing and Data Entry Process

Site-based KIIs and FGDs began with an introduction from Mikajy local staff to the Consulting Associates interviewing team. In some cases, the staff held a courtesy call with the president of the fokontany, or village, prior to the start of data collection in that site. Prior to the start of each session, staff read an informed consent statement to participants. All participants provided written consent to participate in the session and have their session recorded.

A team of two researchers completed each FGD and KII: one interviewer/facilitator and one notetaker. The researchers recorded all data collection sessions to facilitate quality reviews. Data transcription occurred through the following steps:

1. The sessions were transcribed in full (in Malagasy) by a notetaker.
2. The Consulting Associates team lead translated the transcript into English for review (comparing written notes to the recorded session as a first quality control step).
3. The Consulting Associates team lead compiled key findings and quotes from interview transcripts into a spreadsheet for review and analysis by the MI2 team.

Following the first week of data collection, the MI2 research team reviewed transcripts and notes from the first data collection sessions for quality. The objectives of the review were to:

1. Ensure that data collection tools were adequately capturing the level of specificity needed for analysis.
2. Ensure that interviewers were probing as needed to capture the information needed for analysis.
3. Ensure that key information from the interview was being entered in the data compilation spreadsheet.
4. Review translations for accuracy.

Following this review, MI2 and Consulting Associates met to adjust the data collection instruments, protocol, and interviewing procedures as necessary.

## 3.0 ANALYSIS

Even before completing interviews, MI2 laid the groundwork for analysis as coders reviewed the transcripts and notes and began the process of memo writing and initial data coding, two preliminary steps in grounded theory data analysis.<sup>8</sup>

After completing the KIIs and FGDs, ICF's research team conducted a thematic analysis of the transcripts and interview notes to identify patterns and themes that address the performance evaluation questions and technical research gaps outlined in the evaluation plan. MI2 developed a code list from themes and patterns emerging from the data. Through this analysis, MI2 identified trends from the qualitative data that either diverged from or expanded on the assumptions in the CCP theories of change.

MI2 reviewed feedback in the data compilation spreadsheet from left to right and synthesized feedback into "findings." This was an iterative process, and MI2 refined and changed the findings as they obtained more information from the review. As part of this review, MI2 recorded findings in a separate document by research question/sub-question and entered "illustrative quotes" for every main finding in the report template. In some cases, these quotations were broad enough that we included the key informant's organization name. In other cases, quotes could not be included because their specificity could reveal the key informant's identity and present a potential breach of confidentiality.

### 3.1 Data Analysis Limitations

Despite the wealth of data resulting from this evaluation, there were some areas where the need for additional information persists. The evaluation team experienced challenges in obtaining data in the following areas:

- **Government input:** The evaluation team had planned for five KIIs with national-level government officials. However, at the start of data collection in mid-March 2022, interviews with government officials were postponed due to a reshuffle in the government, including the Minister of Environment, Minister of Territorial Planning, and Vice Minister for Reforestation. The evaluation team continued to attempt to schedule interviews, but GOM officials were unwilling to participate at the time. In total, the evaluation team was able to conduct interviews with nine regional government officials. Because the need for improved coordination with central and regional governments was a consistent theme in the evaluation findings, the lack of central government participation in the evaluation presents limitations on recommendations moving forward.
- **Carbon finance and payment for ecosystem services:** Because there are few successful models for Reducing Emissions from Deforestation and Forest Degradation (REDD+) and payment for ecosystem services in Madagascar, evaluation participants provided limited data on these areas.

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<sup>8</sup> Chun Tie, Y., Birks, M., Francis, K. "Grounded theory research: A design framework for novice researchers." SAGE Open Med. 2019; 7:2050312118822927. Published 2019 Jan 2. doi:10.1177/2050312118822927.



- **Delayed activity implementation due to COVID-19:** Due to the outbreak of COVID-19 in the spring of 2020, many Mikajy activities were delayed, with support to many VOI and cooperatives not beginning until mid-2021. As a result, some FGDs and KIs had difficulty assessing CCP performance and the impacts of activities, because activities are relatively new and their impacts are not yet realized. As a result, in many cases, feedback was restricted to the process of designing and implementing activities, rather than their impacts on conservation.

## 3.2 Strengths and Limitations of Qualitative Research

There are multiple strengths to qualitative research, including:

- Qualitative research provides rich, nuanced data on human behavior, perceptions, and beliefs.
- It is especially well suited to phenomena that are emerging, complex, or ambiguous (such as the continuously changing social, political, and economic context of Madagascar, which all impact the success of biodiversity conservation programming).
- Qualitative approaches allow researchers to preserve the flow of various actions or events and see how they fit together in context. Importantly, they allow for follow-up questions and probing. Because the drivers of conservation behaviors may evolve over time, qualitative interviews allowed us to freely explore the reasons behind beneficiaries' decision-making.

However, there are also several limitations to this approach:

- Although the MI2 team made every effort to align the demographics of interviewees and focus group participants with the characteristics of key CCP beneficiary populations, and although MI2 conducted the interviews and FGDs in a systematic way, qualitative data are not generalizable. We cannot say whether the findings in this study are representative of all CCP beneficiaries or are representative of the broader population of Malagasy people who might benefit from future programming.
- There is inherent subjectivity in the way the researchers have analyzed and grouped the findings together to find meaning. We attempted to address this subjectivity by presenting preliminary findings at a validation workshop with USAID/SEED and CCP implementing partners.

As such, the key findings presented below should be interpreted with these limitations in mind.

## 4.0 FINDINGS

### 4.1 Evaluation Question 1: To what extent have USAID-supported capacity-building efforts enabled target groups (such as protected area managers, CSOs, local government/authorities, and communities) to achieve expected results pertaining to conservation goals?

#### 4.1.1 Evaluation Question 1: Hay Tao Findings

A key objective of Hay Tao is to create an enabling and empowering environment for effective community-based management and protection of Madagascar's biodiversity and natural resources. However, the evaluation findings show that CCP activities are occurring in a context with few enabling conditions for conservation advocacy. By contrast, barriers to participation in conservation advocacy are significant. In this section, we present the commonly cited barriers to conservation advocacy emerging from the evaluation as important context for understanding Hay Tao's achievement of expected results.

#### **Barrier 1. Corruption, Retaliation, and Lack of Law Enforcement**

*“Corruption is the main flaw that must be reduced to get acceptable results in CSO activities on conservation. A system to permanently raise awareness of the population on conservation and anti-corruption measures should be in place.” — Transparency International, Antananarivo*

Without exception, the evaluation data show that corruption is the most significant constraint to creating an enabling environment for conservation advocacy. Transparency International ranks Madagascar as 147 out of 180 countries on the Corruption Perceptions Index, with a score of 26 out of 100 (where 0 denotes “highly corrupt” and 100 denotes “very clean”). In 2019, 76 percent of people in Madagascar reported that they thought corruption increased in the previous 12 months, and 27 percent reported paying a bribe for a public service in the previous 12 months.<sup>9</sup> In Madagascar, corruption plays a strong role in undermining conservation efforts. Evaluation key informants cited multiple examples of environmental corruption, such as issuance of false certificates of origin for products (maize and peanuts) illegally produced within protected areas, and slash-and-burn agriculture within protected areas. Hay Tao's approach to combating environmental corruption is the engagement, empowerment, and capacity-building of community members and CSOs to monitor and report such environmental crimes, an approach shown to effectively reduce natural resource corruption.<sup>10</sup> However, the evaluation found that fear of retaliation poses a substantial barrier to participation in these efforts: *“There are cases of jailed whistleblowers. Currently, CSOs are lobbying for a law aiming at protecting whistleblowers. It needs strong lobbying from CSOs, and USAID could play a huge role in finalizing and passing the law.” (Transparency International, Antananarivo).*

In addition to a fear of retaliation, the evaluation found a reluctance of citizens to engage in conservation advocacy efforts due to a lack of enforcement. When citizens do not believe that their reports or complaints will result in any action on behalf of law enforcement, there is an even greater reluctance to risk retaliation: *“Currently, corruption is at every level: local authorities, even at the entity supposed to manage PA, making law enforcement quite impossible in Menabe. People are starting to be mad.” (CODE, Menabe).*

<sup>9</sup> Pring, C., and Vrushi, J. 2019. “Citizens' Views and Experiences of Corruption.” Global Corruption Barometer Africa 2019. <https://files.transparencycdn.org/images/Full-Report-Global-Corruption-Barometer-Africa-2019.pdf>.

<sup>10</sup> Klein, B., Zhu, A., Pardo-Herrera, C., and Mullard, S. 2021. “Enrolling the Local: Community-Based Anti-Corruption Efforts and Institutional Capture.” <https://c402277.ssl.cf1.rackcdn.com/publications/1435/files/original/Topic-Brief-Enrolling-the-Local-Community-Based-Anti-Corruption-Efforts-and-Institutional-Capture.pdf?1612890192>

## **Barrier 2. Basic Needs Prioritized over Conservation Activities**

*“The enabling conditions are not in place: there is a deep poverty, forcing people to solve day-to-day problems, and so there is no consideration for conservation advocacy. Conservation seems to be a different concept for most people; there is a lack of ownership of the NR (common goods). However, most people are aware of the problem, but it’s a kind of non-event.”* —Conservation International Madagascar, Antananarivo

Madagascar had seen over a decade of increases in income per capita until 2020, when the COVID-19 pandemic pushed the country into a recession that was approximately three times worse than in the rest of Sub-Saharan Africa. The impact of the pandemic pushed the poverty rate to a new record high of 81 percent (based on the international poverty line of \$1.90 per capita per day). In the south, the impacts of the pandemic were compounded by droughts leading to widespread crop failures, further leading to growing food insecurity. This also resulted in massive internal migration from the south to the north, putting additional pressures on natural resources in the north.<sup>11</sup> Consequently, poverty and a lack of unmet basic needs were repeatedly mentioned as one of the most significant barriers to conservation advocacy. As an example, key informants cited the case of the SUCOMA sugar plant in Menabe, whose closure resulted in hundreds of unemployed staff turning to illegal agricultural production within protected areas (VCS Madagascar). In Section 4.2 of this report, we present in detail the most common unmet basic human needs cited by key informants and CCP beneficiaries.

## **Barrier 3. Lack of Ownership/Power in Local Communities**

*“There is a lack of ownership by the population. People are not convinced of natural resource conservation activities.”* —Alliance Voahary Gasy (AVG), Menabe

In 1996, Madagascar passed the GELOSE law, which transferred natural resource management rights to local communities. This decentralized model of natural resource management allows local communities to develop legally recognized natural resource management plans informed by Dina (local traditions and social norms). This process begins with the development of an association of local stakeholders who are willing to collectively manage their resources, known as VOI.<sup>12 13</sup> However, the evaluation findings indicate a lack of ownership, power, and engagement of local communities in conservation efforts, creating major barriers to conservation advocacy and conservation management. Among VOIs, key informants reported a lack of meaningful engagement in implementation of the Dina, lack of clarity around roles and regulations, and little meaningful power in decision-making. As mentioned above, survival is prioritized over conservation activities by community members, and there is little motivation to engage in conservation advocacy without clear benefits to communities. In addition, corruption, fear of retaliation, and an eroding confidence in the system are all demotivating factors for reporting infractions.

## **Barrier 4. Outdated and Ineffective Policies**

*“There is no implementation of the existing strategies and policies. There is no synergy among actions, because conservation is not among the priority of the government. Most of the laws and regulations are old (1960–1975), and as such do not correspond to the current situation.”* —MEDD - Antananarivo

11 The World Bank. “The World Bank in Madagascar.” Last modified April 15, 2022. <https://www.worldbank.org/en/country/madagascar/overview>.

12 Andriamalala, G., and Gardner, C.J. 2010. “Use of the dina as a tool for natural resource governance: lessons learned from Velondriake, southwestern Madagascar.” *Tropical Conservation Science*. 3, 447-472. [https://www.researchgate.net/publication/280140113\\_Use\\_of\\_the\\_dina\\_as\\_a\\_tool\\_for\\_natural\\_resource\\_governance\\_lessons\\_learned\\_from\\_Velondriake\\_southwestern\\_Madagascar](https://www.researchgate.net/publication/280140113_Use_of_the_dina_as_a_tool_for_natural_resource_governance_lessons_learned_from_Velondriake_southwestern_Madagascar).

13 Pollini, J., and Lassoie, J.P. 2011. “Trapping Farmer Communities Within Global Environmental Regimes: The Case of the GELOSE Legislation in Madagascar, Society & Natural Resources.” 24:8, 814-830. <https://www.tandfonline.com/doi/abs/10.1080/08941921003782218>.

There was broad agreement across all evaluation participants that many current conservation policies are ineffective, unenforced, and should be updated to reflect current realities and emerging challenges (such as climate change, industrial fleets, and ensuring benefits to communities):

- “Regulations need to be updated and enforced. For instance, 90–95 percent of existing natural resources management transfer (TGRN) contracts (about 1,000 in total) were not evaluated, thus exploiting forests because they think it’s best for them illegally. The last evaluation was in 2004, but most TGRNs are now using forest products without capacity-building.” (Hay Tao, Antananarivo)
- “Existing laws need updating and revision. For example, the laws 2014-018 and -020 on financial resources for protected areas and communities should be updated to reflect the field reality... The purpose of the changes/ updates is to bring more incentives for local communities to protect natural resources as a source of substantial income.” (Mikajy, Antananarivo)

It is with these significant barriers in mind that we present both Hay Tao successes and Hay Tao lessons learned in building local capacity for conservation advocacy.

### Currently, what are the most significant barriers to conservation advocacy in Madagascar?

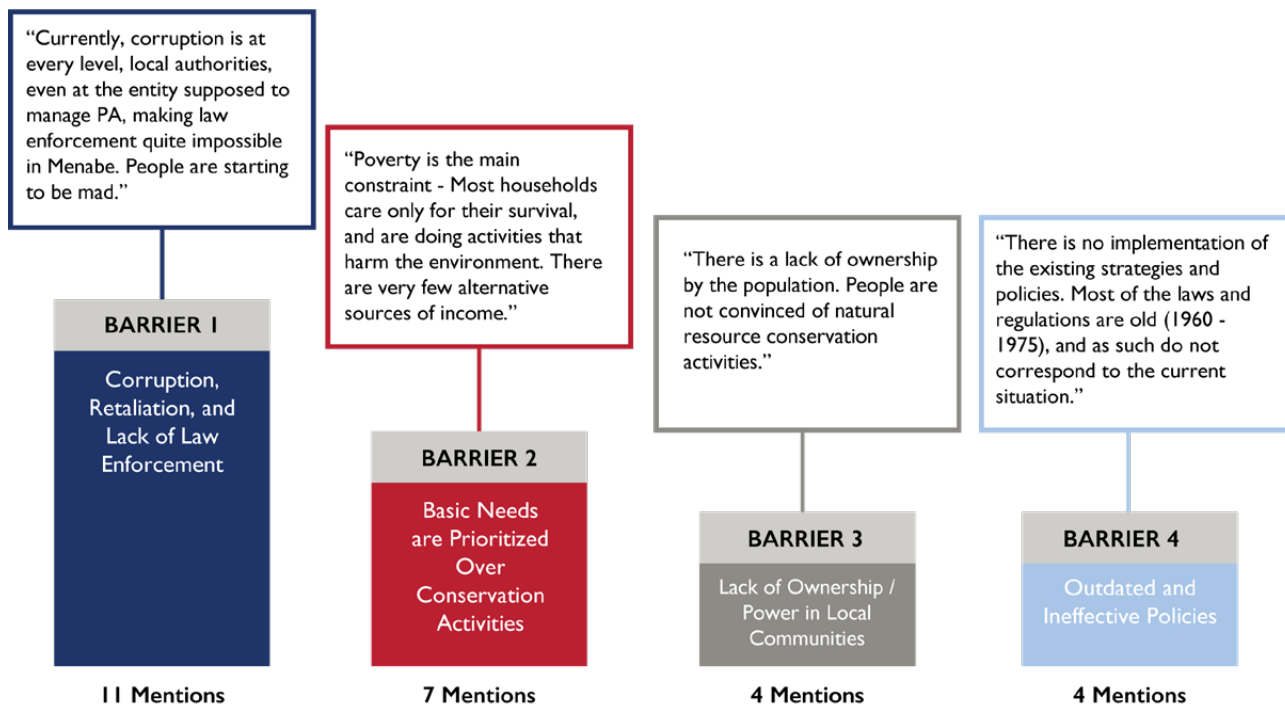


Figure 1. Barriers to Conservation Advocacy in Madagascar

*PI<sup>4</sup>1.1. To what extent have Hay Tao activities contributed to an increase in local groups' abilities to engage in political processes and conservation advocacy? What improvements has Hay Tao made in terms of building the capacity of Malagasy civil society? In what area(s)?*

The evaluation found that Hay Tao has increased local group capacity in several areas but that this support has been limited (in terms of number of beneficiaries and types of capacity-building support provided) and additional support is needed. Because many of Hay Tao's capacity-building activities are still new, it is too soon to measure the impact of these initiatives on environmental justice and on CCP's broader conservation goals. Additional time, investment, and evaluation is needed to determine whether Hay Tao's early successes will lead to longer-term impacts, despite the significant barriers cited above. However, an evaluation of Hay Tao's efforts to date provides meaningful insights on early successes, challenges, and foundations for future success, described below.

**Environmental justice (monitoring and reporting):** The evaluation found that Hay Tao's support of the environmental legal clinics—which provide communities with free access to services, resources, and legal advice to promote compliance with and enforcement of environmental laws and regulations—have greatly contributed to an increase in local groups' abilities to engage in political processes and conservation advocacy. Key informants cited Hay Tao's facilitation of collections of dossier juridique (legal files) as a major contribution to improved monitoring and governance. However, evaluation findings also indicate a need for additional legal clinics, and more field visits to strengthen connections and gain the confidence of community members. Additionally, more support to CSOs at all levels (national, regional, and local) is needed to be able to protect members when reporting environmental crimes by powerful individuals, and more support for witness protection is needed as well. Finally, additional support to law enforcement should be a priority for future funding in addressing corruption and ensuring enforcement: *“Currently, OPJ is the most corrupted entity. Internal control should have various categories of sanctions (professional, civil, criminal). Capacity-building and awareness raising should target OPJs.”* (Transparency International, Antananarivo).

*PI.3. How can the tools developed by Hay Tao be capitalized for more impact? What are the best approaches to ensure their sustained use beyond the life of the project? Who are future owners/users/champions of these tools?*

In addition to tools to support legal clinics, Hay Tao was responsible for supporting the development or improvement of several capacity-building tools and initiatives, including:

- Natural resource management tools and plans with MEDD
- TGRN management tools (for spatial planning, organization of VOI, and monitoring and evaluation)
- Reforestation guides across four different ecosystems
- Communal and regional development plans
- Tools and guides to support land tenure
- Tools and guides to support conservation advocacy and reporting of environmental offenses

All evaluation participants familiar with Hay Tao's capacity-building efforts felt that the project's capacity-building tools would be used beyond the life of the project by VOI, government, and CSOs. The evaluation found that the tools are already considered “owned” by these stakeholders. Establishing local ownership from

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<sup>14</sup> In sub-question numbering, “P” refers to questions included to measure performance, and “T” refers to questions included to address technical gaps.

the start, ensuring that tools are easily adaptable, and using an established Training of Trainers approach are reasons cited for optimism over future sustained use of the tools.

- “Users are likely to continue using the tools, as they are simple and adapted to the Malagasy reality. The tools may be used at any moment!” (Transparency International, Antananarivo)
- “The tool is easy to use, thus CSOs can use it without Hay Tao. CSOs already have certified trainers who can train other people.” (Force Instrumentale pour Valoriser Ensemble, Menabe)

To scale up these tools (and maximize the impact of USAID’s investments in current capacity-building initiatives), regional-level coordination is recommended to disseminate tools to CSOs in other areas.

#### 4.1.2 Evaluation Question 1: Mikajy Findings

*PI.4. To what extent is improved management of protected areas (as evidenced by improvements in scores) attributable to Mikajy support?*

USAID/Mikajy is designed to advance biodiversity conservation in forest and coastal ecosystems, strengthen natural resource management and land tenure security among vulnerable populations, and promote sustainable economic growth in rural communities. A key activity under Mikajy is to improve management of PAs in the targeted coastal and terrestrial landscapes of Menabe and MaMaBay. At the launch of Mikajy in 2019, PAs in these regions already faced extreme threats from deforestation and climate change. However, in recent years these challenges have been exacerbated by subsequent crises, including:

- A substantial loss of tourism revenue (which helps to fund conservation efforts) resulting from the COVID-19 pandemic
- Increasing poverty and a lack of alternative sources of income leading to increased illegal activities within PAs (agricultural production, hunting, logging, and charcoal production)
- Increased internal migration to areas surrounding PAs due to drought and widespread crop failures

The evaluation highlighted several successes of the Mikajy program in improving management of PAs over the past four years, including:

- Support to women’s fisher associations, including supply of equipment
- Provision of Spatial Monitoring and Reporting Tool and training
- Building capacity of park managers in participatory ecology monitoring methods
- Technical and financial support to CSOs (Fanamby to fight forest fire, Durrell for patrolling, Association Voahary for reforestation)

However, the evaluation also noted several challenges and barriers to achieving expected results. In the following sections, we provide an overview of successes and lessons learned emerging from the evaluation, which can inform future efforts to improve management of protected areas.

#### **Impact I. Improved Monitoring, Patrolling, and Coordination with DREDD**

*“Patrolling is the most successful [activity]: there is good coordination, capacity-building to OPJ, Mikajy pays for the per diem and fuel for the Mission.”—Director of Fisheries, Menabe*

Political instability, government mismanagement, a lack of forest operation controls, and a lack of penalties on well-known traffickers have led to widespread wildlife trafficking in Madagascar. In a study conducted by TRAFFIC from March 2010 to March 2015, at least 350,000 trees were illegally felled inside PAs and at least 150,000 tons of logs were illegally exported to destinations including China, Malaysia, and Mauritius.<sup>15</sup> <sup>16</sup> Illegal poaching and trafficking of wildlife also threatens various species of wildlife, including reptiles, lemurs, marine life, and birds.<sup>17</sup>

Mikajy supports both park managers and Communauté de Base (COBAs, Grassroot Communities) to implement participatory patrols to combat environmental crimes in PAs. Support includes training on the Spatial Monitoring and Reporting Tool, which aims to strengthen biodiversity conservation by reducing the level of illegal extraction and trade of natural resources, supporting law enforcement related to environmental infractions, and strengthening the overall management of PAs. Park officers and community members conduct the patrols and report all offenses and crimes they observe to local authorities, including OPJs, canton chiefs, and DREDD. Most evaluation participants felt that Mikajy's most impactful intervention was in improved monitoring, patrolling, and coordination with DREDD and OPJ. These patrols have resulted in the reporting of a number of violations within PAs, such as illegal agricultural production, illegal cutting of vegetation, camping, clearings, illegal hunting, mining, fire, and charcoal production. A Madagascar National Parks representative cited a 50 percent reduction of illegal logging in MaMaBay as a significant improvement observed over the life of the project. Key informants reported that punitive actions (including destruction of illegal agricultural production) have been a strong crime deterrent.

