



# Combating Illegal Exploitation of Natural Resources in Madagascar:

## Assessment of “Preserving Madagascar’s Natural Resources” (Oct 2013 - Sep 2016)

**Associate Award No. AID-687-LA-13-00001 to World Wildlife Fund, under Leader Award No. EEM-A-00-09-00006-00, part of the program Sustainable Conservation Approaches in Priority Ecosystems (SCAPES).**



December 2017

## **Acknowledgements**

This assessment would not have been possible without the generous, thoughtful and dedicated staff of USAID/Madagascar, project implementers, collaborators in local, regional and national civil society organizations, journalists, park and district officials, and community organizations. We are especially grateful to the people of Anjahamena for their time, knowledge, perspectives, patience and commitment to both tackling intractable conservation challenges and to helping us document and learn from their collective experience.

## **Cover Photos**

BEVOALAVO, MADAGASCAR: Pierre Sampilahy, Chief Patroller for the Mitsinjo community forestry group, records data on illegal logging that he will report to local authorities for investigation. In a nearby town, a concrete monument in the shape of Madagascar, painted in the national colors, sits outside an administrative office. Photos by Natalie Bailey, USAID.

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## **Keywords:**

CWT, ILAT, wildlife, timber, illegal logging, wildlife trafficking, SCAPES, Madagascar

**December 2017**

## ACRONYMS AND ABBREVIATIONS

ACCE	<i>Komanga Arongampanihy</i> Culture Communication Environment
AJE	Association of Environmental Journalists
AICPM	Inter-Communal Association for the Mahafaly Plateau
ASM	Artisanal small-scale mining
AVG	<i>Alliance Voahary Gasy</i>
BIANCO	Government of Madagascar's <i>Bureau Indépendant Anti-Corruption</i>
CAZ	Ankeniheny-Zahamena corridor
CBO	Community-Based Organization
CI	Conservation International
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLP	<i>Comités Locales du Parc</i> , Community Monitoring Teams
CNPE	<i>Coalition Nationale de Plaidoyer Environnemental</i>
COBA	<i>Communautés Locales de Bases</i>
COCAZ	Ankeniheny-Zahamena corridor landscape CSO advocacy coalition
COMATSA	Marojejy-Tsaratanana-Anjanaharibe corridor
CSO	Civil Society Organization
DBEV	Department of Biology and Plant Ecology, University of Antananarivo
DGF	Directorate General of Forests
DREEF	Regional Office of the Environment Ministry, MEEF
DSAP	Direction of the System of Protected Areas
DWCT	Durrell Wildlife Conservation Trust
EOP	End of Program
FAMARI	<i>Fatidran'ny Ala Maiky sy ny Riake</i>
GERP	<i>Groupe d'Etude et de Recherche sur les Primates</i>
GIS	Geographic Information System
GIZ	<i>Gesellschaft für Internationale Zusammenarbeit</i>
IR	Intermediate Result
IUCN	International Union for the Conservation of Nature
IWT	Illegal Wildlife Trade
JIRAMA	<i>Jiro Rano Malagasy</i>
LEM	Law Enforcement and Threats Monitoring
MAMABAY	Masoala-Makira-Antongil Bay seascape
MBG	Missouri Botanical Garden
MEEF	<i>Ministère de l'Environnement, de l'Ecologie et des Forêts</i>
MNP	Madagascar National Parks
MV	<i>Madagasikara Voakajy</i>
MWIOPO	WWF Madagascar and West Indian Ocean Program Office
NDF	Non-detriment Finding (with respect to CITES-listed species)
NP	National Park
NTFP	Non-Timber Forest Products
PA	Protected Area