A critical component of the success of this activity has been in the form of funding and equipment to DREDD. Although this has been an impactful intervention with immediate results, the evaluation revealed concerns from both project staff and local partners on the sustainability of this approach: *“However, the question on sustainability remains when Mikajy or other projects cannot ‘pay’ for the time/service requested from communities.”* (Madagascar National Parks, Antananarivo).

## Impact 2. Firefighting and Reforestation

*“Being a partner of Mikajy has opened new activities, especially in areas where deforestation was quite important (e.g., village of Lambokely). Voahary has worked with communities on reforestation and got excellent results.”* —Voahary, Menabe

The prevalence of fires is often used as an indicator both in land conversion from forest to agriculture and in measuring the effectiveness of conservation interventions.<sup>18</sup> Mikajy supported reductions in fires by training community members in firefighting, supporting the development of firefighting management committees, and training on the Spatial Monitoring and Reporting Tool and on Moderate Resolution Imaging Spectroradiometer/GLAD satellite imagery, which provides real-time data on fire points, enabling stakeholders to take the necessary measures to verify, control, and extinguish the fires as soon as possible. Many KIIs mentioned Mikajy support to firefighting as a key success story, citing an almost 80 percent reduction in forest fires in Menabe in since 2019 compared to 2013–2018 (Madagascar National Parks).

15 USAID. “Tackling Environmental Crime in Madagascar’s Rainforests.” Biodiversity Links. <https://biodiversitylinks.org/projects/mission-projects/tackling-environmental-crime-in-madagascar2019s-rain-forests>.

16 “Timber Island: The Rosewood and Ebony Trade of Madagascar.” 2017. Traffic. <https://www.traffic.org/publications/reports/timber-island-the-rosewood-and-ebony-trade-of-madagascar/>.

17 USAID. “Combating Wildlife Trafficking.” Last modified February 1, 2011. <https://www.usaid.gov/madagascar/environment/wildlifetrafficking>.

18 Eklund, J., Jones, J.P.G., Räsänen, M., et al. 2022. “Elevated fires during COVID-19 lockdown and the vulnerability of protected areas.” Nat. Sustain. <https://doi.org/10.1038/s41893-022-00884-x>.

Reforestation (of both dry forests and mangroves) was also commonly stated as one of the most impactful Mikajy interventions. Success stories cited during the evaluation included the community of Lambokely, where 600 community members were mobilized to plant 2,017 hectares of trees (approximately 200,000 trees). Unfortunately, many of these were subsequently destroyed by forest fires, but replanting is ongoing.

In the case of both reforestation and firefighting, Dina ownership, engagement, and enforcement was mentioned as a critical key factor: *“In the past year, there has been a willingness of the local population to contribute to reforestation and firefighting (mandated by the Dina Menabe).”* (Voahary, Menabe).

## Which types of support were most impactful in improving PA Management?

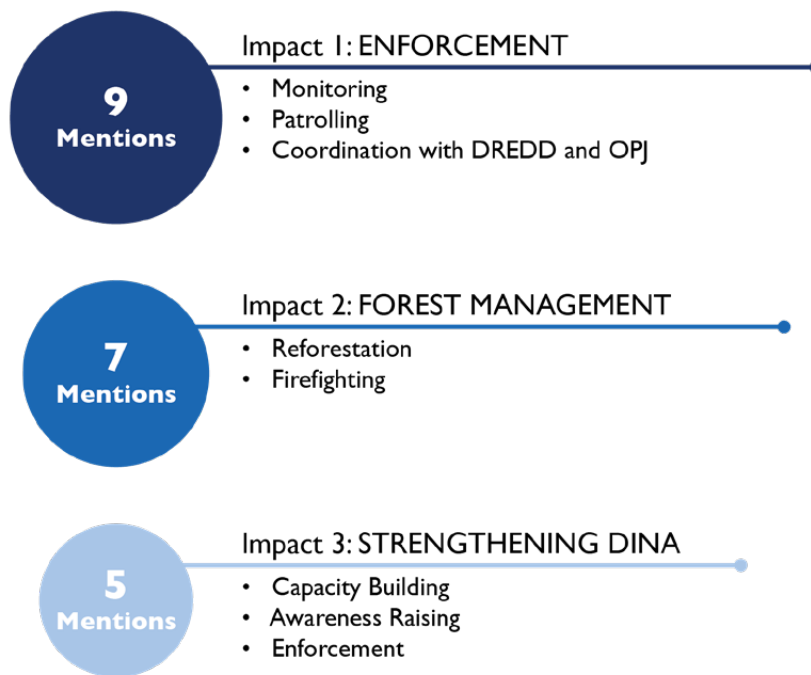


Figure 2. Most-Impactful Conservation Management Activities under CCP

Although the evaluation found that Mikajy’s patrolling, reforestation, firefighting, and capacity-building have been impactful, the Management Effectiveness Tracking Tool (METT) may not be an effective method of evaluating management effectiveness. The evaluation found widespread skepticism over use of the tool due to (1) potential bias and (2) increased scores not reflective of the conditions of the PAs, as observed by local stakeholders. To avoid the perception of a conflict of interest, we recommend use of an external, third-party evaluation for measuring the protected area management.

*“METT is not a good tool to assess the progress of VOI and TGRN. METT is biased because of the methodology used: self-assessment and lack of external auditors/evaluators. There is no hard evidence on conservation to support the scores. It is not surprising that there are positive results from the assessment of VOI done with METT.”*

*“However, the METT (M&E tools for TGRN) tools used by MEDD and Mikajy are not effective. For instance, in Antimena, USAID found positive change when using the tools, which does not reflect the status destruction of the dry*



forest and the disengagement of the 11 TGRN surrounding the protected area. USAID justified the positive score on the activities that Mikajy did within the protected area.”

### *PI.2. What are the barriers and challenges to achieving expected results, and what are the strategies for addressing these barriers and challenges?*

Several Mikajy partners expressed dissatisfaction over a lack of coordination and collaboration, citing a lack of communication and instances of implementing activities with contradictory approaches and objectives, causing confusion (and sometimes conflict) among beneficiaries.

One such conflict includes Mikajy’s support to vanilla cooperatives in the Maroantsetra District. Mikajy supported the development of a partnership between Ramamandraibe Export (RAMEX) and the cooperatives for the purchase of vanilla for McCormick and supported five cooperatives that partnered with RAMEX to create the AVAMA Union. The first contracts and vanilla purchases between these cooperatives and RAMEX were successful in 2020, but in 2021 a drop in global vanilla prices and price controls by GOM resulted in uncertainty in vanilla pricing. When the price of vanilla was not clear in the contract with RAMEX, one cooperative declined to sign the contract while the other cooperatives proceeded with the agreement. RAMEX, therefore, did not purchase from the cooperative that did not enter into the contract, causing disappointment among many members. Mikajy plans to work with this cooperative and RAMEX to renew their partnership for the upcoming vanilla campaign and to facilitate a reconciliation between the cooperatives to help reduce any remaining tensions.

Another conflict emerging from the evaluation findings included competition between Mikajy and local partners for local participants, resulting from inconsistencies in per diem amounts. Because USAID typically offers higher per diem amounts than other NGOs, local organizations complained about a lack of participation of communities and GOM staff for their activities. Although Mikajy attempts to avoid comparison of per diems and impacts on participation by not implementing activities in the same places with the same beneficiaries at the same time, additional coordination and communication with partners in future activities would be helpful to avoid this perception of competition.

### *TI.1. How can more targeted and coordinated engagement with GOM (and regional authorities, CSOs, and other actors) lead to better enforcement, management of the environment pressures, and impacts of migration?*

*“USAID projects must coordinate activities with development projects (including GOM projects) to ensure better outcomes in conservation. National strategies must be in place because some problems cannot be solved regionally and independently.” —CODE, Menabe*

A lack of coordination and collaboration with government authorities at all levels was cited as a significant barrier and as an important consideration for the success of follow-on activities. Key informants cited the importance of engaging with ministries to enact laws on environment and land tenure and to develop national-level strategies where appropriate:

*“Nothing will happen without strong administration (government/local and regional authorities). Development and conservation partners may implement the work, but the government must be involved in the design, identification of sites, and strategies, since they will be the ones that ensure sustainability of project interventions. It means projects should support regions, communes, and local communities.” (MEDD - DESAP, Antananarivo).*

### 4.1.3 Addressing the Impacts of Internal Migration

As mentioned above, Madagascar has seen a massive increase in internal migration from the south to the west and northwest of the country (including Menabe), putting additional pressures on the natural resources in these areas. A key focus of this evaluation was to address the question of how more targeted and coordinated engagement with GOM (and regional authorities, CSOs, and other actors) might lead to better management of the environmental pressures and impacts of migration. This evaluation identified two primary challenges to addressing environmental pressures from migration: (1) a lack of GOM leadership and (2) a lack of law enforcement due to low local and regional capacity and resources.

#### **Challenge 1. Lack of Government Leadership in Addressing Migration**

The evaluation found a lack of government leadership in addressing the drivers of internal migration and in mitigating migrations' impacts. Key informants cited a lack of a national policy and action plan for addressing migration. Although some key informants attributed this to a general lack of willingness or human resources, others pointed to corruption, citing instances of government officials (and local and regional authorities) encouraging migration for illegal purposes.

Key informants also cited a lack of communication from the “Responding to threats to peace and social cohesion, supporting the empowerment and promotion of women in Madagascar” project funded in 2020 by the UN Peacebuilding Fund and implemented by the International Organization for Migration and United Nations Development Programme. The International Organization for Migration (for Menabe) and United Nations Development Programme (for Androy) in 2020 developed regional strategies, but key informants lamented the lack of communication on implementation of the plan, stating: *“There is no application of the already-discussed regional strategy on migration. GOM should be the leader in following up on the actions.”* Although GOM has attempted to address drivers of migration through the projet Titre Vert Présidentiel ([Presidential Green Title project] which provides unemployed youth in the south with land, housing, equipment, and livestock), this intervention is not sufficient to address the scale of the region’s migration issues.

Key informants cited some efforts by Mikajy in addressing internal migration in Menabe, including coordination with Sehatra Iombonan’ny Fananan-tany (SIF, Solidarité des Intervenants sur le Foncier, in English Solidarity of Land Stakeholders) on site selection for resettlement of approximately 100 migrants in Mahabo. However, the evaluation found that this complex process has been hindered by a lack of funding and government support.

#### **Challenge 2. Lack of Enforcement**

Many key informants cited a lack of local enforcement of existing regulations to manage migration, including the use of local passports:

- *“There is a clear disengagement of the government and local authorities on migration. For instance, at the fokontany level, the use of a migration passport is not required anymore - while this is an important document to control and monitor migration.”* (Tafo Mihaavo, Antananarivo)
- *“Local authorities should comply with the policy in recording anyone arriving at their villages (administrative monitoring of individual displacement across the country). Usually, anyone moving from his/her place must have a letter from the original fokontany with the purpose and the duration of the trip (in rural areas).”* (Transparency International, Antananarivo)

- “Laws on using local passports to move from one village to another are not enforced.” (*Force Instrumentale pour Valoriser Ensemble, Menabe*)

Key informants stressed the need for additional support and capacity-building to improve enforcement and address the impacts of migration, including support for:

- OPJ following up on reports of environmental crimes by migrants
- Public Organization for Inter-Municipal Cooperation for more coordinated response strategies (and not just intervention at local levels)
- VOI for interpreting regulations and filing and responding to complaints
- DREDD, in the form of equipment: “DREDD staff should be more present in the field, but the lack of finance, equipment (motorbike, guns) are the main constraints. Currently, patrol is composed of 2 forest agents, 2 gendarmes, 1 quartier mobile, and 1 VOI member - but rarely done because of the above constraints.”

#### *TI.2. What opportunities exist to improve coordination between Hay Tao and Mikajy to scale up the impact of activities at decentralized levels?*

Collaboration with Mikajy was cited as essential to achieving expected results. In cases where support from Hay Tao in the design and development of tools was not complemented with support from Mikajy, stakeholders did not feel that they received adequate support:

- “There is a rush to attain targets for both projects (Mikajy and Hay Tao). Conceptually, Hay Tao designs the tools, and Mikajy implements. However, activities are implemented with a lack of coordination. For example, Mikajy wants to update PAG, but Hay Tao does not yet have the tools for the process.”
- “However, there was no support for implementation. For example, [ORGANIZATION]<sup>19</sup> did not get any support when requesting collaboration with Mikajy. [ORGANIZATION] has submitted proposals to Mikajy to strengthen advocacy for its members, and then to support the region on the finalization of a regional decree on conservation with WWF and DRAE, but again - no response.”

Although a lack of coordination and collaboration between Hay Tao and Mikajy was cited as a barrier to achieving results early in the project, participants reported that coordination between the two activities has improved over time.

## **4.2 Evaluation Question 2: Are current efforts effectively incentivizing communities, including migrants, to use natural resources differently?**

### *P2.1. To what extent has the Mikajy implementation of the territorial defense of natural heritage led to empowerment of local actors? How effective is the current implementation of the shared vision and related action plan? What, if anything, needs to be improved?*

The objective of Mikajy’s territorial defense of natural heritage strategy is to improve communities’ ability to access, manage, and defend their rights to land and natural resources by establishing local structures capable of playing these roles. Mikajy’s achievement to date on this process includes:

<sup>19</sup> In some cases, names of organizations have been redacted to protect confidentiality.

- The identification of a shared vision between local communities and commune actors in which they agreed on common goals and approaches for local biodiversity and sustainable natural resource management.
- The establishment of committees of elders by the commune to resolve any disputes or conflicts related to natural resources and this shared vision. Currently, these committees of elders ensure the role of local land recognition committees and help manage and reduce conflicts, including related to the PAs.
- The establishment of commune action plans identifying roles, responsibilities, and actions for different actors toward the shared vision, developed by the local community under the leadership of the mayors and members of the local consultation structures.
- The provision of training to 467 representatives of commune authorities, local communities, CSOs, and natural resource managers (COBAs, LMMAs) in 30 communes on their roles and responsibilities for natural resource management.

Mikajy’s current emphasis is to work with communities to increase participation in core initiatives (e.g., to encourage the majority of the local community to become members of the COBAs). The aim is to build on appreciation and interest in diversified and sustainable agriculture, such as conservation farming techniques, establishment of cooperatives, and VSLAs, to integrate these producers and other community members to revitalize and strengthen the effectiveness of COBAs and LMMAs.

Due to the longer-term objectives of these activities, key informants felt it was too early to evaluate any impacts of the territorial defense of natural heritage. However, key informants cautioned that additional support from Mikajy is needed to ensure sustainability of results achieved to date: *“If Mikajy ends, then the population is not yet ready to take over. There are still too many social problems.”* (Madagascar National Parks, MaMaBay).

*P2.2. Is providing small grants an efficient way to expand operational and impactful field activities? If so, how do we scale up this approach to achieve meaningful sustained impacts? Who might be the target grantees or beneficiaries?* Of 11 responses, 10 key informants felt that small grants would be a more effective and efficient way to scale up results. However, they also cautioned to consider the high transaction costs of administering grants, and the capacity of grantees to manage grants under USAID rules and regulations.

*T2.1. What are proven best practices for translating climate data into pragmatic communication based on targeted beneficiaries’ needs?*

Madagascar is particularly vulnerable to the impacts of climate change, including more powerful cyclones, changing rainfall patterns (including flooding and erosion in some areas, with drought in others), threatened marine ecosystems due to rising sea temperatures and ocean acidity levels, and sea level rise in coastal areas.<sup>20</sup> Focus group participants had varying levels of knowledge of the causes of climate change but observed its impact nonetheless. For example:

- Komity Manokana Miaro ny Faritra Arovana focus group participants (Beroboka, Menabe) did not know about global warming or climate change but observed changes in the environment of agricultural production, such as changes in rainfall and temperatures.

<sup>20</sup> USAID. “Environment and Climate Change.” Last modified February 1, 2022. <https://www.usaid.gov/madagascar/environment>.

- VOI Mirangasoa - Befasy focus group participants observed reduced rainfall and attributed this to the destruction of forests, and especially forest fire.
- Aire de Pêche Gérée Localement (APGL, Locally Managed Fishing Area) Fimiaro - Mahalevona focus group participants did not know about climate change. However, they discussed the devastating effects of a cyclone in 2000, which led to the destruction of the nursery zone for many fishes. These areas are currently recovering from the damages and are not yet fully restored.

The most-cited impacts of climate change reported by focus group participants included:

- Changes in rainfall (floods, droughts) causing delays in rice cultivation or flooded rice fields
- More pests and disease caused by fluctuating temperatures (e.g., reduced clove production due to weevil attacks; root disease in vanilla trees resulting in lack of vanilla beans for three years)
- More devastating cyclones
- Higher temperatures
- Landslides
- Increased forest fires
- Death of bees and cattle due to drought

The evaluation revealed that while there are some sources of information on the impacts of climate change, this information may not be reaching the people who need it most. USAID Mikajy, in collaboration with Direction Générale de la Météorologie, has developed Allo Mikajy, which provides climate change and disaster risk management information with basic, easy-to-understand language in local dialect, and tips about sea safety and fishing regulations. Although key informants and focus group participants praised Allo Mikajy, focus group participants requested additional information on how to cope with climate change, including:

- Agricultural technologies to reduce the impact of extreme change in rainfall and temperature
- Information on skills to better manage agricultural production
- More information on crop calendars and weather (wind, rainfall, temperature, and cyclones) for fishers and farmers

Mikajy staff participating in the evaluation noted that hiring a communications specialist in 2022 may help to disseminate this climate information to those who need it.

*T2.2. Do unmet basic human needs present barriers to adoption of conservation-friendly practices, or even drive threats to biodiversity?*

*T2.3. What are the most immediate needs that must be addressed to begin to think about long-term development?*

A key objective of Mikajy is to incentivize community-level behavior change around the use of natural resources. However, a recurring theme throughout the evaluation is that a lacking ability to serve basic human needs presents barriers to adoption of conservation-friendly practices and is even driving threats to biodiversity (see Section 4.1.1). When asked “Are things getting better or worse for people in your community?” seven out of eight focus groups reported that things are getting worse. Examples cited include:

- Needing to remove children from school due to lost income from fishing
- Lower agricultural activity due to lack of rain and due to pests
- Food insecurity
- Lack of water for agricultural production

When asked about the most immediate needs that must be addressed for long-term development, the top mention was infrastructure (most specifically, access to water for agricultural production, but also improvements to roads and access to finance and markets to support livelihoods). In Menabe, rice production remains at the center of household concerns. Most rice fields have been abandoned due to the failure of the Dabara irrigation system to provide water and due to lack of individual irrigation systems such as boreholes. Other (related) mentions of most immediate needs include more on- and off-farm income opportunities, access to arable land, food security, and education. Access to health care was only briefly mentioned by two respondents, indicating that although this may be a concern, there are other, more-acute needs among CCP beneficiaries.

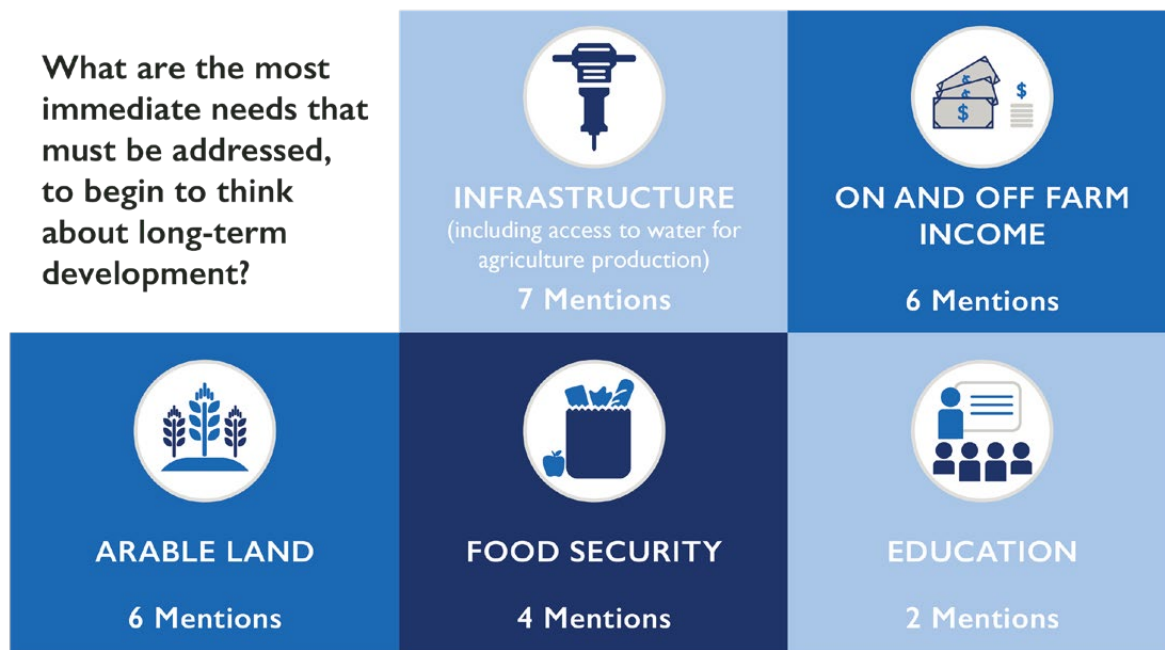


Figure 3. Most-Commonly Cited Unmet Needs

In addition to addressing these basic needs, key informants emphasized that sensitization alone is not sufficient to create behavior change around natural resource use and that sensitization and capacity-building must be coupled with long-term sustained field presence, economic incentives through income generation, and community engagement to be effective:

- *“Sensitization and training play an important role in behavior changes. However, more presence in the fields is preferred, emphasizing the positive changes made by communities. It seems that there is a lack of environmental education and ownership. However, to be effective, it must be complemented by setting up activities aiming to help local communities.” (Mikajy, MaMaBay)*

- *“In most cases, the impact of sensitization in conservation will only be observed in the medium-to-long term. There is a need for a continuous presence near communities and supporting [income-generating] activities, as well as monitoring the progress of conservation activities, e.g., reforestation, nursery units.” (Association Voahary, Menabe)*

#### *T2.5. Who do we target as beneficiaries, keeping in mind the vision of long-term development?*

Recommendations for selection of future CCP beneficiaries were mixed. In selecting future participants, many key informants mentioned VOIs and cooperatives near PAs but also noted that the best approach is to select leaders and early adopters before expanding to an entire community. Although key informants thought that interventions should be restricted to those with a higher likelihood of success, focus groups felt the opposite, arguing for broadened expansion to more community members.