PLACAZ	<i>Plate-forme Corridor Ankeniheny Zahamena</i>
READ-DSS	Network of Environmental Actors for Development for the Diana, SAVA and Sofia Regions
RDB	<i>Radio Don Bosco</i>
RFDIM	<i>Reseau des Faits-Diversiers et Investigateurs de Madagascar</i>
ROHY	<i>Rindran'ny Olompirenena Hiarovana ny Iaraha-manana</i> (Citizens organization for defending common properties)
SAGE	<i>Service d'Appui à la Gestion de l'Environnement</i>
SAMIFIN	Madagascar Financial Investigation Unit
SAPM	Madagascar Protected Area System
SAVA	Northern region of Madagascar encompassing the four principal towns of Sambava, Antalaha, Vohémar, and Andapa
SCAPES	Sustainable Conservation Approaches in Priority Ecosystems, a global program used here to describe a particular award in Madagascar managed by WWF and its consortium partners
SMART	Spatial Monitoring and Reporting Tool
SMART+	Spatial Monitoring and Reporting Tool as a national standard
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TRAFFIC	The wildlife trade monitoring network, a strategic partnership of IUCN and WWF
USAID	United States Agency for International Development
VOI	<i>Vondron'Olona Ifotony</i> (Community-Based Forestry Organization)
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

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## EXECUTIVE SUMMARY

The “Preserving Madagascar’s Natural Resources Program” (henceforth “the program” or, as it was known among partner and mission staff for its global program affiliation, “SCAPES”), implemented by a consortium led by World Wildlife Fund (WWF) and comprised of WWF, Wildlife Conservation Society (WCS), Conservation International (CI), and TRAFFIC, was a three-year program (October 2013 – September 2016). It sought to counter illegal and illicit natural resource extraction activities in the Atsinanana North ecoregion of Madagascar, with work focused in three landscapes: Marojejy-Tsaratanana-Anjanaharibe Corridor (COMATSA) led by WWF), Makira-Masaola-Antongil Bay (MaMaBay) led by WCS, and Ankeniheny-Zahamena Corridor (CAZ) led by CI. The overall objective of this US\$2.25 million activity was to enhance the capabilities of the Malagasy people and civil society organizations to combat the illegal exploitation of Madagascar’s natural resources.

Each of the four partners led a line of effort contributing to a different intermediate result (IR), while working together to generate products and relationships useful across the program. Landscape leads facilitated and implemented actions associated with all IRs. The four IRs were:

IR-1: Improve understanding of unsustainable and illegal behavior associated with biodiversity loss and ecosystem degradation **Lead: TRAFFIC.** IR-1 activities included field work in timber and reptile sourcing regions and primary exit points, to strengthen Madagascar’s national knowledge-base on timber and reptile harvest and trade.

IR-2: Strengthen capacity of community-based organizations to monitor illegal activities involving Madagascar’s endangered natural resources and compliance with laws. **Lead: WCS** IR-2 focused on expanding the operationalization and implementation of the Law Enforcement and Threats Monitoring / Spatial Monitoring and Reporting Tool (SMART) system for participatory community patrols and National Park staff.

IR-3: Increase proactive and results-oriented engagement of civil society organizations in combating illegal practices targeting Madagascar’s endangered natural resources **Lead: WWF** IR-3 focused on strengthening the capacity of Civil Society Organizations (CSOs) representing the three landscapes, and linking these to broader regional and national environmental advocacy platforms.

IR-4: Improve media coverage and exposure of abusive practices targeting Madagascar’s endangered natural resources **Lead: CI.** IR-4 focused on empowering journalists to organize forums, conduct investigative projects and increase domestic media coverage of illegal activities in national newspapers, radio and TV programs.

### Overall conclusions and recommendations:

- Support for bringing SMART to Madagascar has opened the door to improved wildlife law enforcement and ecological monitoring in the country. NGOs that were not part of the program are adopting the system more and more, and most importantly, the government is adopting SMART+ throughout the country. As the system enables data

collection and transparency of aggregated information, it will serve as an important component of improved environmental governance for multiple actors.