#### *T2.7. What are existing, successful models for payment for ecosystem services/carbon financing in Madagascar?*

The midterm evaluation also sought to collect evidence of existing, successful models for carbon financing and payment for ecosystem services in Madagascar. However, key informants had little information on established best practices to share. The most-cited example was that of the Makira REDD+ project, which was the largest carbon emission reduction program in Madagascar’s land use sector. Funded by the Wildlife Conservation Society, the Makira REDD+ project reports that it avoided 6,000 hectares of deforestation and that 90 percent of carbon revenues were directed toward Malagasy stakeholders.<sup>21</sup> However, evaluation participants referred to this project as a “failure,” because revenue from the project was directed to the Treasury and not to local communities. A similar example is the Ankeniheny-Zahamena Corridor REDD+ project, implemented by Conservation International with funding from the World Bank 2007. As with Makira, KIs reported that no recorded payments from the 2007–2013 project have been made to local communities. In both cases, this is due to a 2020 national law requiring revenues from carbon financing projects to be transferred to the Treasury and then managed by MEDD. Key informants stressed that a lack of benefits to local communities is a major barrier to the success of carbon finance programs.

Regarding payment for ecosystem services, key informants stressed the importance of supporting conservation-friendly value chains. Key successes of the Mikajy program in this space include collaborations with the private sector to improve vanilla production and to link producers with importers. Mikajy’s success in helping cooperatives to build strong private sector partnerships allowed vanilla farmers to attend trainings, obtain certifications, and secure more favorable contractual arrangements for the 2021 vanilla campaign, thereby helping to diversify and increase revenues while encouraging an eco-friendly, sustainable vanilla value chain. Although it is too early to measure the ultimate impact of these efforts, 21 USAID Mikajy-supported cooperatives in the districts of Antalaha, Andapa, Mananara, and Maroantsetra were able to achieve successful sales for vanilla produced, resulting in a total of 101,745.78 kg of green vanilla and 3,000 kg of prepared bulk vanilla sold for \$1,340,958, even despite global oversupply of vanilla and GOM’s interventionist policies on price fixing ahead of the 2021 vanilla campaign. USAID Mikajy helped cooperatives to identify new partners for the sale of their cloves from Q1 of FY 2022, which will help them to diversify and increase their revenues.

Other models mentioned by key informants included the use of ecotourism fees for social infrastructure that helps to address basic human needs (water, education, healthcare); however, key informants also mentioned the results of current initiatives are too small to have a meaningful impact on community members.

<sup>21</sup> The Makira REDD+ Project. <https://makiraredd.wcs.org/>.

### 4.3 Evaluation Question 3: What are the best approaches within livelihood investment (e.g., small-scale farming, conservation enterprises, social enterprises) that best change or support good behavior for conservation? To what extent do beneficiaries of various livelihood investments change their unsustainable practices or adopt sustainable practices?

#### 4.3.1 Livelihood Investments: Context and Introduction

Beneficiary engagement is key to improving the conservation outcomes of CCP's livelihood investments. The midterm evaluation yielded useful data on recommendations and approaches to more efficiently and effectively engage beneficiaries to encourage conservation behaviors and change their unsustainable practices. The evaluation findings also demonstrate how to scale up the most successful livelihood investments under the current CCP program. The findings explored how partnering with private sector entities could contribute to scaling up livelihood programs and investments.

CCP livelihood programs in Menabe included peanut production, support to VSLAs, and local chicken production and vegetable farming for income generation. In MaMaBay, the focus on livelihood interventions also included support to VSLAs, and vanilla production.<sup>22</sup>

The evaluation found recurring themes that constitute barriers to livelihood investments, including a lack of skills for increased professionalization, lack of funding opportunities and finances, lack of equipment, and lack of access to intervention areas. Each barrier is explained in more detail below.

#### **Barrier 1. Lack of Funding and Finances**

*“[Access to finance and finance tools] is a significant barrier. Companies cannot scale up because of the lack of finance.” —RAMEX, MaMaBay*

Funding is a crucial element for successful scaling up of livelihood income-generating activities, notably in purchasing processing equipment and more inputs to improve production and to diversify product offerings (for instance, a cooperative in Menabe suggested getting an oil-processing machine to turn peanuts into oil). Some alternative funding sources (such as the Fond de Développement Agricole at the Ministry of Agriculture and the government Fihariana project for entrepreneurs) have provided opportunities in CCP target areas. However, funding remains a frequently mentioned barrier to beneficiary engagement, because a lack of access to finance presents risks to the sustainability of current income-generating activities, pushing beneficiaries to default back to unsustainable practices for income generation. However, the evaluation findings suggest that the solution may be in promoting and strengthening VSLA projects as an alternative source to encourage self-reliance in fundraising and access to finance. Further evidence on efficiency of VSLAs is provided in Evaluation Question 3, below.

#### **Barrier 2. Lack of Skills for Enhanced Professionalization and Market Access**

*“Lack of skills in exporting agricultural products. Export of agricultural products needs experience and professionalism. The team needs to be in the fields most of the time for quality control, logistics, product preparation, and packaging.” —RAMEX, MaMaBay*

<sup>22</sup> It is important to note that MaMaBay activities in vanilla production were in the early stages of implementation at the time the evaluation was conducted; therefore, findings from this region are limited.



*“(1) Need to improve skills of farmers and timing during manual vanilla fecundation. (2) Build capacity of farmers on pest management, using organic inputs. Currently, members of cooperatives do not use chemical pesticides (requirement for organic production) and get lower yields because of the infestation (case of Vinanibe Sahatany) [...]”*  
—Esperance Company, MaMaBay

According to key informants, lack of skills is the primary barrier to improving professionalization, which in turn limits the ability of CCP beneficiaries to scale up their enterprises. Scaling entails ensuring better product quality in preparation for export to increase revenues. In parallel, focus groups also requested more assistance and capacity-building throughout the value chain. The latter is intricately linked to improving market linkages and access, hence the identified lack of skills in export and product quality raised by key informants in the evaluation. This shared view (by CCP beneficiaries and key informants) on increasing market access through enhanced professionalization is detailed further in the findings below.

### **Barrier 3. Lack of Equipment**

*“Only two row makers are provided to the group, resulting in difficulties to expand cultivation areas. Manual techniques exist, but it requires a high quantity of labor.”* —Cooperative Volasoa, Menabe

Although closely linked to the funding and financing barrier, both beneficiaries in focus groups and livelihood experts frequently identified equipment needs as a main constraint. Inability to acquire equipment is not just a challenge on the communities’ and beneficiaries’ side; when exploring new livelihood activity opportunities, several SMEs also experience the need for more sophisticated equipment but lack finances to acquire them.

### **Barrier 4. Challenging Access to Intervention Areas**

A lack of physical access to interventions is a significant (albeit difficult to address) barrier. This lack of infrastructure was also one of the most-cited “unmet needs” cited by evaluation participants (see Section 4.2). Naturally, this affects market access and the logistics of obtaining needed input elements (e.g., seeds, equipment) and output elements (product export). To improve livelihoods, future CCP programs will need to explore ways to overcome these significant barriers.

## 4.3.2 Improving Market Access and Linkages Strategy

### *P3.1. How can future programs most effectively scale up results achieved under Mikajy (in terms of number of beneficiaries and revenue generated from livelihood activities)?*

Cooperatives stressed the need for a more-holistic approach to the support provided to the development of livelihood activities. In other words, support should start at the beginning of the value chain with input activities (input provision, seeds), then move to mid-chain (veterinary products, equipment), and then finish with commercialization and capacity-building in processing steps. CCP beneficiaries requested that future Mikajy interventions continue to focus on a small number of strategic value chains but broaden the scope of support to the entire value chain (rather than primarily focusing on production).

- *Support from Mikajy should encompass all elements of the chain, from input provisions (seeds, veterinary products, equipment) to commercialization/processing if necessary.”* (Cooperative Fandrosoana, Menabe)

- *“Fully support livelihoods activities from start (inputs provision) to the end (sales).” (Cooperative Femme Misinisiny, Menabe)*
- *“Support to commercialization of the products should be more.” (Cooperative Volasoa, Menabe)*

One expert KII from Mikajy also identified this need for a more-holistic approach to activity support when discussing enabling factors that must be in place for reforestation in land rehabilitation for conservation, stating, *“Projects should ensure other elements of the value chain, such as markets and input supplies. USAID should aim to get results in the long term because of high transaction costs.” (Mikajy, Antananarivo)*. Increasing market linkages could also be interpreted in terms of physical access which is currently hampered by poor infrastructure for logistics impeding exports. One cooperative highlighted the efficiency of organized transportation of products, which helps to cut costs in areas where roads may be difficult to navigate for vehicles.

A holistic support to value chain development must be in line with capacity-building programs offered by Mikajy; these capacity-building programs must, in turn, also align with market needs. For example, in one cooperative, organic production and processing methods are in place, but cooperatives believe that market access support is insufficient. However, the cooperative had no capacity to deal with pest attacks in an organically friendly manner, which resulted in almost no onion production in 2021. Cooperative Femme Misinisiny (Menabe) also highlighted a misalignment between income-generating activities and capacity building for both onion and chicken production: *“Preference for organic production has resulted in almost no onion production in 2021 (due to pest attack). The group wants more coordinated actions from Mikajy. For example, if organic production, then more training on the use of organic inputs (fertilizers, pesticides).”* Furthermore, a cooperative in MaMaBay had to identify alternative buyers of organic and high-quality vanilla production surplus because contracted purchase was reduced in 2021.<sup>23</sup> In another example, also in onion production, Cooperative Volasoa (Menabe) mentioned a lack of access to quality seeds (because commercial seeds have low germination rates), and a lack of market demand. Therefore, there should be strong evidence of market demand and logistical support prior to engaging and proceeding with support to income-generating activities.

When asked *“[w]hat barriers do small or medium-sized businesses in Madagascar (such as fisheries/marine resources, small-scale farmers, conservation enterprises, social enterprises, etc.) face in professionalizing and scaling up their businesses?”* three out of four interviewed livelihood experts cited finance barriers. Two cooperatives participating in the evaluation were able to scale up their enterprises through accessing funding opportunities in the Fond de Développement Agricole at the Ministry of Agriculture and the government’s Fihariana project for entrepreneurs:

- *Yes, the cooperative is now expanding partnership with FDA (Fond de Développement Agricole at Ministry of Agriculture), Fihariana (access to finance).” (Cooperative Fandrosoana, Menabe)*
- *“Increased opportunities to look for alternative sources of financing: FDA with Ministry of Agriculture, and Fihariana with the government.” (Cooperative Volasoa, Menabe)*

<sup>23</sup> According to an expert from Esperance Company, there is a possibility that COVID-19 reduced the visibility of cooperative products with fewer buyers coming to visit for sampling purposes.

Next, a key finding was that the use of VSLA, a form of microfinance, empowered communities to grow their business but also acted to cater to their social needs. The research literature supports that the use of VSLAs in African countries effectively increases agricultural yield and economic empowerment and self-reliance. A study in Northern Ghana found that members of VSLAs (448 households) obtained 38.2 percent higher agricultural value productivity than non-members for crops such as maize, rice, cowpeas, soya beans, peanuts, and vegetables.<sup>24</sup> In Malawi, researchers found that over a two year period VSLAs resulted in an increase in savings and credit obtained through the VSLAs for communities that in turn increased agricultural investments and income from small businesses; authors used USAID’s Poverty Assessment Tool to assess the impact of VSLAs, including the number of meals consumed per day and household expenditure.<sup>25</sup> In Rwanda, the results of a study of 97 members selected from 140 VSLAs found that “members are empowered to run different economic activities: agriculture and livestock (38.1 percent); petit commerce (20.6 percent); bar (6.2 percent); selling mobile money (4.1 percent); petit kiosk (3.1 percent); and transport activities through motorcycle (3.1 percent).”<sup>26</sup> Lastly, findings from a study in Nigeria suggested that 70 percent of the families (from 46 VSLA groups) attained self-reliance within the project life span of five years. These results are in relation to entrepreneurship development and the need for social workers to create awareness of VSLAs in rural communities.<sup>27</sup>

While Mikajy’s support to VSLAs is relatively new, its impacts have already been observed. In FY 2021, Mikajy supported the creation of 29 new VSLAs in the District of Maroantsetra with a total of 489 new members, including 486 (99 percent) women, creating a total of 51 VSLAs fully operational in the MaMaBay landscape. In Menabe, an additional 39 VSLAs were created in FY 2021 with support from USAID Mikajy with a total of 717 new members, of which 487 (68 percent) are women, making an overall total of 54 VLSAs comprised of 1,058 members. Mikajy trained 11 VSLA committees on the creation process and benefits of producer organizations, resulting in the creation of 31 new producer organizations with 54 VSLA members. Furthermore, 155 producers from 8 VSLAs in Menabe successfully distributed a total of \$1,965 (7,801,900 Malagasy ariary) of shares to their members during FY 2021, whereas in MaMaBay the savings were not deemed sufficient for distribution and the members decided to continue saving.<sup>28</sup> Furthermore, cooperatives also reported better family budget management due to VSLA projects; however, more training and awareness is needed to improve budget management in some cases:

- *“VSLA is efficient. I get a loan of 200,000 ariary from our VSLA that I’ve used for local chicken production. In 3 months, I was able to make 60,000 ariary net profit, with some leftover reproduction chicken.” (Cooperative Volasoa, Menabe)*
- *“The system serves more social needs rather than IGA. Contribution is 500 ar/week for social and up to 5,000 ar/week for savings.” (Cooperative Volasoa, Menabe)*

24 Dawuni, P., Mabe, F.N., and Tahidu, O.D. 2021. “Effects of Village Savings and Loan Association on Agricultural Value Productivity in Northern Region of Ghana.” *Agricultural Finance Review*, 81(5), 657–674.

<https://www.proquest.com/docview/2576771018?accountid=14779>.

25 Ksoll, C., Lilleor, H.B., Lonborg, J.H., and Rasmussen, O.D. 2016. “Impact of Village Savings and Loan Associations: Evidence from a Cluster Randomized Trial.” *Journal of Development Economics*, 120, 70–85.

[EconPapers: Impact of Village Savings and Loan Associations: Evidence from a cluster randomized trial \(repec.org\)](https://www.repec.org/EconPapers/Impact_of_Village_Savings_and_Loan_Associations_Evidence_from_a_cluster_randomized_trial)

26 Habumuremyi, D.P.D., Habamenshi, V., and Mvunabo, G. 2019. “Village Savings and Loan Associations and Social Economic Development of Poor Households in Rwanda. A Case of Murundi Sector (2015-2019).” *Research Gate* 2, 70. [https://www.researchgate.net/publication/338459069\\_Village\\_Savings\\_and\\_Loan\\_Associations\\_and\\_Social\\_Economic\\_Development\\_of\\_Poor\\_Households\\_in\\_Rwanda\\_A\\_Case\\_of\\_Murundi\\_Sector\\_2015-2019](https://www.researchgate.net/publication/338459069_Village_Savings_and_Loan_Associations_and_Social_Economic_Development_of_Poor_Households_in_Rwanda_A_Case_of_Murundi_Sector_2015-2019).

27 Nnama-Okechukwu, C.U., Okoye, U.O., Obikeguna, C., Onalu, C.E., Agha, A.A., Eneh, J., Ogbu, A.I., Erhunwunse, E.A., Nwanze, A.A., and Okunsanya, T. 2019. “An impact study of the Village Savings and Loan Association (VSLA) in Nigeria.” *African Population Studies*, 33(2). <https://doi.org/10.11564/33-2-1405>.

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- “Mikajy training on VSLA has helped households to improve the management of the family budget.” (Cooperative Femme Misinisy, Menabe)
- “Continue working on vanilla production and increase activities of VSLA.” (Cooperative Mevasoa, MaMaBay)
- “Mikajy should strengthen the capacity of VSLA. Community members need further family budget management, especially after the sales of vanilla. Most HH made spontaneous useless purchase.” (Cooperative Femme Misinisy, Menabe)

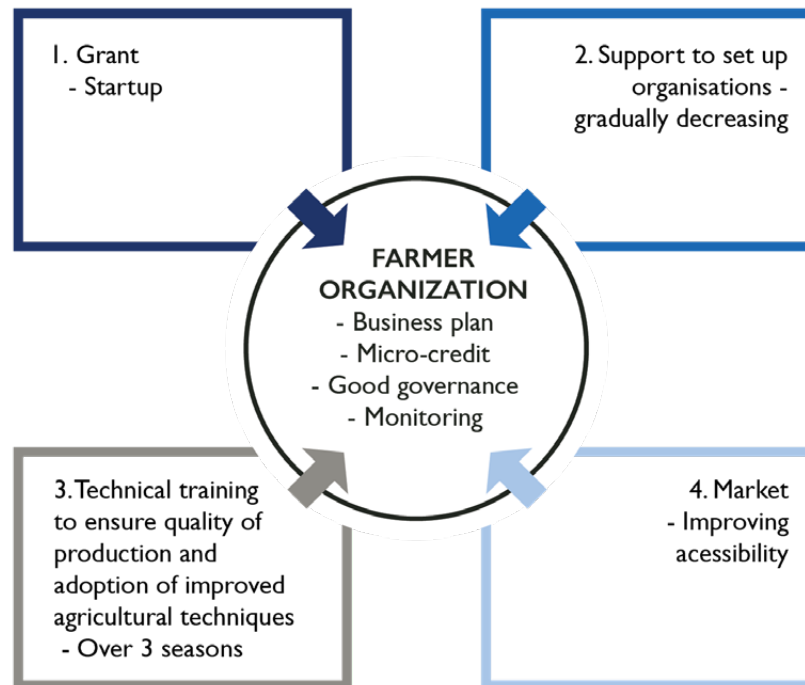


Figure 4. WWF's Elements of Sustainability at the Community Level for the Forest Landscape Restoration Project's Exit Strategy

Although Mikajy's support to VSLAs shows promise, alternative models for access to finance in Madagascar also exist. These were highlighted in the WWF Forest Landscape Restoration project in the Fandriana-Marolambo region from 2005 to 2017.<sup>29</sup> WWF also explored other financial schemes for livelihood promotions, recognizing that relying on external donor funding is not financially viable in the long term. Partnerships with microcredit provider Otiv and Madagascar Savings scheme or Caisse d'Épargne de Madagascar (which was brought in to emphasize the value of microcredit as an option to support local farmers) benefited over 500 farmers, demonstrating that microcredit schemes supported alternative income-generating activities. Figure 4 showcases strategies found to support sustainability of farmers' livelihood activities (in this case through farmer organizations). In addition, WWF identified similar findings to the current CCP midterm evaluation on the need for better capacity-building and for improving market access and linkages of cooperatives.

### *P3.2. What were the primary challenges to engaging beneficiaries and increasing revenue from livelihoods under Mikajy? How can follow-up projects be designed to address these challenges and achieve greater impact?*

<sup>29</sup> Mansourian, S., Razafimahatratra, A., and Vallauri, D. 2018. "Experience in Forest Landscape Restoration: Lessons Learnt from 13 Years of Restoration in a Moist Tropical Forest: The Fandriana-Marolambo Landscape in Madagascar." WWF Field Series 2018. [https://wwfint.awsassets.panda.org/downloads/field\\_study\\_lessons\\_learned\\_from\\_13\\_years\\_of\\_restoration\\_in\\_the\\_fandriana\\_marolambo\\_lands.pdf](https://wwfint.awsassets.panda.org/downloads/field_study_lessons_learned_from_13_years_of_restoration_in_the_fandriana_marolambo_lands.pdf).

Both KII and FGD respondents noted the lack of finance and equipment as a barrier to community members scaling up their business and thus increasing revenue. Although beneficiaries are requesting a more-holistic approach to the support provided for the development of livelihood activities, some key informants remained skeptical that cooperatives would be able to reach the level of professionalism needed to participate in processing and export without significant investment in capacity-building:

- *“Processing activities by cooperatives are yet a long shot since it requires experiences and product quality.” (Agriculture and Livestock Chief, MaMaBay)*
- *“Lack of skills in exporting agricultural products. Export of agricultural products needs experience and professionalism. The team needs to be in the fields most of the time for quality control, logistics, product preparation, and packaging.” (RAMEX, MaMaBay)*

Next, noted under P3.1 above, farmers mentioned that despite organic production and high productivity, there is still no market access. In addition, some cooperatives had to search for buyers of surplus production. Because RAMEX worked on the commercialization (i.e., better access to markets for vanilla farmers [CRAE/MINAE, MaMaBay]), there may be more work needed from RAMEX’s side, more communication and collaboration between Mikajy and RAMEX, or perhaps a need for an increase in the number of commercialization partners and thus other forms of collaboration within the value chain. Respondents from RAMEX mentioned that “RAMEX allocated funding to buy equipment to cooperatives [while] Mikajy contributes to the technical support during production and processing (extension services) and RAMEX ensures quality control.” However, there was no specific mention of how RAMEX may be assisting the cooperative with commercialization. Indeed, some experts highlighted the importance of enhancing collaboration between actors in the value chain as follows (not just in the vanilla value chain; this view is shared across two of the four livelihood KII respondents):

- *“It follows that a strong collaboration among actors on development and conservation is critical for success.” (CRAE/MINAE, MaMaBay)*

### *T3.5. What barriers do local SMEs face in professionalizing and scaling up (e.g., finance and finance tools)?*

Better access to equipment could play a major role in professionalizing and scaling up cooperatives by increasing production efficiency, reducing labor, and allowing for the expansion of cultivated areas. Similarly, access to equipment can diversify products sold (e.g., from selling just peanuts to selling peanut oil made with a peanut processor), resulting in increased revenue. When asked what type of activities cooperatives would do if they were given funds to create a program to support people to improve their livelihoods, five out of the six interviewed cooperatives answered equipment, warehouses, office space, or some form of distribution points:

- Cooperative Volasoa (Menabe) would establish shops to facilitate access to inputs such as seeds, veterinary products, and equipment.
- Cooperative Fandrosoana (Menabe) would acquire an oil processing unit: *“Peanut price is about 1,500 ariary per kilogram, oil price is about 8,000 ariary per liter; processing conversion ratio is 50 percent oil plus 50 percent peanut cake.”*
- Cooperative Fandrosoana (Menabe) would build an office and a warehouse.
- Cooperative Mirary Soa (MaMaBay) would invest in skills and equipment for vanilla preparation: *“As the prices are much better compared to fresh vanilla. The cooperative has already identified the location, but it needs facilities and cooking equipment.”*

- Cooperative Avotra (MaMaBay) and Cooperative Mevasoa (MaMaBay) would both invest in a rice milling unit to sell milled rice and use by-products for small livestock and poultry production.

As mentioned in the discussions above on unmet basic needs (see Sections 4.1.1 and 4.2) and on the impacts of climate change (Section 4.2), here, too, CCP beneficiaries mentioned the detrimental impacts of water scarcity and pests on their livelihoods. Cooperatives in Menabe frequently cited capacity-building and equipment to address water scarcity and manage pests as critical needs:

- *“Improve access to potable and irrigation water.” (Cooperative Volasoa, Menabe)*
- *“Improve access to water - maybe more boreholes.” (Cooperative Femme Misinisy, Menabe)*
- *“Livelihoods of the population depend on agriculture, but land is scarce, and lack of water makes yields low.” (Cooperative Volasoa, Menabe)*
- *“Mikajy should also support access to water, as it is critical for high yields in vegetable production.” (Cooperative Volasoa, Menabe)*
- *“Borehole / dam may be options to get water, but it needs discussion with hydrologists. Water table may be as deep as 25 meters, but these are for potable water, so far.” (Cooperative Volasoa, Menabe)*

Although more equipment requires additional investments, alternative funding sources, such as VSLAs, may address this need (described above).

### 4.3.3 Exploring New Livelihood Opportunities

#### *T3.4. What opportunities exist to partner with the private sector in our target areas? Should future programming focus on investment in fuel and timber?*

Overall, opportunities to partner with the private sector are primarily focused on providing and securing raw materials to companies. Another opportunity may be related to electrification projects to communes using biofuel. There was no investment in the areas of fuel and timber observed during the field work in Menabe. However, essential oil producers are interested in using alternative sources of fuel for the distillation. For timber, the evaluation team only interviewed two respondents, and the focus was less on using timber for alternative fuel production and more on furniture production and reforestation. The industry association is not active in the production of fuels because it stopped its activities due to the MEDD no-cut interdiction in 2019, despite timber still being available and sold in the market.

In addition to the KII interviews about livelihoods, the evaluation team interviewed private sector respondents to gain insight into opportunities to engage and partner with the private sector in CCP target areas. There were six respondent SMEs or enterprises involved in fuel and timber industries or alternative energy solutions and four respondent industry groups or associations (groupements). The SMEs included participants from ethanol production (one SME), essential oils and organic spices (two SMEs, with one including activities in medicinal plants in addition to essential oils and organic spices), non-edible vegetable oils (one SME), and timber and furniture production (one SME). The four industry groups were: (1) the Malagasy entrepreneurship association (Fivondronan’ny Mpandraharaha Malagasy, or FIVMPAMA), (2) the Madagascar Exporters of Essential Oils, Extracts and Oleoresins Group (Groupement des Exportateurs d’Huiles Essentielles, Extraits et Oléorésines de Madagascar, or GEHEM), (3) the Free Trade Zone Companies and Partners’ Organization

(Groupement des Entreprises Franches et Partenaires, or GEFP), which brings together the majority of free enterprises located in Madagascar (in free trade zones), and (4) the National Loggers Group of Madagascar (GNEFM, Groupement National des Exploitants Forestiers de Madagascar), an economic entity exploiting forest products under the prevailing laws on timber production.

Details about the SMEs and industry groups interviewed can be found in Tables 5 and 6 below.

*Table 5. Private Sector Engagement Interviews (Companies)*

Interviewed SME Respondents	Respondent's Location	Location of Intervention and Activities	Supply Chain Positioning
1. HOBIO Mamy	Antananarivo	-Location not specified (company is not fully established yet) -Ethanol	Vertical coordination: cassava production through farmers, ethanol processing, and distribution
2. <a href="#">Biolandes</a>	Ambanja	-Ambanja, Sambirano River Valley -Essential oils	Processing
3. <a href="#">Jacarandas</a>	Antananarivo	-Ylang cultivation: Nosy Be -Baie rose collection: Sainte Marie to Tolagnaro -Collection of essential oils from smaller distillers: Analamanga -Processing of essential oils in two plants with grinding, distillation, and packaging: location not specified	For essential oils: collection from smaller distillers, processing (grinding, distillation, and packaging)

Table 5. Private Sector Engagement Interviews (Companies) (continued)

4. <a href="#">Phileol</a>	Antananarivo	<ul style="list-style-type: none"> <li>-Location not specified</li> <li>-Essential oils, medicinal plants, and spices</li> <li>-Partners with small producers, e.g., cinnamon, ravintsara, katrafay, mandravarotra</li> <li>-Rental of equipment to producers and small essential oils processors</li> </ul>	Collection, processing, and export to the European Union
5. Vegetalia	Antananarivo	<ul style="list-style-type: none"> <li>-Location not specified</li> <li>-Essential oils, medicinal plants, and spices</li> <li>-Partners with small producers, e.g., cinnamon, ravintsara, katrafay, mandravarotra</li> <li>-Rental of equipment to producers and small essential oils processors</li> </ul>	<ul style="list-style-type: none"> <li>-Collection of raw materials</li> <li>-Processing and packaging</li> <li>-Export</li> <li>-Service providers</li> </ul>
6. Fanalamanga	Antananarivo	<ul style="list-style-type: none"> <li>-Tree planting (200,000 hectares): three districts of Alaotra Mangoro</li> <li>-Timber and furniture production</li> </ul>	-Raw materials production



Table 5. Private Sector Engagement Interviews (Industry Groups)

Interviewed Associations or Groupements*	Description
<p><a href="#">FIVMPAMA</a></p>	<ul style="list-style-type: none"> <li>-Promotes the effective participation of its members in the economic and social sectors with roles in advocacy, market research, support to members, development of value chains, and GOM liaising (<a href="#">learn more here</a>)</li> <li>-Groups 500 companies throughout the island, classified as SMEs/industries</li> <li>-Present in nine regions with an international presence in France, Réunion Island, and Canada</li> <li>-Comprised of 15 groups</li> </ul>
<p><a href="#">GEHEM</a></p>	<ul style="list-style-type: none"> <li>-Gathers essential oil exporters to fight against anti-economic measures and for the promotion of the essential oils sector in Madagascar and around the world (<a href="#">learn more here</a>)</li> <li>-Created in 2017 (legally in 2019) following the ban on essential oils exports from Madagascar</li> <li>-Currently has 67 members (an increase from the starting number of 14 members)</li> </ul>
<p><a href="#">GEFP</a></p>	<ul style="list-style-type: none"> <li>-Brings together the majority of free enterprises located in Madagascar (in free trade zones) to improve competitiveness and promote the socio-economic role of its members (i.e., removal of VAT payment or facilitation of customs procedures for import and export, and for outsourcing and local sales) (<a href="#">learn more here</a>)</li> <li>-Most members work in the garment industry and target export markets</li> <li>-Based on current policies, sector growth will be limited (no new investors will come to Madagascar) because of the loss of competitiveness compared to Bangladesh and other African countries</li> </ul>

Table 5. Private Sector Engagement Interviews (Industry Groups) (continued)

<p><u>GNEFM</u></p>	<ul style="list-style-type: none"> <li>-Created in 2007, currently has 30 members who have all received training and support from GIZ and USAID</li> <li>-An economic entity exploiting forest products under the prevailing laws on timber production, which works with local communities and GOM</li> <li>-Participates in reforestation activities led by MEDD</li> <li>-Activity currently stopped because of 2019 MEDD no-cut interdiction, despite timber currently still being sold in the market</li> <li>-Gathers all operators involved in various activities of the timber industry, such as transporters and sellers of raw wood, processing companies, and finished products of wood</li> </ul>
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*\*All interviewed associations or groupements intervene at a national level.*

Three SMEs expressed that shortages in the raw material supply chain put their businesses at risk. In one case, a key informant from Jacarandas SME attributed the reduction and quality of raw materials to deforestation that is accentuated by demographic pressure. In parallel, unorganized farming schemes to facilitate raw material supply render the situation more difficult. From the SME perspective, two factors contribute to the lack of organization: (1) lack of contract farming to guarantee the amount of raw materials provided (Vegetalia and Hobio Mamy respondents in Antananarivo), and (2) lack of capacity of farmers and farmer groups to attain quantity or quality of production of raw materials. Two examples of challenges related to raw materials are (1) limited community efforts to collect seeds from existing forests to plant more trees (reforestation using endemic species) as an additional source of income (Phileol respondent in Antananarivo) and (2) the lack of capacity and organization at production raw material sites regarding setting up forest fire breakers and access to land (Vegetalia respondent in Antananarivo). Indeed, Hobio Mamy expressed the importance of having a stable contracted partner farmer organization. With no stable structure that has influence and control over its members, there would be no basis for a stable contract.

- *“Problem of supplies of raw materials (leaves for essential oils) start to happen.” (Jacarandas, Antananarivo)*
- *“Main gap is the supply of raw materials, logistics for collection and transportation.” (Phileol, Antananarivo)*
- *“Instability of supplies of raw materials (leaves, flowers).” (Vegetalia, Antananarivo)*

Therefore, USAID CCP projects could partner with the private sector in raw material supplies to help the private sector stabilize their supply chain and, in turn, their processes and production capacity. To ensure that both the buyers and producers benefit from these contracts, CCP USAID could support local producers as they organize and negotiate the terms of contracts, as well as supporting them in achieving the qualities and quantities required. Furthermore, one KII expert mentioned the need to ensure and improve the quality of

raw materials with the use of certifications to gain more market share. Currently, Mikajy is working with some supply chain certifications to address these needs,

- *“Competitiveness. Compliance with standards and norms. Reduction of quality and quantity of raw materials from cultivated crops (coffee, pepper) and from essential oils trees from natural resources; the latter is affected by deforestation because of demographic pressure.” (Jacarandas, Antananarivo)*
- *“Organic certification by ECOCERT is expensive. In most cases, farmers do not have the capacity and the resources to certify their products, and thus are facing problems during commercialization of their products.” (Biolandes, Ambanja)*
- *“Traceability and certification of [essential oils] products, especially for export to the US (which has the largest market).” (Vegetalia, Antananarivo)*

A respondent from Vegetalia identified the difficulty of access to land for essential oil tree plantation, which is a precondition for improving raw material supply through production. This comment highlights the importance of land tenure rights.

Another opportunity to partner with the private sector is through electricity supply. However, feasibility of this activity needs to be investigated further, and more information is needed on how this partnership would benefit CCP beneficiary communities. Overall, most SMEs use JIRAMA (Madagascar’s national and government-owned water and electricity provider) to power their activities. However, its power supply is unreliable, expensive, and often far from where raw materials are collected. Industry groups also identified this issue of electricity supply. One suggestion from a Phileol respondent was for private sector provision of energy and electricity, or communities using biofuel to electrify communes and generate energy. The opportunity to provide alternative fuels to communities is further addressed below.

### **Investing in Fuel Production: Constraints and Opportunities**

When asked about the factors constraining the private sector from more involvement and investment in fuels for productions, industry groups quoted the high cost of investment, which could affect competitiveness. Furthermore, challenges frequently expressed by both SMEs and industry groups included government poor laws, governance, and lack of financing opportunities, which in turn affect the quality of Madagascar’s business environment. For instance, MEDD requires enterprises to pay an export tax of 1.5 percent (often deemed too high and expensive by SMEs) of the value of their export of essential oils. This tax should be used for reforestation purposes, but there is no transparency or monitoring on the use of these taxes. Next, MEDD expects entrepreneurs to carry out these reforestation activities with no monitoring from MEDD. This poor governance is attributed by the respondents to high turnover within the government and can impede progress in negotiations (i.e., on taxes) and other collaboration opportunities.

- *Tax (export fees) to [essential oils] exporters are too high, and without accountability on the use of the collected money.” (Vegetalia, Antananarivo)*
- *“Absence of MEDD in protection of forests, and sensitization of local communities in forest conservation. For instance, the company has paid 10 million ariary to MEDD (tax) but in return, there were no reforestation activities at all.” (Phileo, Antananarivo)*

A lack of finance is another challenge frequently mentioned by private sector interviewees. They also mentioned that the Fihariana project is not sufficient to scale their business, with a maximum of \$50,000 per entrepreneur.

- *“Lack of adequate financing structure in Madagascar [...] No interest from banks as the slow return to investment (7 years).” (HOBIO, Mamy)*
- *“Lack of access to credit, especially after COVID-19 crisis. Commercial banks are not willing to grant credit to EPZ.” (GEFP, Antananarivo)*
- *“Access to affordable loans to acquire equipment [to scale business].” (Vegetalia, Antananarivo)*

### **Opportunities in Alternative Fuels for Ethanol and Essential Oil Production**

Only one respondent, HOBIO Mamy, was involved with ethanol production. However, for value chains of both ethanol and essential oils, firewood remains the main source of fuel for key steps in production (notably, distilling). There is general interest regarding alternative fuels and green energy sources for production, such as briquettes from organic matter with ongoing research initiatives in alternative energy sources. Therefore, there are opportunities to partner with the private sector in funding this research, notably for essential oils distillation or ethanol distillation, but also in ethanol raw material sources (i.e., identifying plants for extraction). The current export for essential oils is about \$90 million and is targeted to reach \$1 billion in 2030, hence the need for a massive amount of energy sources for production. According to HOBIO Mamy, the market for ethanol is quite large, with 700,000 households in Antananarivo converting from charcoal and firewood. However, once again, there is a lack of adequate financing to meet the need for the growing ethanol market. Indeed, a producer needs \$3.5 million to produce 7,000 liters of ethanol per day. Banks are not interested in investing in ethanol production due to a slow return to investment of 7 years, and the GOM's Fihariana budget of \$50,000 per entrepreneur is insufficient. Additionally, export of essential oils is a big market that contributes to increased income for small farmers. Biofuel production has several positive impacts: (1) it provides forest protection by becoming a source of income for villagers; (2) it enables carbon sequestration from more planting of trees; and (3) it reduces CO<sub>2</sub> emissions.

Another identified barrier to alternative fuels production is importing materials needed to make alternative fuels, which in turn increases the price of this fuel. Currently, there is a platform working on alternative energy, but most of their members are small enterprises that do not have the capacity to fulfill the demand (notably for free trade zone activity), so relying on these suppliers is too risky for SMEs (GEFP, Antananarivo).

### **Investing in Timber Production**

According to GNEFM, despite a domestic market for 21,000 cubic meters per year, there are only a few entities (such as GIZ) involved in the timber value chain. VOI does not have the skills or capacity to manage forest for timber production. Similarly, the suspension of timber commercialization has led to a reduction of the number of GNEFM members. However, other respondents, and timber experts, recognize the need for promoting more firewood and timber alternatives as a source of energy for activities such as ethanol and essential oils production. A Vegetalia respondent suggested that GOM look into a good timber production economic model based on eucalyptus (currently, actors need authorization from MEDD and VOI before cutting the eucalyptus tree, so there is a need for more firewood production as an economic activity, without the use of natural resources). GNEFM could act as the main GOM collaborator and voice for the timber value chain. However, the government does not see GNEFM as a lead in the value chain when attributing the public

market to other operators. Fanalamanga parastatal SME (originally started with World Bank funding) further mentions that USAID could become their potential partner in scaling up reforestation.

The respondents from two projects that currently support alternative fuel production could constitute potential partnership opportunities for USAID CCP. The first is the World Bank’s Public Information Center and UN Industrial Development Organization project on improved stoves (in terms of fuel efficiency improvements), mentioned by FIVMPAMA. The second project was mentioned by timber producer association GNEFM, which is GIZ’s green (highly efficient equipment, less waste) charcoal-making program, on training on economic charcoal stove and village reforestation. Lastly, USAID could partner with GNEFM to promote more planted timber production as a source of sustainable fuel, while livelihood projects centered around the production of raw materials can feed directly into the supply chain.

#### 4.3.4 The Role of Land Rehabilitation and Livelihood Investments

*T3.1. What are the criteria for selecting the areas and the related communities for rehabilitation?*

*T3.2. How long does it generally take to rehabilitate currently non-arable land for agricultural use? Can we do this within the life of a USAID project?*

Three key informants provided responses to the question, “What are the best criteria for selecting the geographic areas and communities for rehabilitation?” Each of the three answers proposed a different selection criterion that could be combined to create a set of criteria. A key finding is that activities need to ensure the criteria include some “enabling conditions” that lead to successful soil rehabilitation, such as ensuring community land tenure first or setting up nurseries of perennial crops that will be used for rehabilitation. Criteria include:

- *“Farmers/communities should have land tenure right before engaging in soil fertility restoration, since it’s a medium-term investment.” (WCS, Antananarivo)*
- *“Support to perennial crops is preferable. It requires setting up nursery plants for cloves, endemic species, and fruit trees.” (Mikajy, MaMaBay)*
- *“CI uses agro-forestry technique, supplies seeds and plants trees, supports perennial crops (coffee, clove, vanilla) reforestation using autochome species.” (Conservation International, Antananarivo)*
- *“For dry forests, identification of the right crops for dry forest.” (Mikajy, Menabe)*

A key recommendation is to select crops and trees adapted to selected areas. A successful example comes from WWF, where local communities are planting indigenous species and processing essential oils from these plants as a sustainable activity. After eight years (and the close of the funded project), these activities have been fully adopted by the local communities and are still ongoing.

Experts also identified geographical selection criteria for rehabilitation:

- Land rehabilitation sites outside the heart of protected areas: *“Select site for land rehabilitation in sites outside the core protected area (noyau dur).” (Mikajy, Menabe)*
- Select sites close to VOI/TGRN so that reforestation and livelihood activities can be done at these sites: *“The best are zones with TGRN: VOI can do agricultural production, reforestation, and use the wood for charcoal/ firewood.” (Mikajy, Menabe)*

Lastly, experts suggested using some more technical approaches to targeting areas for rehabilitation:

- “Use SAC (Schemas d’aménagement communaux[Municipal development plans]) as a basis to select land for rehabilitation[. This] needs coordination with regional vision, but currently, Menabe does not have schémas d’aménagement régional (SAR), and this was not planned with MIKAJY.” (Mikajy, Antananarivo)
- “Project should target the most degraded sites, most vulnerable areas using ‘appreciative approach.’” (Mikajy, MaMaBay)

Key informants gave a range of time frames from 1-2 year to see first results under good conditions and with targeted rehabilitation activities, to 10 years for more sustainable results. They shared that a 5 year project provides a short time frame for achieving significant forestry rehabilitation results.

- “5 years is too short to see results. At least [the] project needs 10 years, with the first 1-2 years spent on preparatory work.” (Mikajy, Antananarivo)
- “Usually, it takes longer if the soil is depleted. However, in some cases, results may be observed within a year.” (WCS, Antananarivo)
- “Rehabilitation of savoka (degraded forest) without specific activities needs about 10 years. However, there are techniques that may bear results in 2 years, thus within the life of a project.” (Mikajy, MaMaBay)
- “Need 4-5 years to observe good results.” (Mikajy, Menabe)

Figure 5 summarizes the suggestions provided by experts on land rehabilitation. The criteria can be organized in a sequential and logical manner to (1) select the geographical area for rehabilitation implementation, (2) employ a technical approach for selection, once the area has been selected, (3) ensure enabling conditions are appropriate to soil conditions and climate of the area, and (4) determine the amount of time needed for rehabilitation, in addition to ensuring sustainability beyond the project. The most relevant criteria to livelihood activities are selecting sites close to VOI/TGRN to ensure that opportunities can be given to people who are closest to the vulnerable sites.



Figure 5. Key Informant Recommendations for Land Rehabilitation

With a minimum of five years for a rehabilitation project, the corresponding livelihood activities must also be able to continue beyond USAID funding. Returning to the success story of WWF’s Forest Landscape Restoration in the Fandriana-Marolombo region, the project meets the enabling conditions criteria of selecting appropriate plants for the geographical area. The project helped communities to change their negative perception of local species of plants, which they previously perceived as difficult to produce and slow to grow on degraded land. In retrospect, to have a joint vision on the project’s rehabilitation landscape, the general activities included: (1) clarifying land status and tenure; (2) introducing the Forest Landscape Restoration concept and ensuring it was adopted within local development plans; (3) building on local associations; and (4) supporting and initiating long-term sustainability using passive and active restoration methods. General activity 1 is in line with the criterion on ensuring land tenure rights, while general activity 4 is in line with the criterion for using the passive and active restoration technique, which resulted in a 75 percent survival rate for indigenous trees. These general activities further included other specific activities such as:

- Adapting agriculture practices (in line with criterion 4)
- Identifying alternative income-generating options for local farmers
- Some restoration activities, such as nursery development (in line with criterion 3)
- Transferring management rights to COBAs

Therefore, in addition to expert-proposed criteria identified during the evaluation, USAID would benefit from exploring other use cases of soil rehabilitation projects that are in conjunction with livelihood income generation activities.

### *T3.3 How have reductions in tourism impacted livelihoods in target areas, and is this driving forest/environmental degradation? How must future CCP programs adapt accordingly?*

Although the case could be made that there may be a correlation of decrease in income and environmental degradation, there is no clear connection found in the data. Tourism remains important in some areas because it provides off-farm employment to local communities, resulting in less pressure on the remaining natural resources. However, there was an expected negative impact on tourism due to COVID-19, which affected other activities that were highly dependent on tourism; indeed, a RAMEX expert respondent in MaMaBay highlighted that the “[d]irect impact of COVID-19 is the reduction of tourists, resulting in low to no activities of restaurants, and reduction of the prices of vanilla.” The only KII respondent in the evaluation that was from the tourism sector confirmed that “COVID-19 added more constraints on top of the tourism sector in the region” (ORTANALA, MaMaBay). ORTANALA respondents also pushed for more support of organizations such as theirs and made the case that tourism improves income generation through park fees and through tourists being willing to pay more to buy a given produce, etc. The beneficiary community respondents also share a similar view to the ORTANALA respondent when asked what the opportunities are for USAID to revamp the tourism industry, notably after COVID-19. Tourism helps them generate more income, but they did not seem to give precise responses on opportunities to mitigate risks of sudden external shocks like the pandemic:

- *“USAID should invest in the tourism industry as it can help VOI and cooperatives to increase their income. For example, cooperative members doing arts and crafts get higher income through visitors. If organized, VOI may get financial resources from Makira and surrounding forest entry fees.” (Cooperative Mirary Soa, MaMaBay)*

- *“Tourists are useful because they are a major source of income for the region. Cooperative members can increase their income by selling agricultural products and crafts – tourists are willing to buy at higher prices.” (Cooperative Mevasoa, MaMaBay)*

Lastly, another positive and perhaps future opportunity for tourism is joint projects between conservation and tourism in which both sides promote the quality of the sites, thus increasing the number of visitors. Furthermore, 50 percent of the entry fees to PAs are given to the communes for social projects (ORTANALA, MaMaBay), which constitutes an opportunity to assist with meeting the basic needs of the surrounding communities.

#### 4.4 Evaluation Question 4: To what extent has USAID support to the enforcement of land and natural resource tenure rights improved management of and access to natural resources?

Prior to the evaluation, USAID interventions in marine areas had been identified as lagging behind terrestrial interventions. Evaluation findings suggest that climate change has impacted marine areas, including changes in local ocean temperatures and circulation patterns, and changes in fishing patterns. The latter affects livelihoods and fisheries management, and local regulations and law enforcement also lag in LMMAs. In terrestrial interventions, national regulations affect land tenure rights and impede communities from acquiring land titles. Findings and details on interventions in both terrestrial and marine areas are explained further below. Overall, there are similar barriers and challenges for each area, including governance, low capacity or knowledge, increasing pressures from migration, and a lack of (or unfavorable) regulations at both local and national levels.

##### **Barrier 1. Migrant Crisis and Corruption**

*“Migrants bring their unsustainable practices (e.g., nets with small mesh / no mesh due to the depletion of stocks in their zones) to Menabe. Migrants do not comply to existing Dina, LMMA, or community laws and impose their practices. At the end, local communities follow the destructive practices. Migrants are protected by some regional/national organized mafia.” —Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe*

*“[In your community, do you think most people have a title or a certificate/karatany for the land where they live?] No, only a few households and settlers/foreigners have certificates and land titles.” —BIF, Befasy*

As mentioned in Section 4.1.1, internal migration in Madagascar is caused by environmental, economic, and social conditions and changes, which are in turn exacerbated by climate change.<sup>30</sup> Deforestation, both in clearing and burning for agriculture and in harvesting of wood for charcoal production, is the biggest negative environmental impact of migration in Madagascar. Because it represents economic and agricultural opportunity for migrants, it can cause social conflict and tensions between locals and migrant communities due to the increasing number of people utilizing the same stock of infrastructure and environmental resources. Some migrants benefit from the protection of mafia or corrupt government representatives when engaging in illegal activities. The latter is the case for both terrestrial and seascape areas, with migrants or sometimes settlers engaging in unsustainable, even illegal, practices that put local communities at a disadvantage in resource and tenure rights.

<sup>30</sup> Mueller, E.P. 2020. “Climate Change and Migration in Madagascar: Investigating the impacts on people, ecosystems, and natural resources.” University of Oregon. [https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=4394&context=isp\\_collection](https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=4394&context=isp_collection).



## Barrier 2. Lack of or Unfavorable Regulations

*“LMMA is not yet legal because there is no enacted law related to LMMA. This is a big challenge for LMMA to work.”*  
—Conservation International, Antananarivo

*“There is a clear process to take people out of their land. However, the 2021-016 law drops the ‘présomption de propriété’ [presumption of ownership] so that it is easier to move into someone’s land, especially farmers without land certificate and title. The new law also questions the legality of the certificate from the ‘Guichet foncier’ [Local Land Offices].”* —SIF, Antananarivo

TGRH-EA<sup>31</sup> and marine regulations governing LMMAs are relatively new, rendering law enforcement difficult. At the same time, existing regulations in land tenure rights are unfavorable to vulnerable communities that are CCP’s primary beneficiaries.

## Barrier 3. Governance and Capacity-Building

*“Simplify the process to get land certificates at the district and commune, which must have the power to decide on land rights allocation. They need capacity-building on local governance and land tenure laws. They need equipment.”* —AVG, Antananarivo

*“Build capacity of local fishermen. Sanction those who make public transgressions. Support CSOs. We need a similar organization like AVG in the marine system. Require strong involvement of strong CSOs (federation of several small entities) at the regional level.”* —Mikajy, Antananarivo

While Mikajy is already engaging in several capacity-building activities, there are opportunities to improve capacity-building and governance to facilitate resource and tenure rights access for communities in both sea- and landscape intervention areas and activities.

## 4.4.1 Marine Resources Management

### *P4.1. What are the strengths and weaknesses of LMMA work under the current programming and regarding the experience of conflict with industrial fleets?*

One strength of LMMAs is that they are effective in capacity-building and in increasing the quantity of fish (even though overall stocks depleted when looking at a longer timescale). However, one weakness is that not all community members are LMMA members, which in part increases illegal fishing and trading incidents (this is further explored in evaluation question P4.2 findings). Another major weakness is the lack of an organizing structure and legal mandate for marine areas (such as TGRH), which complicates the implementation and enforcement of local Dina and sanctions:

- *“LMMA cannot enforce local regulations and Dina. For instance, perpetrators use forbidden nets, which led to reduction of marine resources (crabs, shrimp, fishes...), and LMMA have no power to preclude the destruction from happening.”* (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)
- *“LMMA needs to have a legal mandate (for instance, TGRN has a legal mandate through DREDD) so that TGRH (for marine) is hard to achieve. Cannot transfer management to TGRH because it requires involvement of commune development plan.”* (Mikajy, Antananarivo)

<sup>31</sup> WWF. “The first “TGRH - EA” in Madagascar, signed in Ambaro Bay.” 2022. <https://www.wwf.org/en/?6431966/Les-premiers-contrats-de-Transfert-de-Gestion-des-Ressources-Halieuques-et-des-cosystemes-Aquatiques-TGRH-EA-a-Madagascar-signes-dans-la-Baie-dAmbaro>.

In addition to a lack of local regulation and absence of legal national mandate, corruption at national (ministry level), regional (regional elites protecting illegal fishing mafia and migrants), and local (Dina enforcement) levels further erodes law enforcement. Key informants reported that, once again, migrants pose a particular issue because they are often the perpetrators of illegal fishing activities and corruption schemes. However, these migrants often enjoy protection from any repercussions and can be protected by mafia or members of government through bribes:

- *“Corruption is the main constraint. Sanctioned offenders are set free after a couple of weeks/days.” (Mikajy, MaMaBay)*
- *“Reduce corruption and impunity of regional elites (who are the mafia behind illegal fishing).” (MIHARI Network)*
- *“Corruption (ministry level), which affects LMMA activities.” (MIHARI Network, Antananarivo)*
- *“Migrants are protected by some regional/national organized mafia. Pressure from local population moving away from agriculture (problem of land, water) to marine resources (mangroves for charcoal, marine NR exploitation).” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, [Regional Directorate of Agriculture, Livestock and Fisheries] Menabe)*

Experience of conflict with industrial fleets appears to be primarily a delimitation issue in which there are overlapping fishing zones and unclear boundaries, with industrial fleets accused of entering fishing zones and conducting illegal activities (such as buying products from small fishers) while small artisanal fishers go deep into the opposite direction (8-10 km) looking for better catches. Another result of this conflict is destruction of equipment by fleets. Although there are attempts to set up agreements between the two parties in which there is compensation or insurance for damaged equipment, this issue currently persists, due in part to lack of understanding of insurance procedures by small fishers.

- *“Expected to be better when the agreement between LMMA and industrial fleet is approved. In the agreement, small fishers get compensation in case their equipment is damaged by industrial fleet. Mikajy, Hay Tao, and WCS are partners of the deal.” (Mikajy, MaMaBay)*
- *“Conflict of interests. There is a ‘charte de responsabilités’ but it is not yet fully implemented. Nets are still destroyed by the industrial fleet. Insurance for small fishers is not yet implemented, as the process is not clear for small fishers. District department of fisheries should be responsible for mediation and compensation in case of disputes.” (Plateforme de Concertation pour le Développement Durable de la Baie d’Antongil [PCDBBA, Consultation Platform for Sustainable Development of the Antongil Bay], MaMaBay)*

With corruption, persistent mismanagement, and exploitation of natural resources, both experts and FGD respondents identified the lack of surveillance equipment to monitor and apprehend those participating in illegal activities as a challenge. Two respondents, one from the DRP and the other a Mikajy field staff member, recognized that surveillance and pursuit of illegal fishers should be done by the government by providing the government regional offices with access to key surveillance equipment such as motorized boats:

- *“Lack of equipment means they cannot engage in pursuit of illegal fishers using motorized boats and illegal nets. The result is a lack of credibility from the population, due to empty threats from government officials.” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)*

- *“Support for more law enforcement for all, especially artisanal and industrial fleets.” (MIHARI Network, Antananarivo)*
- *“Supply of basic equipment - providing boats is the same as providing cars to the GOM.” (Mikajy, MaMaBay)*

Another insightful evaluation finding and potential weakness of LMMA management is the disparity in management strategies (too many different approaches by different projects and implementers). According to a KII respondent from MIHARI Network, Antananarivo, there should be a “common strategy and program for LMMAs, including the opening and closure of fishing periods. LMMAs should apply findings from scientific research.” A Mikajy (Menabe) respondent also confirms that LMMAs have no legal framework and also lack common strategies, using the example of WWF and Blue Ventures: WWF works with VOI mangroves in habitat conservation and fishing, whereas Blue Ventures promotes management of crabs (only); although both NGOs split their intervention zones (north and south), they have no common orientation.

In conclusion, there have been discussions about the Management and Development Plan, the Fisheries Management Plan for marine area natural resource management, and agreements between industrial fleet and community fishers to solve equipment damage issues. However, when it comes to addressing illegal fishing itself, the issue remains that migrants, and some of the community members who have not agreed to join the LMMAs, continue to practice illegal fishing. Therefore, there is a need to bring awareness to communities on the benefits of LMMAs and to showcase direct economic benefits of joining (such as access to markets). Key informants proposed the following solutions to engage more communities to join LMMA:

- Equipment to access better markets
- Support to income-generating activities (crab juvenile production in mangroves)
- Support for post-harvest activities (refrigeration, smoking)

#### *P4.2 What are stakeholders’ current perceptions of the effectiveness of CCP interventions in marine areas (e.g., sustainable management of LMMAs, marine protected areas, and marine resources)?*

There is consensus among experts that LMMAs are effective in capacity-building and empowering local communities, and increasing the quantity of fish catches and stocks:

- *“LMMAs are effective and empower VOI.” (MIHARI Network, Antananarivo)*
- *“It seems that [LMMAs] is more effective compared to VOI because of the direct links between patrolling and quantity of harvest. With good conservation, fishers are getting higher quantity of fishes, and thus higher income.” (Mikajy, MaMaBay)*
- *“Yes, APGL members recognized the benefits of being part of the association, such as the increase in fish stocks from well-managed areas, despite problems with other community members.” (Masoala Natural Park, MaMaBay)*
- *“LMMAs are effective in the northern region of Madagascar. Communities with LMMA support have seen an increase in the quantity of seafood in the past years, e.g., people have increased from less than 1 ton per year to 28 tons within 15 years.” (Conservation International, Antananarivo)*

However, experts highlighted that not all community members choose to join LMMAs, which may indicate that more awareness-building is needed to demonstrate the benefits of LMMAs. The reluctance of some community members to join LMMAs is partly because some communities view LMMA internal regulations as

adding additional constraints on their lives and livelihoods, resulting in further disengagement of community members. For instance, some villagers would rather sell their catches to illegal collectors. Furthermore, non-LMMA members are more likely to engage in illegal fishing and trading (i.e., some industrial fleets buy directly from small-scale fishers, some of whom use nets that are not environmentally friendly).

- *“Some community members do not want to participate in LMMA because of the limitation in their practice and sales, thus about 20–25 percent are members of LMMA. The rest (80 percent) prefer selling to Chinese and illegal collectors (no limitation on size).” (Mikajy, Menabe)*
- *“Not all fishers are members of the LMMA. Some do not want to follow the rules.” (Conservation International, Antananarivo)*
- *“Not everyone is member of LMMA. Offenders (e.g., using illegal nets, unregistered boat, users of beach seines) don’t want to enter the group.” (Mikajy, MaMaBay)*
- *“No, some are not members of LMMA. These are the fishers who will migrate to other places without LMMA to fish. For example, from Maroantsetra to Navahana, where they use children to use beach seine (illegal) to capture small fishes. There are also a group of fishers who want to observe (first) before engaging in the membership.” (PCDBBA, MaMaBay)*

On the beneficiary community side, current LMMA members in KIMONY LMMA in Menabe also stressed that all community members should join LMMAs and that non-LMMA members made it difficult for the community to enforce regulations, such as the Dina, that are meant to protect conservation activities. In APGL Fimiario (MaMaBay), because there is no Dina yet, the association tries to make a compromise with illegal fishers. Lastly, similar to the KII expert observations, APGL Fimiario in MaMaBay also detected the need to bring more awareness to the benefits of joining LMMAs because many non-LMMA members feel constrained to do patrolling, among other things, because the results of their conservation activities are not visible in the short term.

Lastly, conservation management expert respondents proposed recommendations on how to influence and empower community leaders to address issues in illegal fishing, given the issues of corruption and lack of law enforcement:

- *“Need to know who are the decision-makers and target these people: identify who is making decisions, resolv[ing] issues, e.g., illegal fishing. Maybe Mikajy did not target the right beneficiaries.” (Mikajy, Antananarivo)*
- *“Lack of equipment = cannot engage in pursuit of illegal fishers using motorized boats and illegal nets. The result is a lack of credibility from the population (empty threats from government officials).” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)*
- *“Cannot prohibit fishers in using beach seine - they have protectors from Mananara (collectors). Still high use of illegal nets.” (Masoala Natural Park, MaMaBay)*
- *“The main reasons are the unsustainable fishing practices (illegal nets, lack of regulations). Effective measures should be the setting up of mangroves and marine ecosystem conservation and the full prohibition of entering in core PAs.” (PCDBBA, MaMaBay)*

*P4.4. The development of activities in marine areas lags behind those in terrestrial areas. What are the challenges to implementing interventions in marine areas? How can future programming address these challenges to achieve increased, sustained impact in marine areas?*

Despite the aforementioned issues (corruption, illegal fishing, lack of regulation and enforcement, resource disputes between migrants and foreigners, etc.), marine activities have fewer interventions than terrestrial activities. When asked about the lack of interventions in marine areas, key informants attributed this to three main causes:

1. A lack of marine expertise and staff within USAID and CCP activities, accompanied by only 30 percent of the Mikajy allocated budget dedicated to marine interventions, compared to 70 percent for land activities
2. The inherent difficulty of managing marine areas with delineation challenges; there is no clear and permanent way to delineate managed zones.
3. Lack of a legal framework or mandate to manage LMMA NRM activities. Indeed, whereas TGRN has been developed for over 20 years now, the similar concept for marine areas, TGRH-EA, is relatively new, as would be any legal framework or mandate that would follow.

#### *T4.1. Are local ocean temperatures and circulation patterns changing due to climate change? Is this driving changes in fishing patterns?*

Findings showed that climate change plays a major role in changes in fishing and harvest patterns, fish migratory patterns, and ecological characteristics of wildlife, and biodiversity decline. According to experts, the environmental and marine ecosystem degradation are in part due to increases in rainfall, which in turn cause erosion and increase transfer of pollutants from the land. Some impacts of climate change on marine resources and coastal livelihoods cited in the evaluation include:

- Changes in fishing patterns:
  - *“Reduction of the number of days that fishers can go fishing at sea because of more frequent cyclones and high wind.” (Mihary Network, Antananarivo)*
  - *“Climate change has direct impacts on the fishery sector. Wind from the south (Tsioka and frequent cyclones) reduce the number of fishing days. On average, fishers may only go to sea 7 days per month.” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)*
  - *“Huge impact as it affects the way people work. For example, marine activities stop one week before and two weeks after a cyclone, reducing income for fishers.” (Mikajy, MaMaBay)*
- Changes in fish migratory patterns, ecological characteristics, and biodiversity decline in given areas:
  - *“Fish are producing some kind of poison because of the rise of the temperature.” (Mihary Network, Antananarivo)*
  - *“High temperatures without rainfall disrupts the cycle of life for some species (no juveniles growing in the mangroves).” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)*
  - *“Impacts include loss of some species migrating to other places and reduction of fish harvests.” (PCDBBA, MaMaBay)*
  - *“Climate change resulted in dispersion of fishes between October and December - these fishes are likely migrating to lower-temperature ocean sites.” (Masoala Natural Park, MaMaBay)*

- Environmental and habitat degradation:
  - *“Climate change results in too much rainfall, too much erosion, resulting in siltation of mangroves, thus less products.” (Mikajy, Menabe)*
  - *“In addition, quality of fishes is declining as well as the quality of the marine ecosystem because of wastes from the land (erosion).” (WCS, MaMaBay)*

#### **T4.2. What are the most effective approaches to fighting illegal fishing, involving international levels and engaging the GOM?**

While Mikajy’s ceinture bleu (blue belt) shows promising results, according to experts, fish stocks are depleting due to overexploitation, resulting in a pressing need to combat illegal fishing methods. KIMONY LMMA in Menabe expressed that they have increasingly been seeing fewer captures from marine fishing in the past years with almost no harvest from continental fishing:

- *“Findings from a marine ecological monitoring by WCS show that production is declining, but there is hope with the setting up of the ceinture bleu. Implementation of PAG and agreement will improve the fish stocks.” (Mikajy, MaMaBay)*
- *“The marine ecosystem is over-exploited [in Menabe] within the 2-mile coastal zones, in which small fishers are operating. These are the mangroves and open sea zones, and the areas are destroyed by the population, especially by migrants from the south.” (Direction Régionale de l’Agriculture, de l’Élevage et de la Pêche, Menabe)*
- *“Fish stocks are declining compared to 20 years ago. Before, fishers can get a good catch 200 meters from the seashore. Currently, they must go far. The main reasons are the unsustainable fishing practices (illegal nets, lack of regulations).” (PCDBBA, MaMaBay)*

One recommendation from KII experts includes enhancing collaboration with GOM for better law enforcement (as with terrestrial resource use; see Section 4.1.1). This could be achieved at the local level by mandating Dina, and by lobbying for increased government funding for equipment and training. The respondents’ recommended strategies on how future programming can address marine management challenges to achieve increased, sustained impact in marine areas primarily focused on strengthening law enforcement:

- *“Build capacity of local fishermen. Sanction those who make public transgressions.” (Mikajy, Antananarivo)*
- *“Support for more law enforcement for all, especially artisanal and industrial fleets. Need to revise laws on fishing because some texts led to confusion and brought frustration to small fishers. Text should also sanction perpetrators with jail time. Reduce corruption and impunity of regional elites (who are the mafia behind illegal fishing).” (MIHARI Network, Antananarivo)*
- *“Antongil Bay will have its PAG. However, there will be no improvement without the empowerment of LMMA to be able to enforce existing laws and regulations.” (Mikajy, MaMaBay)*
- *“Strengthen law enforcement. Further build capacity of APGL with equipment and access [to] better markets.” (Masoala Natural Park, MaMaBay)*
- *“Better collaboration among existing projects. Further refinement of Dina (streamlining process, simplifying offense reporting).” (PCDBBA, MaMaBay)*

Two respondents mentioned the need to increase funding to fight illegal fishing by increasing the operational budget (budget law, or loi des finances) of GOM regional entities in marine conservation (Mikajy, Menabe, and

MIHARI Network, Antananarivo). Another respondent from PCDBBA (Antananarivo) proposed collaboration with GOM in which the carbon credit fund is attributed to the communities.

Furthermore, key informants recommended collaboration with the International Organization for Migration to address migration issues (see Section 4.1.4). There was also a recommendation to take advantage of international agreements aimed at promoting management of marine areas; for example, the Paris Agreement states that 20 percent of REDD+ activities should go to COBA or VOI, but projects following these agreements “need strong coordination for its realization, [...] clear allocation for each entity should exist [with opportunities to use to implement projects around] blue carbon sequestration, [which is] is still unclear for most stakeholders (marine carbon financing scheme).” (PCDBBA, MaMaBay).

To extract meaningful takeaways on CCP marine management of resources, this section will review and compare Mikajy’s Year 3 Work Plan<sup>32</sup> on marine intervention, along with an LMMA peer-reviewed study, with the evaluation findings. The study in question is a 2020 study seeking to evaluate the effectiveness of the first-ever LMMAs in Madagascar (Velondriake LMMA was established 15 years ago and is managed by Blue Ventures).<sup>33</sup> The study provides insights on how to interpret the marine management and tenure rights’ findings from this evaluation. Lessons learned and challenges highlighted by the study are listed in the figure below.

Lessons Learned	Challenges
<ol style="list-style-type: none"> <li>1. Co-management rather than community management</li> <li>2. Permanent field presence of a supporting NGO</li> <li>3. Management focus on locally important natural resources</li> <li>4. Addressing poverty-related barriers to enable resource management</li> <li>5. Decision-making by resource users rather than scientists</li> <li>6. Diversified, entrepreneurial funding model</li> <li>7. Emphasis on monitoring and adaptive management</li> </ol>	<ol style="list-style-type: none"> <li>8. Inability to influence fishery supply chains</li> <li>9. Difficulty promoting participation and good governance</li> <li>10. Difficulty promoting rule application</li> <li>11. Inability to stand up to outsiders</li> <li>12. Difficulty promoting environmental management in the long term</li> <li>13. Challenges in attaining funding</li> </ol>

Figure 7. Lessons Learned and Challenges in Marine Resources Management

Evaluation findings showed that there was a need to incentivize communities to join LMMAs by demonstrating the benefits of joining these management structures. When addressing barriers to enable resource management, Blue Ventures identified several poverty-related barriers that impacted community engagement in local governance and compliance with LMMA management. To overcome this, Blue Ventures invested in

32 USAID Mikajy Year Three Work Plan: October 1, 2020–September 30, 2021

33 Gardner, C.J., Cripps, G., Day, L.P., Dewar, K., Gough, C., Peabody, S., Tahindraza, G., and Harris, A. 2020. “A decade and a half of learning from Madagascar’s first locally managed marine area.” *Conservation Science and Practice*, 2(12). <https://doi.org/10.1111/csp2.298>.

education (i.e., building schools) and healthcare programs at first, then transitioned into improving the “post-harvest” value chain to improve product quality. With improved quality, Blue Ventures partnered with seafood buyers looking to purchase sustainable products. Income generated by these initiatives allowed for more participation in resource management and governance. The latter is similar to what Mikajy plans to accomplish in marine areas by developing crab value chains in Menabe or fish, lobster, and octopus value chains in Menabe.

Next, in its lessons learned, and still in line with incentivizing communities and increasing engagement, Blue Ventures diversified funding and entrepreneurial models. Revenue streams included LMMA tourist entry fees, octopus periodic fisheries closure, and seaweed aquaculture. However, Velondriake still relies on Blue Ventures subsidies and other small grants, resulting in the identified challenge of maintaining funding. Velondriake private donors lost interest over time, so Velondriake recommended funders that ensured long-term and unrestricted funding to push for effective initiatives. Another suggestion was creating trust funds for successful LMMAs for current TGRN in Madagascar. With Mikajy’s endeavor to create a “Blue Belt” in Antongil Bay, CCP could try to explore alternative funding systems that could eventually lead to more sustainable funding of the LMMAs in the belt.

Next, information on governance of LMMAs in interviewed respondents revolved around the need for more capacity-building and community engagement for good governance. When **promoting participation and good governance**, Blue Ventures focuses on promoting participation in LMMAs in management activities through a mix of activities in social marketing and participatory learning. To do this, they provided compensation to elected Velondriake members and per diem for meeting attendance. Although compensation was not always viewed as enough to compensate for lost income from not going fishing and selling products, it at least alleviated the aforementioned poverty-related barriers. These governance and participation initiatives, or perhaps slightly different versions of these initiatives, could be tested or replicated in CCP LMMAs.

When it comes to law enforcement and **promoting compliance**, despite the implementation of social marketing programs designed to promote enforcement by villagers and local leaders and the ongoing outreach efforts in all villages, Blue Ventures found that the Dina is not often used to sanction infractions of the LMMA; in Velondriake, it has been used only 12 times in 6 years. Indeed, there is an identified reluctance to prosecute community members due to the complex webs of social, family, and political ties in the community. However, several traditional Dina (i.e., theft, domestic violence) are regularly applied and with little hesitation by community members. These traditional Dina are informal, unwritten, and lack prescribed punishments. Therefore, Blue Ventures observed that the formalization of rules and application procedures of the LMMA Dina may have reduced local ownership of marine Dina or that the formal procedures are not fully understood compared to traditional terrestrial Dina. There is a possibility of observing low use of Dina in CCP activities, despite evaluation experts’ recommendation on strengthening capacity-building and law enforcement through Dina. Nevertheless, in FY 2021, Mikajy planned to support LMMA Dina through strengthening law enforcement by giving in-kind grants to LMMAs in Menabe to purchase surveillance and patrol equipment. Blue Ventures did not mention providing any surveillance equipment in the study, but instead mentioned that the permanent presence of Blue Ventures in Velondriake allowed them to act as patrollers of illegal activities.

Still in law enforcement, Blue Ventures also encountered the migrant or “outsider” challenge, referring to migrants who cause overexploitation, perform illegal practices, and spread corruption. In the challenge



**standing up to outsiders**, LMMAs have limited ability to prevent rule-breaking by migrants. They lack legal backup and law enforcement from the government, which is in line with the evaluation finding on the importance to expand partnership with GOM to access better law enforcement (and funding opportunities).

With respect to the findings on the lack of structured legal framework for LMMAs, the study did not mention the possibility of implementing TGRH. However, Blue Ventures noted that Malagasy legislation requires local communities to form associations to participate in governance of PAs or formal NRM. These associations tend to not resemble traditional community governance institutions, and local social norms do not necessarily align with the GOM's good governance requirements.

Lastly, the MHARI Network respondents in particular stressed that there is a disparity in management strategies and too many approaches by different implementers in managing LMMAs. This disparity in approaches may be what causes the lack of regulation and legal framework. However, with the creation of the Blue Belt in Antongil Bay, Mikajy has the opportunity to lead a pilot project in which all regulations and governance structures in the more than 35 LMMAs created by Mikajy are similar. There may also be an opportunity to convene a consortium of implementers and experts to construct unified solutions on identified weaknesses, such as the lack of common legal framework.

There may be several other lessons learned in the Blue Ventures study that are not highlighted in this evaluation report. However, the advantage and strength of this study is that it leverages 15 years of LMMA management experience that could enrich current USAID activities. With only 30 percent of the allocated budget for marine activities, observed issues around marine ecosystems such as fish stock depletion could be exacerbated. Future activities should consider allocating more budget to marine resources management and include more marine expert staff.

## 4.4.2 Land Resources Management and Tenure Rights

*P4.3. To what extent have CCP's efforts to improve access to land and resource tenure changed the way beneficiaries use or manage natural resources?*

The team only interviewed one FGD for each region of MaMaBay and Menabe (two total). This small data sample of FGD findings revealed that communities understand the importance of having a land title or a certificate to secure their tenure rights:

- “[BIF] think it’s very important to make sure that there is no problem with their land. For instance, during the project with Ravinala, the delimitation of the land belonging to each household was the main source of discussion. In such cases, the fokontany (villagers) helped resolving the issues - the delimitation process was finished for the Ravinala project.” (BIF Befasy, Menabe)
- “Very important, as some people may come with private surveyor (geometre) and start land titling process. This happened in Ambinanitelo and Mahalevona. Farmers using the land complained to the tribunal but [were] defeated.” (CRLF Voloina, MaMaBay)
- “Maybe [someone could try to take their parcel]. Cannot take out the possibility of fight, especially for rice fields.” (BIF Befasy, Menabe)

However, there is a low number of members with land certification to prove ownership, indicating a low impact of CCP in improving land ownership. According to the BIF in Befasy, out of the 5,000 applicants in the commune, BIF only issued 400 certificates since 2005 (less than 10 percent). In CRLF Voloina in MaMaBay, only 4 requests out of 10 have been granted with land certificates since mid-2021.

A major identified cause for low certification rates is that the BIF is not fully functional because the Ravinala project (contracted by Mikajy), which was expected to provide \$1,163 USD (5 million ariary) to the BIF, was canceled. The Ravinala project fund would have been enough to run the BIF office for two years, but revenue from land certification processing fees is not enough to maintain the BIF and to pay staff salaries (even with only two permanent staff). According to BIF Befasy, “the process is that fees are paid to the commune, and the commune pays for the salary and operational costs for the BIF. However, for the past 15 years, the BIF could not get enough financial income to self-sustain.”

#### *T4.3. With land tenure rights in flux, how do we mobilize groups to demand more from their local governments?*

To engage groups in tenure rights, experts from SIF in MaMaBay recommended starting with land certification through OCFM, or grouped certification, to reduce costs and increase awareness in different communes, and then establishing land certificates. A SIF expert in Antananarivo also pointed out that the order of correct certification processes is not being followed, because a local land occupancy plan must precede land certificate delivery, which is currently not the case.

- *“The best strategy is to promote OCFM (Opération de Certification Foncière Massive [Large-Scale Land Certification Operation]), which starts with awareness raising of the community on land certification, then plans land certification for several HH. It aims to speed up the process and reduce costs.” (SIF, MaMaBay)*
- *“PLOF (Plan Local d’ Occupation Foncière [Local Land Use Plan]) must precede any delivery of land certificates. Communes should protect its population in accessing land; this is not, however, the case in many places.” (SIF, Antananarivo)*

Therefore, more capacity-building is needed to empower communities when seeking land certifications, and grouped certification can also help to strengthen and empower community members. Another recommendation is to simplify the land certificate process by opening new offices close to their localities (communes do not have the financial capacity to manage land tenure offices), and most importantly to increase funding to ensure that day-to-day activities are running smoothly:

- *“Simplify process to get land certificate at district and commune, which must have the power to decide on land right allocation. They need capacity-building on local governance and land tenure laws. They need equipment.” (AVG, Antananarivo)*
- *“Organizing demand for land certificate from community members seems to be effective, fast, and at lower costs. The approach also facilitates access to financial and technical support from development and conservation project.” (SIF, Menabe)*
- *“It also requires supporting (financial, equipment, technical) existing BIF. Lack of monetary income precludes many villagers from starting land certification process.” (SIF, Menabe)*

- “There are 1,695 communes and only 400 have issued land certificates. Communes do not have the financial capacity to manage land tenure offices.” (SIF, Antananarivo)

The BIF performs local recognition of rights, issues certificates, registers transfers, inheritances, and sales, and updates the Plan Local d’Occupation Foncière, or Local Land Use Plan. By the end of 2007, the objective of the land tenure office was to set up 285 communal land tenure offices, 168 of which would be able to issue land certificates and specifically handle the management of untitled property and communal land.<sup>34</sup>

From the KII experts’ point of view, land certificates are less expensive than titles, which makes them more favorable to communities and mobilizes them to seek certification. However, from the FGD participants’ point of view, land tenure processes are long, require money, and do not appear to give community members security in ownership of the land they are currently cultivating. Communities therefore experience a lack of confidence in ownership, notably when observing the low number of certificate owners in the community (and how difficult these certificates were to acquire). Lastly, communities appear to have the perception that land certificates have less power and are trumped by land titles, which are more easily acquired by foreigners and migrants. Therefore, there is a strong need for BIF offices to be fully functional, although the 2021-16 law presents a barrier to land certification. Differences in the land certificate points of view are summarized in the table below.

Table 6. Perspectives on Land Certificate

Land Tenure Expert View	Community Member View
<ul style="list-style-type: none"> <li>• “Land certificate is OK but needs improved credibility from all. Mayor should be the decision-maker and must be involved in the process. Indeed, land titling is difficult and expensive - should only do for exceptional cases.” (SIF, Antananarivo)</li> <li>• “Land certificate is a good start, as it is less expensive than title, and relatively easy to get (at least before the enactment of the 2021-16 law).” (SIF, MaMaBay)</li> <li>• “Organizing demand for land certificate from community members seems to be effective, fast, and at lower costs. The approach also facilitates access to financial and technical support from development and conservation project.” (SIF, Menabe)</li> </ul>	<ul style="list-style-type: none"> <li>• “Process is long and requires money.” (BIF, Befasy)</li> <li>• “Fees are too high for titling. Land certificate is better but for now, BIF is not operating.” (CRLF Voloina, MaMaBay)</li> <li>• “[...]some people may come with private surveyor (geometre) and start land titling process. This happened in Ambinanitelo and Mahalevona. Farmers using the land complained to the tribunal but [were] defeated.” (CRLF Voloina, MaMaBay)</li> <li>• “People from outside the communities [are] getting support from officials (elected or not). Farmers migrating from other communes [try] to take the community member parcels.” (BIF Befasy, Menabe)</li> <li>• “People from outside the communities may come with title and official documents.” (CRLF Voloina, MaMaBay)</li> <li>• “No, only a few households and settlers/foreigners have certificate and land titles.” (BIF Befasy, Menabe)</li> </ul>

34 Food and Agriculture Organization of the United Nations. “Land administration institutions and women quotas.” Gender and Land Rights Database. [https://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/land-administration-institutions-and-women-quotas/en/?country\\_iso3=MDC](https://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/land-administration-institutions-and-women-quotas/en/?country_iso3=MDC)

#### T4.5. How does the government’s decision on land designation for mining versus conservation areas affect people living in areas without land titles?

There are several barriers for activity implementation to land tenure rights and resource management. One external barrier is unfavorable regulations, such as the 2021-016 law and the government’s decision on land designation of mining versus conservation areas in the laws of Les Propriétés Foncières Privées Non Titrées (PPNT, Untitled Private Land Properties), or untitled private land holdings. Land tenure experts expressed the following on how these new laws affect land tenure:

- *“This is indeed a big issue for communities living in forest but overlapping with mining certificate. In some cases, government gives titled land to large companies doing mining or agricultural production (Horombe).” (Alliance Vohary Gasy, Antananarivo)*
- *“There is a clear process to take people out of their land. However, the 2021-016 law drops the ‘présomption de propriété’ so that it is easier to move into someone’s land, especially farmers without land certificate and title. The new law also questions the legality of the certificate from the ‘Guichet foncier’ [Local Land Offices].” (SIF, Antananarivo)*
- *“Yes, the new PPNT law has resulted in several problems:*
  - *(1) Suspension of BIF activities*
  - *(2) Possibilities for the GOM to allocate PPNT to business*
  - *(3) Possibility of giving land to someone who will not exploit it (land grab)*
  - *(4) Further increase the nonpayment of IFPB (Impôt foncier et propriété bati [Real estate and property tax]), which is the main source of income for local communes.” (SIF, Menabe)*
- *“Social conflict may arise in the case of no compensation for households with PPNT. There should be a compromise between the two parties. Very few people have certificate and land title in Maroantsetra. Most are living/exploiting PPNT. However, the process to get a certificate or title is quite long, starting at the village/commune (diagnostic foncier, delimitation, BIF).” (SIF, MaMaBay)*
- *“The 2021-16 decree puts an end to the BIF activities, as the communes stopped receiving fees from communities. Currently, the salaries of the two BIF staff (60,000 x 2 per month) and the costs of office supplies are paid by the commune, as it should be. However, the commune has requested updates of the software from Mikajy.” (SIF, Antananarivo)*

The main difficulty caused by the 2021-016 law for local community tenure rights is that it eliminates *présomption de propriété*, or presumption of ownership, which states that an individual must have used and cultivated a given land for at least 15 years to have presumption of ownership and may receive a land certificate.<sup>35</sup> However, this title is not an absolute means of proof. It simply leads to a presumption of ownership, which can be challenged. The new PPNT regulations also facilitate designation of untitled land into mining areas if deemed necessary and of public interest by the government.<sup>36</sup> Although overlaps may exist in other intervention areas for conservation and potential mining designated areas, they do not appear to exist in Menabe and MaMaBay PAs. The new law removes the presumption of ownership, making people without title or land certificate live in fear of spoliation.

35 Repoblikan'i Madagasikara. “LOI n° 2021-016 portant refonte de la Loi n°2006-031 du 24 novembre 2006 fixant le régime juridique de la propriété foncière privée non titrée.” [https://www.assemblee-nationale.mg/wp-content/uploads/2021/07/Loi-n%C2%B0-2021-016-propri%C3%A9t%C3%A9-fonci%C3%A8re-priv%C3%A9-non-titr%C3%A9e\\_corr%C3%A9.pdf](https://www.assemblee-nationale.mg/wp-content/uploads/2021/07/Loi-n%C2%B0-2021-016-propri%C3%A9t%C3%A9-fonci%C3%A8re-priv%C3%A9-non-titr%C3%A9e_corr%C3%A9.pdf).

36 Foncier & Développement. “Madagascar : fortes inquiétudes autour de la nouvelle loi foncière.” <https://www.foncier-developpement.fr/actualite/madagascar-fortes-inquietudes-autour-de-la-nouvelle-loi-fonciere/>.

# APPENDIX I. EVALUATION MATRIX (TECHNICAL GAPS)

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<b>Evaluation Question T1:</b> To what extent have USAID-supported capacity-building efforts enabled target groups (such as protected area managers, CSOs, local government/authorities, and communities) to achieve expected results pertaining to conservation goals? (Conservation goals include environmental justice and law application achieved through various advocacy interventions.)				
<b>Link to CCP Theory of Change Strategic Approach:</b> Strengthen communication and coordination among private sector, state, and local actors to enable advocacy and targeted action on addressing human population pressures				
T1.1. How can more targeted and coordinated engagement with GOM (as well as regional authorities, CSOs, and other actors) lead to better enforcement, management of the environmental pressures, and impacts of migration?	<a href="#">Governance KII</a> (Q4–Q7)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure
<b>Link to CCP Theory of Change Strategic Approach:</b> Strengthen public sector institutions in policy making and enforcement of (marine and land) tenure rights (Hay Tao SA4)				
T1.2. What opportunities exist to improve coordination between Hay Tao and Mikajy in order to scale up the impact of activities at decentralized levels?	<a href="#">Governance KII</a> (Q12)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<b>Evaluation Question T2:</b>				
Are the current efforts effectively incentivizing communities, including migrants, to use natural resources differently? Why or why not?				
<b>Link to CCP Theory of Change Strategic Approach:</b>				
Build local capacity to anticipate climate shocks and implement adaptation and preparedness mechanisms (e.g., food reserves, information systems)				
T2.1. What are proven best practices for translating climate data into pragmatic communication based on targeted beneficiaries' needs?	<a href="#">Conservation FGD</a> (Q3a–Q3d)	Mikajy beneficiaries	Mikajy beneficiaries	N/A
	<a href="#">Conservation Management KII</a> (Q16a–Q16c)	Mikajy beneficiaries	Mikajy beneficiaries; at least two groups in marine areas	Expert Key Informants, conservation management
<b>Link to CCP Theory of Change Strategic Approach:</b>				
Promote sustainable livelihoods at scale while also supporting basic human needs with links to conservation (aligning with other donors where possible)				
T2.2. Is a lack of access to basic human needs presenting barriers to adoption of conservation-friendly practices, or even driving threats to biodiversity?	<a href="#">Conservation FGD</a> (Q1)	Mikajy beneficiaries; ensure inclusion of elder community members in Menabe to address long-term forest degradation	Mikajy beneficiaries	N/A
	<a href="#">Conservation Management KII</a> (Q5.1.a)	Mikajy beneficiaries	Mikajy beneficiaries; at least two groups in marine areas	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
T2.3. What are the most immediate needs that must be addressed to begin to think about long-term development?	<a href="#">Conservation Management KII</a> (Q4, Q5, Q6a)	Mikajy beneficiaries	Mikajy beneficiaries; at least two groups in marine areas	N/A
T2.4. How can better coordination and collaboration with other U.S. government partners, or the private sector, begin to address basic needs?	<a href="#">Conservation Management KII</a> (Q6b, Q6c)	Mikajy beneficiaries	Mikajy beneficiaries; at least two groups in marine areas	Expert key informants, conservation management
T2.5. Who do we target as beneficiaries, keeping in mind vision of long-term development?	<a href="#">Conservation Management KII</a> (Q8a, Q8b)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
	<a href="#">Conservation FGD</a> (Q4e)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
T2.6. Does sensitization alone lead to changed attitudes and conservation behaviors?	<a href="#">Conservation FGD</a> (Q3)	Mikajy beneficiaries	Mikajy beneficiaries; at least two groups in marine areas	N/A
	<a href="#">Conservation Management KII</a> (Q7)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
<b>Link to CCP Theory of Change Strategic Approach:</b> Secure conservation financing through payment for ecosystem services or carbon payment opportunities				
T2.7. What are existing, successful models for payment for ecosystem services/carbon financing in Madagascar?	<a href="#">Conservation Management KII</a> (Q13–Q15)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<p><b>Evaluation Question T3:</b></p> <p>What are the best approaches within livelihood investment (e.g., small-scale farming, conservation enterprises, social enterprises, etc.) that best change or support good behavior for conservation? To what extent do beneficiaries of various livelihood investments change their unsustainable practices or adopt sustainable practices?</p>				
<p><b>Link to CCP Theory of Change Strategic Approach:</b></p> <p>Rehabilitate cleared, non-arable land for increased agricultural availability</p>				
T3.1. What are the criteria for selecting the areas and related communities for rehabilitation?	<a href="#">Conservation Management KII</a> (Q20)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
T3.2. How long does it generally take to rehabilitate currently non-arable land for agricultural use? Can we do this within the life of a USAID project?	<a href="#">Conservation Management KII</a> (Q19)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
<p><b>Link to CCP Theory of Change Strategic Approach:</b></p> <p>Promote sustainable management of production forest; promote sustainable livelihoods at scale while also supporting basic human needs with links to conservation (aligning with other donors where possible)</p>				
T3.3. How have reductions in tourism impacted livelihoods in target areas, and is this driving forest/environmental degradation? How must future CCP programs adapt accordingly?	<a href="#">Livelihoods KII</a> (Q10)	Expert key informants, livelihoods	Expert key informants, livelihoods	Expert key informants, livelihoods
	<a href="#">Livelihoods SME FGD</a> (Q12–Q14)	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	N/A



Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
T3.4. What opportunities exist to partner with the private sector in our target areas? Should future programming focus on investment in fuel and timber?	<a href="#">Livelihoods KII</a> (Q10)	Expert key informants, livelihoods	Expert key informants, livelihoods	Expert key informants, livelihoods
	<a href="#">PSE KII</a>	SMEs; enterprises involved in fuel and timber industries; alternative solutions	SMEs; enterprises involved in fuel and timber industries; alternative solutions	SMEs; enterprises involved in fuel and timber industries; alternative solutions
T3.5. What barriers do local SMEs face in professionalizing and scaling up (e.g., finance and finance tools)?	<a href="#">Livelihoods SME FGD</a> (Q4–Q6)	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	N/A
<b>Evaluation Question T4:</b>				
To what extent has USAID support to the enforcement of land and natural resource tenure rights improved management and access to natural resources?				
<b>Link to CCP Theory of Change Strategic Approach:</b>				
Support more sustainable fishing practices through fishing cooperatives and women and youth				
T4.1. Are local ocean temperatures and circulation patterns changing due to climate change? Is this driving changes in fishing patterns?	<a href="#">Conservation Management KII</a> (Q28)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
T4.2. What are the most effective approaches to fighting illegal fishing, involving international levels and engaging the GOM?	<a href="#">Conservation Management KII</a> (Q22–Q35)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<p><b>Link to CCP Theory of Change Strategic Approach:</b> Mobilize community groups to claim their natural resource rights, rebuild cohesion, and tackle local challenges together</p>				
T4.3. With land tenure rights in flux, how do we mobilize groups to demand more from their local governments?	<a href="#">Land Tenure KII (Q5)</a>	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure
	<a href="#">Land Tenure FGD (Q4a–Q5)</a>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Untitled youth, men, women</li> <li>• Migrants</li> </ul>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Untitled youth, men, women</li> <li>• Migrants</li> </ul>	N/A
T4.4. How does the government’s decision on land designation for mining versus conservation areas affect people living in areas without land titles?	<a href="#">Land Tenure KII (Q6)</a>	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<b>Evaluation Question P1:</b>				
To what extent have USAID-supported capacity-building efforts enabled target groups (such as protected area managers, CSOs, local government/authorities, and communities) to achieve expected results pertaining to conservation goals? (Conservation goals include environmental justice and law application achieved through various advocacy interventions.)				
<b>Cross-Cutting CCP Performance Evaluation Questions</b>				
P1.1. To what extent have Hay Tao activities contributed to an increase in local groups' abilities to engage in political processes and conservation advocacy? What improvements has Hay Tao made in terms of building the capacity of Malagasy civil society? In what area(s)?	<a href="#">Governance KII</a> (Q9–Q12)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure
	<a href="#">Governance and Advocacy FGD</a> (Q3–Q7)	Hay Tao beneficiaries	Hay Tao beneficiaries	N/A
P1.2. What are the barriers and challenges to achieving expected results, and what are the strategies for addressing these barriers and challenges?	<a href="#">Governance KII</a> (Q6, Q7, Q9f)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure
	<a href="#">Governance and Advocacy FGD</a> (Q5c, Q6, Q7)	Hay Tao beneficiaries	Hay Tao beneficiaries	N/A

# APPENDIX II. EVALUATION MATRIX (PERFORMANCE EVALUATION QUESTIONS)

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
PI.3. How can the tools developed by Hay Tao be capitalized for more impact? What are the best approaches to ensure their sustained use beyond the life of the project? Who are future owners/users/champions of these tools?	<a href="#">Governance and Advocacy FGD</a> (Q5a–Q5d)	Hay Tao beneficiaries	Hay Tao beneficiaries	N/A
	<a href="#">Governance KII</a> (Q9–Q11)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure
PI.4. To what extent is improved management of protected areas (as evidenced by improvements in scores) attributable to Mikajy support? Which types of support were most impactful in improving protected area management? Least impactful? How does this inform design of future activities?	<a href="#">Conservation Management KII</a> (Q11a–Q11d)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<b>Evaluation Question P2:</b> Are current efforts effectively incentivizing communities, including migrants, to use natural resources differently? Why or why not?				
<b>Cross-Cutting CCP Performance Evaluation Questions</b>				
P2.1. To what extent has the Mikajy implementation of the territorial defense of natural heritage led to empowerment of local actors? How effective is the current implementation of the shared vision and related action plan? What, if anything, needs to be improved?	<a href="#">Conservation Management KII</a> (Q10a, Q10b)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
P2.2. Is providing small grants an efficient way to expand operational and impactful field activities? If so, how do we scale up this approach to achieve meaningful sustained impacts? Who might be the target grantees or beneficiaries?	<a href="#">Conservation Management KII</a> (Q12a, Q12b)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<p><b>Evaluation Question P3:</b></p> <p>What are the best approaches within livelihood investment (e.g., small-scale farming, conservation enterprises, social enterprises, etc.) that best change or support good behavior for conservation? To what extent do beneficiaries of various livelihood investments change their unsustainable practices or adopt sustainable practices?</p>				
<p><b>Cross-Cutting CCP Performance Evaluation Questions</b></p>				
P3.1. How can future programs most effectively scale up results achieved under Mikajy (in terms of number of beneficiaries and revenue generated from livelihood activities)?	<a href="#">Livelihoods SME FGD</a> (Q4–Q7)	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>• Tourism SMEs</li> <li>• Women owned/operated SMEs</li> </ul>	N/A
	<a href="#">PSE KII</a>	SMEs; enterprises involved in fuel and timber industries; alternative solutions	SMEs; enterprises involved in fuel and timber industries; alternative solutions	SMEs; enterprises involved in fuel and timber industries; alternative solutions
P3.2. What were the primary challenges to engaging beneficiaries and increasing revenue from livelihoods under Mikajy? How can follow-up projects be designed to address these challenges and achieve greater impact?	<a href="#">Livelihoods KII</a> (Q4–Q6, Q9, Q10)	Expert key informants, livelihoods	Expert key informants, livelihoods	Expert key informants, livelihoods

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
<b>Evaluation Question P4:</b>				
To what extent has USAID support to the enforcement of land and natural resource tenure rights improved management and access to natural resources?				
<b>Cross-Cutting CCP Performance Evaluation Questions</b>				
P4.1. What are the strengths and weaknesses of LMMA work under the current programming and regarding the experience of conflict with industrial fleets?	<a href="#">Conservation Management KII</a> (Q30–Q35)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management
P4.2. What are stakeholders' current perceptions of the effectiveness of CCP interventions in marine areas (e.g., sustainable management of LMMAs, marine protected areas, and marine resources)?	<a href="#">Conservation FGD</a> (Q4, Q8–Q10)	N/A	Mikajy beneficiaries in marine areas; separate groups for: <ul style="list-style-type: none"> <li>Youth, men, women</li> <li>Migrants</li> </ul>	N/A
P4.3. To what extent have CCP's efforts to improve access to land and resource tenure changed the way beneficiaries use or manage natural resources?	<a href="#">Land Tenure FGD</a> (Q3b)	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>Untitled youth, men, women</li> <li>Migrants</li> </ul>	Mikajy beneficiaries; ensure representation of: <ul style="list-style-type: none"> <li>Untitled youth, men, women</li> <li>Migrants</li> </ul>	N/A
	<a href="#">Land Tenure KII</a> (Q4)	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure	Expert key informants, governance/land tenure

Sub-Question (Information Gap)	Data Collection Tools/Variables	Data Collection Sources/Sites		
		Menabe	MaMaBay	Antananarivo
P4.4. The development of activities in marine areas lags behind those in terrestrial areas. What are the challenges to implementing interventions in marine areas? How can future programming address these challenges to achieve increased, sustained impact in marine areas?	<a href="#">Conservation Management KII</a> (Q23–Q27)	Expert key informants, conservation management	Expert key informants, conservation management	Expert key informants, conservation management



# APPENDIX III. FGD INFORMED CONSENT SCRIPT

## **Why is this research being done?**

This evaluation is being conducted by Consulting Associates on behalf of USAID/Madagascar. We are inviting you to participate in this focus group discussion because you have participated in a USAID Conservation and Communities Project (CCP) activity: USAID Mikajy and/or USAID Hay Tao. The purpose of this research project is to help USAID/Madagascar to understand to what extent the project's objectives and results have been achieved, to identify areas for improvement on the current project, and to inform the design of the future CCP program. In the end, the goal of this research is to improve USAID programs that promote biodiversity conservation while supporting livelihoods in the Menabe and MaMaBay regions of Madagascar.

## **What will I be asked to do?**

As a focus group participant, you will be asked to discuss either your personal or professional experience with CCP programs designed to (a) support local organizations to advocate for improvement in conservation management; (b) encourage people to adopt more conservation-friendly and climate-smart practices; (c) promote investments in sustainable livelihoods; (d) improve enforcement of land and natural resource tenure rights. The discussion will be led by a Consulting Associates staff member. The meeting itself will not exceed two hours. Questions that you might be asked during the meeting follow:

*[customized per session type]*

## **What about confidentiality?**

We will do our best to keep your personal information confidential. To help protect your confidentiality, all information received as a result of the focus group will be held completely confidential by USAID and consultants/facilitators involved in this project. To help protect your confidentiality, we will not include your name or any of your personal identifiable data in written notes and reports about the meeting or in the data or reports uploaded to the USAID Data Development Library (DDL). If USAID writes a report or article about this research, your identity will be protected to the maximum extent possible.

All data obtained during the focus groups, such as written notes and reports, will be securely stored in password-protected computer files or locked file cabinets with limited access. To further protect confidentiality, we will ask all participants in the focus group, including you, not to share what people talked about or who attended the group. Staff and consultants/facilitators involved in this project who will have access to the data will sign confidentiality agreements.

## **What are the risks of this research?**

There may be some risks from participating in this study. As a result of having to respond to questions about personal or professional experiences of unmet needs or violations of your rights, you may feel distressed or experience psychological or emotional trauma. We will minimize those risks by allowing participants to withdraw from the study at any time. You may leave the meeting at any time, and you do not have to answer any questions you do not want to.

**What are the benefits of this research?**

Even though this research is not designed to help you directly, the results may help USAID/Madagascar and its partners learn more about the effectiveness of activities currently provided, and what improvements are desired, which will eventually improve the overall program. Future CCP beneficiaries would therefore benefit from the study.

**Do I have to be in this research?**

Your participation in this research is completely voluntary. You may choose not to take part at all.

**May I stop participating at any time?**

You may stop participating at any time. If you decide not to participate or if you stop participating at any time, you will not be penalized and will not lose any benefits for which you would otherwise qualify.

**What if I have questions?**

This evaluation is being conducted by USAID/Madagascar. If you have any questions about the study itself, please contact \_\_\_\_\_ (project coordinator name), at \_\_\_\_\_  
\_\_\_\_\_ (insert contact info here: phone, e-mail, address).

**Interview Place and Date:**

**Interviewer(s):**

**Participant Name:**

**Sex:**  Female  Male  Other

**Location:**  MaMaBay  Menabe  Antananarivo  Other: \_\_\_\_\_

**Do you confirm your consent to participate in this interview?**  Yes  No

**Do you understand that your participation is voluntary?**  Yes  No

**Do you understand that you can stop participating at any time?**  Yes  No

To guarantee accuracy, we find it useful to keep an audio record of the conversation. If you prefer, however, we will not use recording devices.

**Do you confirm your consent for us to record this interview?**  Yes  No

**Participant Signature:**

# APPENDIX IV. FGD STUDY INTRODUCTION SCRIPTS

## **Welcome**

Hello, my name is [facilitator name] with Consulting Associates, and I am here today to conduct a focus group with you all to better understand how well USAID Conservation and Communities Project (CCP) activities are working and how they might be improved. This focus group aims to ask questions to get feedback about CCP activities and how you think USAID/Madagascar can better serve you and your community. As participants in the CCP program, you are the experts in what is happening in your community and can help to improve the current program and shape future CCP activities.

## **Explanation of the process**

Before we begin, please raise your hand if you have ever participated in a focus group discussion before.

Focus groups are often used in evaluation research to collect feedback from participants about what is working well in a program and what could be improved. In a focus group, we are not trying to achieve consensus, but are gathering information. We want to learn from you about your honest thoughts and opinions.

- The focus group will last about two hours
- Identify the bathroom/exit
- Share timing of any breaks
- Help yourself to refreshments (if applicable)

## **Establish Ground Rules**

Ask the group to suggest some ground rules. After they brainstorm some, make sure the following are on the list:

- Everyone should participate.
- Information provided in the focus group must be kept confidential.
  - Do not use specific names if you are giving examples.
  - Do not share the information you hear today with others.
- Notes taken during the group will not include names or identifying information.
- Stay with the group, and please do not have side conversations.
- Turn off cell phones if possible.
- Have fun!

During this focus group, I will ask questions and facilitate a conversation about how well the CCP program is doing at improving conservation and supporting livelihoods for you and your community. Please keep in mind that there are no “right” or “wrong” answers to any of the questions I will ask. The purpose is to have a conversation and hear the opinions of everyone in the discussion group. I hope you will be comfortable speaking honestly and sharing your ideas with us. Please note that this session will be recorded (or [name] will be taking notes during the focus group) to ensure we hear all your ideas during the conversation. However,

the focus group's comments will remain confidential, and your name will not be attached to any comments you make. Do you have any questions before we begin?

Before we get into the conversation, let's do a quick round of introductions. Tell the group your name, [opener depends on group/context].

## APPENDIX V. KII INFORMED CONSENT SCRIPT

### **Why is this research being done?**

This evaluation is being conducted by Consulting Associates on behalf of USAID/Madagascar. We are inviting you to participate in this interview because you have some expertise related to activities conducted by a USAID Conservation and Communities Project (CCP) activity: USAID Mikajy and/or USAID Hay Tao. The purpose of this research project is to help USAID/Madagascar to understand to what extent the project's objectives and results have been achieved, to identify areas for improvement on the current project, and to inform the design of the future CCP program. In the end, the goal of this research is to improve USAID programs that promote biodiversity conservation while supporting livelihoods in the Menabe and MaMaBay regions of Madagascar.

### **What will I be asked to do?**

As a key informant, you will be asked to discuss either your personal or professional experience/expertise with CCP programs designed to (a) support local organizations to advocate for improvement in conservation management; (b) encourage people to adopt more conservation-friendly and climate-smart practices; (c) promote investments in sustainable livelihoods; (d) improve enforcement of land and natural resource tenure rights. The interview will be led by a Consulting Associates staff member. The interview itself will not exceed one hour.

### **What about confidentiality?**

We will do our best to keep your personal information confidential. To help protect your confidentiality, all information received as a result of the interview will be held completely confidential by USAID and consultants/facilitators involved in this project. To help protect your confidentiality, your name and any of your personal identifiable data in written notes and reports about the meeting will not be included in reports or datasets uploaded to the USAID Data Development Library (DDL). If USAID writes a report or article about this research, your identity will be protected to the maximum extent possible.

All data obtained through interviews, such as written notes and reports, will be securely stored in password-protected computer files or locked file cabinets with limited access. Staff and consultants/facilitators involved in this project who will have access to the data will sign confidentiality agreements.

### **What are the risks of this research?**

There may be some risks from participating in this study. As a result of having to respond to questions about personal or professional experiences of unmet needs or violations of your rights, you may feel distressed

or experience psychological or emotional trauma. We will minimize those risks by allowing participants to withdraw from the study at any time. You may leave the meeting at any time, and you do not have to answer any questions you do not want to.

**What are the benefits of this research?**

Even though this research is not designed to help you directly, the results may help USAID/Madagascar and its partners learn more about the effectiveness of activities currently provided, and what improvements are desired, which will eventually improve the overall program. Future CCP beneficiaries would therefore benefit from the study.

**Do I have to participate in this research?**

Your participation in this research is completely voluntary. You may choose not to take part at all.

**May I stop participating at any time?**

You may stop participating at any time. If you decide not to participate or if you stop participating at any time, you will not be penalized and will not lose any benefits for which you would otherwise qualify.

**What if I have questions?**

This evaluation is being conducted by USAID/Madagascar. If you have any questions about the study itself, please contact \_\_\_\_\_ (project coordinator name), at \_\_\_\_\_  
\_\_\_\_\_ (insert contact info here: phone, e-mail, address).

**Interview Place and Date:**

**Interviewer(s):**

**Participant Name:**

**Participant Position:**

**Sex:**       Female       Male       Other

**Location:**    MaMaBay    Menabe    Antananarivo    Other: \_\_\_\_\_

**Do you confirm your consent to participate in this interview?**       Yes       No

**Do you understand that your participation is voluntary?**       Yes       No

**Do you understand that you can stop participating at any time?**       Yes       No

**To guarantee accuracy, we find it useful to keep an audio record of the conversation. If you prefer, however, we will not use recording devices.**

**Do you confirm your consent for us to record this interview?**       Yes       No

**Participant Signature:**

# APPENDIX VI. KII STUDY INTRODUCTION SCRIPTS

## **Welcome: Explain purpose of interview**

- Thank you for agreeing to do this interview. My name is [NAME] with [DATA COLLECTION FIRM], and I'll be talking with you today.
- As you know, this evaluation is being funded by USAID.
- The purpose of this interview today is to learn from your personal and professional experiences how we might improve the design of future biodiversity programs in Madagascar.
- The interview will last about one hour.
- Did you read the consent form provided to you? Do you have any questions?

## **Ground rules**

- Everything you tell us will be confidential. While we are including your name and position in our notes, we won't connect your name or position with anything that you say in final reports and presentations shared with the public.
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also stop the interview at any time for any reason.
- Please remember that we want to know what you think and feel and that there are no right or wrong answers.
- Is it OK if I record this interview today?

# APPENDIX VII. DATA COLLECTION INSTRUMENT: CONSERVATION FGD

**Research area:** Conservation Management

## **Information gaps this FGD is intended to address:**

- How is a lack of access to basic human needs presenting barriers to adoption of conservation-friendly practices, or even driving threats to biodiversity?
- What are the most immediate needs that must be addressed to begin to think about long-term development?
- Does sensitization alone lead to changed attitudes and conservation behaviors?
- What are proven best practices for translating climate data into pragmatic communication based on targeted beneficiaries' needs?
- What are the strengths and weaknesses of LMMA work under the current programming and regarding the experience of conflict with industrial fleets?



## Focus Group Questions

Before we get into the conversation, let's do a quick round of introductions. You were all selected for this group as a participant in a Mikajy program. Tell the group your name and what Mikajy activities you have participated in in the past.

### Context

- I. Let's start by talking about your community. What are some good things about living in your community?
  - a. How, if at all, has your community changed over the past 10–15 years?
  - b. What are the biggest challenges people face in your community?
  - c. In your opinion, are things getting better or worse for people in your community? Please provide specific examples if you can.

Prompt for Menabe:

- d. How about the forests in Menabe? How have these changed over the past 10–15 years?
      - i. If degraded: In your opinion, has the degradation of forests in Menabe increased over time? When did this degradation begin?
      - ii. In your opinion, what is causing this increased degradation?  
[prompt for migration as a potential cause]
2. Now I'd like to learn more about the ecosystem where you live. By ecosystem, we mean all of the plants and animals, and the weather and landscape, where you live. To what extent do you think threats to the ecosystem are a cause for concern in your community? Why or why not?
  - a. What do you think are the biggest threats to the ecosystem facing your community? [prompts: illegal logging, slash-and-burn agriculture, poaching, wildlife trafficking, illegal fishing, climate change, unsustainable farming]
  - b. How, if at all, have these threats impacted you or members of your community (positively or negatively)?
  - c. Do you think most people in your community comply with conservation regulations? What are the regulations that are most often ignored? Why or why not?
  - d. If you witnessed someone not complying with laws related to natural resources, would you ever report it? Why or why not?
  - e. Do you think enforcement of regulations of natural resources is an issue in your community? What are the regulations that are most often enforced? Why or why not?
  - f. How have CCP's efforts to improve your access to land and resource tenure changed the way you use or manage natural resources?
3. Now I'd like to ask about the impact of climate change in your community. By climate change, I mean the changes in the typical weather for your region—such as high and low temperatures and amount of rainfall—over a long period of time, due to global warming.
  - a. What do you know about climate change?
    - i. Can you describe where and how you have learned about how climate change might impact you? Please be as specific as you can.
    - ii. What more would you like to know about climate change?
  - b. Have you ever made any changes in your behaviors or practices to adapt to the impacts of climate change? [prompts: changes to farming techniques, your home/infrastructure, sources of income] Why or why not?

- c. Do you think your neighbors know about climate change? What is the level of knowledge they have about the topic?
- d. To what extent do you think climate change is a cause for concern in your community? Why or why not?

### **Engagement in and Satisfaction with CCP Programs**

4. Let's now talk a bit more about your involvement in Mikajy.
  - a. As a result of the intervention(s) and/or based on your opinion, to what extent do you think Mikajy has changed the way you manage natural resources? Can you think of any specific examples?
  - b. What are some reasons why you have not made a change?
  - c. Have the conservation activities with Mikajy resulted in any changes (positive or negative) in your ability to feed and support your family?
    - i. If yes, what are the activities?
    - ii. How have these activities impacted your livelihoods?
  - d. Did Mikajy initiatives yield any unexpected outcomes for you, either positive or negative? If yes, please describe. Could you explain what has happened?
  - e. In your opinion, did Mikajy include the right people in your community to be able to improve natural resource use? In your opinion, who should Mikajy include as participants in future programs?
  - f. Based on your opinion and your experience with Mikajy, are there other improvements that could be made to support to conservation efforts that have not happened? If yes, please describe.

### **Program Gaps and Future Design**

5. What kinds of activities to support you and your neighbors do you think would be important for Mikajy to focus on in the future?
6. If you were given money to create a program to support conservation in your community, what types of activities would you focus on?
  - a. What made you decide on those activities?

### **Marine Areas Only**

7. What are the biggest threats to sustainable fishing and the protection of marine resources in your community?
8. Are you familiar with LMMAs (Locally Managed Marine Areas)?

If not:

Provide definition and skip to 9.

A Locally Managed Marine Area (LMMA) is an area associated with coastal and marine resources that is managed at the local level by the coastal communities. Establishment of an LMMA enables communities to make decisions on which fishing methods and other activities can or cannot be carried out in their waters.

If yes:

- a. Are you aware of any LMMA activities in your area? What do you know about LMMA activities where you live?
  - b. What do you think are the benefits of LMMA activities? What is the difference between marine areas managed by LMMA and other non-LMMA fishing areas?
  - c. What are the biggest challenges LMMAs face in protecting marine resources?
9. Do you have any final comments about how you think we can make current or future Mikajy activities better?

# APPENDIX VIII. DATA COLLECTION INSTRUMENT: LIVELIHOODS FGD

**Research area:** Livelihoods

**Information gaps this FGD is intended to address:**

- Given COVID and political issues, is tourism still a good focus? What other enterprises are more resilient?
- What barriers do local SMEs face in professionalizing and scaling up (e.g., finance and finance tools)?

## **Focus Group Questions**

Before we get into the conversation, let's do a quick round of introductions. You were all selected for this group as an owner or manager of a small business, or a member of a cooperative. Tell the group your name, a little bit about your business, and how long you have had this business.

## **SME Context**

1. Let's start by talking a bit more about your business. Would you say your business is doing better, worse, or the same as five years ago?
  - a. If your business is doing better or worse, why do you think this is?
  - b. What are the biggest challenges facing your business now?
2. Now, we are going to talk about the next five years:
  - a. What are the biggest opportunities you see for your business?
  - b. What are the biggest challenges you see for your business?
  - c. Do you think you will still be working in this business five years from now? Why/why not?
3. To what extent has your business been impacted by the COVID-19 pandemic? (Probe for tourism industry, specifically.)

## **Engagement in and Satisfaction with CCP Programs**

4. What Mikajy intervention(s) have you been involved in?
5. As a result of the intervention(s) and/or based on your opinion, to what extent do you think Mikajy has contributed to your ability to improve your business/livelihoods?
  - a. Has this resulted in any changes in your ability to continue or grow your business?
  - b. Can you think of any specific examples?
6. Based on your opinion and your experience with Mikajy, are there other improvements that could be made to support livelihoods that have not happened? If yes, please describe.
7. Did Mikajy initiatives yield any unexpected outcomes for your livelihoods, either positive or negative? If yes, please describe.

## **Program Gaps and Future Design**

8. If you were given money to create a program to support people to improve their livelihoods, what types of activities would you focus on?
  - a. What made you decide on those activities?

9. What kinds of activities to support livelihoods do you think would be important for Mikajy to focus on in the future?
10. If there are opportunities to revamp the tourism industry, e.g., after COVID-19, do you think USAID should invest in this sector?
11. Do you have any final comments about how you think we can make current or future Mikajy activities better?

## APPENDIX IX. DATA COLLECTION INSTRUMENT: GOVERNANCE FGD

**Research area:** Governance and Advocacy

**Information gaps this FGD is intended to address:**

- To what extent have capacity-building efforts led to desired results?
- With land tenure rights in flux, how do we mobilize groups to demand more from their local governments?
- How does the government's decision on land designation for mining versus conservation areas affect people living in areas without land titles?

### **Participants**

- Participants in advocacy programs

### **Focus Group Questions**

Before we get into the conversation, let's do a quick round of introductions. You were all selected for this group as a participant in a Hay Tao program. Tell the group your name and what Hay Tao activities you have participated in in the past.

### **Context**

- I. First, I would like to learn more about the organizations that you represent.
  - a. What are some of your biggest successes/proudest moments working with this organization?
  - b. What are some of the biggest challenges you have faced as an organization?
  - c. In the past five years, what are some of the biggest changes you have seen in the way your organization engages in conservation efforts? Please provide specific examples.

### **Engagement in and Satisfaction with CCP Programs**

2. Now I would like to ask you about your experiences with the Hay Tao Activity. What activities supported by Hay Tao have you participated in to promote conservation of biodiversity? As a result of the intervention(s) and/or based on your opinion, to what extent do you think Hay Tao has contributed to your ability to engage in conservation advocacy? Can you think of any specific examples?

Now I have several questions aimed to see the impact of Hay Tao interventions on various categories of beneficiaries.

3. The first question is for individual beneficiaries: How have Hay Tao's efforts to involve citizens in advocacy directly impacted the way people use/manage natural resources? Can you think of any specific examples?
4. Next, we will talk about local groups: Do you think that Hay Tao activities contributed to an increase in local groups' abilities to engage in political processes and conservation advocacy? If yes, please describe.
5. The third question is about CSOs: What improvements has Hay Tao made in terms of building the capacity of Malagasy civil society? In what area(s)? Please describe.
  - a. To what extent do you think the tools developed by Hay Tao will continue to be used beyond the life of the project?
  - b. Who are future owners/users/champions of these tools?
  - c. What are the challenges/barriers to the continued use of these tools?
  - d. How might these tools be scaled up to achieve greater impact?
6. Based on your opinion and your experience with Hay Tao, are there other improvements that could be made to increase local capacities that have not happened? If yes, please describe.
7. Did Hay Tao initiatives yield unexpected outcomes, either positive or negative? If yes, please describe.
8. Do you have any final comments about how you think we can make current or future Hay Tao activities better?

## APPENDIX X. DATA COLLECTION INSTRUMENT: LAND TENURE FGD

**Research area:** Land Tenure

**Information gaps this FGD is intended to address:**

- To what extent have capacity-building efforts led to desired results?
- With land tenure rights in flux, how do we mobilize groups to demand more from their local governments?
- How does the government's decision on land designation for mining versus conservation areas affect people living in areas without land titles?

**Participants**

- Untitled youth, men, women
- Migrants

**Focus Group Questions**

Before we get into the conversation, let's do a quick round of introductions. Please tell the group your name and what CCP activities you have participated in the past.

**Context**

- I. Let's start by talking about your community. What are some good things about living in your community?
  - a. How, if at all, has your community changed in the past 10–15 years?

- b. In your opinion, are things getting better or worse for people in your community in the past 10–15 years? Please provide specific examples if you can.
- c. In general, what are the biggest challenges people face in your community?

Now I would like to learn more about land rights where you live. By land rights, we are referring to land titles, karatany and kadastra.

2. What are the main issues related to land tenure in your community?
3. Do you have land title or a certificate/karatany for the land where you live?
  - a. Probe if yes: Did you receive support from Mikajy in obtaining the land title or a certificate/karatany?
    - i. Probe: What kind of support did you receive?
  - b. Probe if yes: How, if at all, has obtaining the land title or a certificate/karatany changed the way you use or manage your land?
4. How important is it for you to have a land title or a certificate/karatany? Why/why not?
  - a. Probe if no: For the pieces of land for which you do not own any formal documents, what are the obstacles that prevent you from acquiring it?
  - b. How likely do you think it is that someone would try to take one of your parcels from you in the next five years?
    - i. If yes: Who do you think would try to take your parcels?
    - i. Compared to one year ago, do you think the possibility that someone could try to take one of your parcels has increased, decreased, or stayed the same? Why?
5. In your community, do you think most people have a title or a certificate/karatany for the land where they live?

### **Engagement in and Satisfaction with CCP Programs**

Now I'd like to learn more about the ecosystem where you live. By ecosystem, we mean all of the plants and animals, and the weather and landscape, where you live.

6. To what extent do you think threats to the ecosystem are a cause for concern in your community? Why/why not?
7. What do you think are the biggest threats to the ecosystem facing your community? [prompts: illegal logging, slash-and-burn agriculture, poaching, wildlife trafficking, illegal fishing, climate change, unsustainable farming]
8. How, if at all, have these threats impacted you or members of your community (positively or negatively)?
9. Do you think most people in your community comply with conservation regulations? What are the regulations that are most often ignored? Why/why not?
  - a. Do you think improved land tenure will increase compliance to conservation regulations? If yes, how?
10. If you witnessed someone not complying with laws related to natural resources, would you ever report it? Why/why not?
11. Do you think enforcement of regulations of natural resources is an issue in your community? What are the regulations that are most often enforced? Why/why not?
12. Do you have any final comments about how you think we can make current or future Mikajy activities better?

# APPENDIX XI. DATA COLLECTION INSTRUMENT: CONSERVATION KII

## Section 1. Background

I'd like to begin by asking you some questions about your current position.

1. What is your position at [organization]? What are your major responsibilities in your current position?
2. How long have you been with [organization]?
3. Can you tell me a bit about your work and experience as it relates to conservation management? (Probe particularly for aspects of current job that relate to the topics below: U.S. government coordination, payment for ecosystem services, carbon financing, land rehabilitation, fisheries management.)

## Section 2. Threats, Drivers, and Barriers to Behavior Change

In your opinion, what are the main threats to biodiversity in [MaMaBay/Menabe]? What are the primary drivers of these threats?

4. Probe, if not mentioned: What role, if any, does increased migration play?
5. Could you tell us some conservation-friendly practices promoted by Mikajy in your community? In your opinion, what are the primary barriers to adoption of these conservation-friendly practices?
6. Now I want to talk [or discuss more if mentioned] about the likely impacts of the lack of basic human needs such as health care, food security, education, livelihoods, and secure land tenure on the adoption of these conservation-friendly practices. Do any of these basic human needs play a role in the adoption of conservation-friendly practices?
  - a. If yes: In your opinion, what are the most immediate basic human needs that must be addressed to begin to think about conservation and long-term development?
  - b. How would you describe the state of coordination/collaboration across U.S. government partners to meet these basic human needs? Where is it now and where does it need to go? What do we need to do to make this happen?
  - c. How about coordination between U.S. government partners and the private sector in providing basic human needs to the population? What particular models/strategies have been used (or what factors were present) that were successful in improving coordination/collaboration?
7. In your opinion, does sensitization and/or training alone lead to changed attitudes and conservation behaviors? If no, what other enabling conditions must be in place?
8. [If familiar with Mikajy activities] If the objective is to maximize the impact of U.S. government investments on conservation management, did we target the right beneficiaries under Mikajy?
  - a. What are the best criteria for selecting project beneficiaries for conservation management?
  - b. How, if at all, might we approach the selection of beneficiaries/sites differently in future CCP programs?
9. At what levels should future CCP programs be working to maximize the impact of conservation programming (e.g., Fokonolona, elders [customary approach], or at the local government levels)? Why?

10. To what extent has the Mikajy implementation of the territorial defense of natural heritage led to empowerment of local actors?
- How effective is the current implementation of the shared vision and related action plan?
  - What, if anything, needs to be improved?
- 11.
- What improvements in protected area management have you noticed in the past four years?
  - In your opinion, to what extent are these improved management results attributable to Mikajy support in conservation activities and capacity-building? (Probe each element of the improvement.)
  - From your experience, which types of support from Mikajy were most impactful in improving management or PAs and which ones were the least impactful?
  - How does this inform design of future activities?
12. In your opinion, would providing small grants be a more efficient way to expand operational and impactful field activities?
- If so, how do we scale up this approach to achieve meaningful sustained impacts?
  - Who might be the target grantees/beneficiaries?

### **Section 3. Payment for Ecosystem Services/Carbon Financing**

13. Do you have any experience or expertise with payment for ecosystem services or carbon financing?
- If no, skip to Section 4
  - If yes, continue
14. To your knowledge, what models for payment for ecosystem services have been implemented in Madagascar, and by whom? Have any been successful in changing resource use?
- What particular models/strategies have been used (or what factors were present) that were successful?
  - What strategies were not so successful? What can we learn from them?
  - Can you recommend any studies/resources that we should review?
15. To your knowledge, what models for carbon finance have been implemented in Madagascar, and by whom? Have any been successful?
- What particular models/strategies have been used (or what factors were present) that were successful?
  - What strategies were not so successful? What can we learn from them?
  - Can you recommend any studies/resources that these organizations have produced that we should review?
16. It is often a difficult challenge to get practical climate information to those who need it most.
- To your knowledge, what types of climate information are most useful to CCP beneficiaries?
  - What are the most effective ways to get this climate information to those who need it?
  - What is the most useful way to present this climate information so that it can be easily understood and used by those who need it?

### **Section 4. Land Rehabilitation**

17. Do you have any experience or expertise with land rehabilitation for agricultural use?
- If no, skip to Section 5
  - If yes, continue



18. One potential area for future investment includes rehabilitation of land in zones outside of protected areas. To your knowledge, are there existing successful case studies of land rehabilitation in Madagascar?
  - a. What particular models/strategies have been used (or what factors were present) that were successful?
  - b. What strategies were not so successful?
  - c. What enabling factors must be in place for reforestation in the rehabilitated land to be successful?
19. How long does it generally take to rehabilitate currently non-arable land for agricultural use? How might success be measured within the life of a USAID project, which is generally five years?
20. What are the best criteria for selecting the geographic areas and communities for rehabilitation? Why are these criteria important?

## **Section 5. Fisheries Management**

21. Do you have any experience or expertise with fisheries management in Madagascar?
  - If no, skip to Section 6
  - If yes, continue
22. In your opinion, to what extent has Mikajy and Hay Tao's support to conservation of marine areas been effective?
23. In your opinion, what are the main constraints to the development and conservation of marine areas in [MaMaBay/Menabe]?
24. How can future programming address these challenges to achieve increased, sustained impact in marine areas?
25. Would increased engagement with the GOM help to fight illegal fishing? Please explain.
26. How about increased engagement with international actors?
27. The development of activities in marine areas lags behind those in terrestrial areas. What are the challenges to implementing interventions in marine areas?
28. How, if at all, is climate change driving changes in fishing patterns in Madagascar?
29. How must future CCP programming be adapted to address these climate-related changes?
30. Do you have a good knowledge of the Locally Managed Marine Area (LMMA) activities?
  - If no, skip to Section 6
  - If yes, continue
31. Are LMMAs effective at managing the fisheries resources? Why or why not?
32. How has the training provided to LMMAs helped them better manage fisheries resources?
33. Are fishers' communities all members of LMMAs? If not, why not? To what extent will that impact the LMMAs?
34. How would you describe the relationships between LMMAs and artisanal and industrial fleets?
  - a. Probe: What are the main sources of conflict?
  - b. What are the main issues encountered by the LMMA managers? How did they see the fish stock many years (20 years) ago? Why is there less stock now? What measures do they think are efficient to regenerate the fish stock?
35. In your opinion, what are the strengths and weaknesses of LMMA work under the current CCP program?

## **Section 6. Wrap Up**

36. What is the most important message that you want us to take away from this interview?

37. Is there anything else that you would like to add about any of the topics that we've discussed or other areas that we didn't discuss but you think are important?
38. Can you refer us to anyone else who you think would be helpful to interview about these topics?

Thank you for your time and participation in this interview. The information that you provided to us will be very helpful in this project.

## APPENDIX XII. DATA COLLECTION INSTRUMENT: LIVELIHOODS KII

### **Section 1. Background**

I'd like to begin by asking you some questions about your current position.

1. What is your position at [organization]? What are your major responsibilities in your current position?
2. How long have you been with [organization]?
3. Can you tell me a bit about your work and experience as it relates to livelihoods issues? (Probe particularly for aspects of current job that relate to the topics below: fisheries/marine resources, tourism, payment for ecosystem services, private sector collaboration, fuel and timber industries.)

### **Section 2. SME Development (Questions for Cooperatives)**

4. To your knowledge, what barriers do small or medium-sized businesses in Madagascar (such as fisheries/marine resources, small-scale farmers, conservation enterprises, social enterprises, etc.) face in professionalizing and scaling up their businesses?
  - a. Is access to finance and finance tools a significant barrier?
  - b. Are the costs associated with formalization (e.g., taxes) a barrier?  
[Probe for more information on fees and other barriers, as needed.]
5. Are there any constraints regarding national, regional, or local regulations governing the value chain or the sector you may refer to?  
[Probe for other challenges: for instance, raw materials, supply, logistics, skills, markets/buyers, selling prices, etc.]
6. What support was/is provided by a USAID project to SMEs? Were the expected results achieved? What are the areas for improvement?
7. How could these companies have a greater impact on biodiversity conservation or the living conditions of local communities?
8. In your experience, which Mikajy livelihoods programs have been most successful in changing negative behaviors impacting biodiversity or supporting positive behavior for conservation?
  - a. Are Mikajy livelihood interventions sufficient to promote behavior change? If not, where are the gaps in programs/interventions?
  - b. Marine areas only:  
What marine value chains are promoted within LMMAs? To what extent will the empowerment of the community through LMMAs address the community's basic needs and/or generate revenues for

them? What types of partnerships with the private sector can support the sustainable management of marine resources, leading to positive behavior for conservation?

9. If you were given money to support the expansion of sustainable livelihoods and the growth of small enterprises, what types of activities would you focus on? What made you decide on those activities?
10. What kinds of activities to support livelihoods do you think would be important for CCP to focus on in the future?
  - a. Mikajy staff only: What were the primary challenges to engaging beneficiaries and increasing revenue from livelihoods under Mikajy? Are there improvements that should be implemented to increase the adoption of these livelihood activities?
  - b. In your opinion, how can follow-up projects be designed to address these challenges and achieve greater impact?

### **Section 3. Tourism**

11. Do you have any experience or expertise with the tourism industry in Madagascar?
  - If no, skip to Section 4
  - If yes, continue
12. How has the reduction of tourism caused by the COVID-19 pandemic impacted livelihoods?
  - a. Have these impacts increased or accelerated forest/environmental degradation?
13. How might future CCP programs increase economic development from tourism?
14. How can environmental conservation be better incorporated in tourism?

### **Section 4. Wrap Up**

15. What is the most important message that you want us to take away from this interview?
16. Is there anything else that you would like to add about any of the topics that we've discussed or other areas that we didn't discuss but you think are important?
17. Can you refer us to anyone else who you think would be helpful to interview about these topics?

Thank you for your time and participation in this interview. The information that you provided to us will be very helpful in this project.

# APPENDIX XIII. DATA COLLECTION INSTRUMENT: GOVERNANCE KII

## **Section I. Background**

I'd like to begin by asking you some questions about your current position.

1. What is your position at [organization]? What are your major responsibilities in your current position?
2. How long have you been with [organization]?
3. Can you tell me a bit about your work and experience as it relates to conservation advocacy and capacity-building?

## Section 2. Capacity-Building

4. In your opinion, what needs to be in place to encourage conservation advocacy? To what extent are these enabling conditions in place in Madagascar?
5. In your opinion, how do you see the role of government, regional authorities (such as OPJ, gendarmes, tribunal), CSOs, and other actors working to manage the pressures and impacts of migration?
  - a. How might USAID improve coordination/engagement across these actors to manage these impacts?
6. Currently, what are the most significant barriers to civic engagement in Madagascar, particularly around conservation advocacy?
7. Currently, what are the most significant barriers to enforcement of conservation laws in Madagascar?
  - a. Probe: What, if any, role does lack of coordination play in this?
  - b. Probe: What, if any, role does corruption play in this?
  - c. Probe: Are current policies sufficient to support conservation? If not, what policies need to be strengthened/put in place?
8. Are you familiar with USAID's Hay Tao program?
  - If no, skip to Section 3
  - If yes, continue
9. Do you think that Hay Tao activities contributed to an increase in local groups' abilities to engage in political processes and conservation advocacy? If yes, please describe.
  - a. For Hay Tao staff: What tools and training were developed under the project?
  - b. For others: What tools and training have you received from the project?
  - c. In your opinion, have the tools and trainings developed under Hay Tao led to changes in behavior?
  - d. To what extent do you think the tools developed by Hay Tao will continue to be used beyond the life of the project?
  - e. Who are future owners/users/champions of these tools?
  - f. What are the challenges/barriers to the continued use of these tools?
  - g. How might these tools be scaled up to achieve greater impact?
10. Based on your opinion and your experience with Hay Tao, are there other improvements that could be made to increase local capacities that have not happened? If yes, please describe.
11. Hay Tao trainings and tools are developed with longer-term outcomes in mind. In your opinion, what are the best measures of success for the trainings and tools developed under the project?
12. In the future, are there any opportunities where Hay Tao and Mikajy might increase coordination to scale up the impact of activities? If so, please describe.
  - a. Probe about the capacity-building to improve the governance and management of the members of CSO.

## Section 6. Wrap Up

13. What is the most important message that you want us to take away from this interview?
14. Is there anything else that you would like to add about any of the topics that we've discussed or other areas that we didn't discuss but you think are important?
15. Can you refer us to anyone else who you think would be helpful to interview about these topics?

Thank you for your time and participation in this interview. The information that you provided to us will be very helpful in this project.

# APPENDIX XIV. DATA COLLECTION INSTRUMENT: LAND TENURE KII

## Section 1. Background

I'd like to begin by asking you some questions about your current position.

1. What is your position at [organization]? What are your major responsibilities in your current position?
2. How long have you been with [organization]?
3. Can you tell me a bit about your work and experience as it relates to livelihoods issues? (Probe particularly for aspects of current job that relate to the topics below: advocacy, capacity-building, land tenure.)

## Section 2. Land Tenure

4. USAID activities have established guichet fonciers (land certification offices) and helped people get land certificates. How has this helped households? Has this had an effect on how they use/invest in their land and other natural resources?
5. With access to land tenure rights, such as land titles, often considered to be too expensive and complicated, what is the most effective way to mobilize groups to demand more from their local and national governments to increase access to secure land tenure?
  - a. Probe if needed: What about land certificates as an alternative?
6. To your knowledge, how has the new Les Propriétés Foncières Privées Non Titrées law (stating that people without land titles can be removed from their land if mining resources are found) affected people living in areas without land titles?
7. Given the lack of political will to increase affordable access to land tenure via certification or improved titling processes, is land tenure still an important area for continued USAID investments? What can be done in this political environment to actually help people secure their land rights?
8. If you were given money to create a program to support land tenure rights, what types of activities would you focus on, especially given political barriers? What made you decide on those activities?
9. What kinds of activities to support land tenure do you think would be important for CCP to focus on in the future?
10. Mikajy is supporting the mass land tenure certification (Operation de Certification Fonciere Massive), and the concerted domain operation (Operation Domanial Concertee, ODOC), to secure land tenure at the community level. In your opinion, which land security mechanism is the most appropriate (quickest, least costly, most sustainable, most feasible, with more impact) for the beneficiaries of the CCP program at the community level?
  - a. What are the obstacles to overcome to implement this mechanism?
  - b. Are there other parameters and/or factors to be considered (apart from the land sector) to be able to address the challenges and implement the mechanism? If yes, which ones? (Please develop your insights.)

## Section 3. Wrap Up

11. What is the most important message that you want us to take away from this interview?
12. Is there anything else that you would like to add about any of the topics that we've discussed or other areas that we didn't discuss but you think are important?

13. Can you refer us to anyone else who you think would be helpful to interview about these topics?

Thank you for your time and participation in this interview. The information that you provided to us will be very helpful in this project.

## APPENDIX XV. DATA COLLECTION INSTRUMENT: PRIVATE SECTOR ENGAGEMENT KII

- I. Questions to SMEs/enterprises involved in fuel and timber industries or alternative solutions (these questions are applicable to SMEs/enterprises/cooperatives involved in key identified value chains [agribusiness])
  - a. Please describe your activities, products, services, and location of your business.
  - b. Where do you intervene in the value chain?
  - c. What is your motivation/asset in working in this industry?
  - d. What are the key challenges/barriers or problems you encounter in your operations?
  - e. Are there any gaps in the value chain?
  - f. What and how are your relationships with the government and/or regulatory agencies?
  - g. Are there any areas for growth for your company?
  - h. Are there any factors constraining you from more involvement and investment? Please explain.
  - i. In your opinion, are there any opportunities for growth in the sector? Why?
  - j. In your opinion, how does this activity impact conservation of biodiversity or protection of the environment? What is missing? What could be improved?
2. Questions to industry groups/associations (groupements)
  - a. Please briefly describe the sector you work in. What are opportunities for growth in this sector?
  - b. In your opinion, how does your sector impact (positively or negatively) conservation of biodiversity or protection of the forest? What is missing? What could be improved?
  - c. What different types of fuels does the sector use in its operations (those impacting or not on biodiversity and forest conservation)?
  - d. Are these fuels produced in-house or bought externally?
  - e. Who are the suppliers of these fuels?
  - f. Regarding these fuels, what are the key challenges/barriers or problems you encounter?
  - g. What solutions and/or alternative solutions could be adapted to reduce the impact of the use of these fuels on biodiversity?
  - h. What may be the roles and interests of the private sector in addressing these issues?
  - i. What are the different factors constraining the private sector from more involvement and investment?

- j. Are you able to provide the names of companies working on alternative solutions or interested in investing in these?
- k. Are you aware of any ongoing and/or upcoming initiatives regarding these alternative solutions? Who is implementing them (donors, NGO, private sector, etc.)?