- Journalists that participated in program training have courageously engaged in investigations of illicit activities. Some have suffered reprisals for their actions, including assault, theft, and imprisonment. One outcome of the training, however, was an informal journalist network that developed a strategy to spread the risk of publishing reports that could make them a target. When a story was ready, the journalists worked together to publish it simultaneously so that no one individual could be targeted for repercussions. This practice is now spreading to other media coverage of other sectors.
- Important enabling conditions helped the program succeed, but more is needed for the future. NGO partners' long term investment in the three landscapes had already developed the relationships and some institutional structures essential to project success, however food security and alternative livelihoods are needed to address the underlying drivers of biodiversity loss and maintain constituencies for conservation.
- Bushmeat hunting and trade is a threat that needs greater attention in Madagascar, particularly for lemurs and tortoises. WCS reports of lemur hunting in the MAMABAY landscape as well as recent reports from the IUCN Tortoise & Freshwater Turtle Species Survival Group are alarming in terms of the scale of offtake. Bushmeat is often hunted not just for food but for income, and additional investments in food security and alternative livelihoods in these areas will be needed.
- Community patrols are operating well, but authorities are not responding quickly, or at all, to requests for assistance. Community motivation is suffering as a result. Community policing requires respect and trust on both sides in order to succeed.
- The local-to-national approach to civil society engagement seems to have generated the results intended. Continued support in the long- to medium-term is needed to ensure that CSO momentum continues, and that regional CSOs can continue supporting local CSOs while coordinating with national-level CSOs, including *Coalition Nationale de Plaidoyer Environnemental* (CNPE), a national environmental advocacy coalition.
- CNPE has promise but will need continued support and also some pressure to become self-sustaining. They have a well thought-out strategy for the next several years and are taking on some key environmental challenges including rosewood overexploitation, shifting agriculture, mining, mangrove health and turtle trafficking.

The program applied an integrated suite of activities that has strengthened natural resource governance, including Madagascar's response to environmental crime. The local-to-national approach supported communities in managing their natural resources, bolstered effective law enforcement and prosecution, provided support systems for regional and national biodiversity conservation, and increased the information available for effective management and decision-making. Collectively, forests are better protected from illegal logging and the enabling environment for conserving overexploited reptiles and other wildlife is improved

Continued application and development of the tools, practices and policies fostered by the program will help Madagascar achieve its international conservation commitments while securing the natural resource base on which national development objectives depend.

## INTRODUCTION

The “Preserving Madagascar’s Natural Resources Program”<sup>1</sup> was a three-year effort to enhance the capabilities of communities, civil society organizations and conservation authorities to combat the illegal exploitation of Madagascar’s natural resources. Implemented by a consortium led by World Wildlife Fund (WWF) and comprised of WWF, Wildlife Conservation Society (WCS), Conservation International (CI), and TRAFFIC, the program sought to counter illegal and illicit natural resource extraction activities in the Atsinanana North ecoregion<sup>2</sup> of Madagascar, with work focused in three landscapes: Marojejy-Tsaratanana-Anjanaharibe Corridor (COMATSA) led by WWF), Makira-Masaola-Antongil Bay (MaMaBay) led by WCS, and Ankeniheny-Zahamena Corridor (CAZ) led by CI.

This report summarizes an assessment of major achievements from, challenges encountered during, and opportunities for building on results of the agreement between USAID/Madagascar and WWF, one of several Associate Awards<sup>3</sup> to WWF under the Sustainable Conservation Approaches in Priority Ecosystems (SCAPES) global program managed in Washington. The report is primarily intended to inform implementation of the mission’s new biodiversity conservation investments, Hay Tao (“know how” in Malagasy), which supports enabling conditions for community based conservation, and Mikajy (“take care of” in Malagasy), which supports improved management, governance, livelihoods in high biodiversity value areas in and around protected areas. The assessment will also recommend any actions that should be continued outside the scope of these activities, and more broadly identify lessons that could inform cross-mission governance efforts.

Mission and partner staff referred to Preserving Madagascar’s Natural Resources simply as “SCAPES,” for its global program affiliation. Here, “SCAPES” and “the program” are used interchangeably to describe the subject of this assessment.

### **Key areas of focus / lines of inquiry for the assessment include the following:**

- A. How to best engage with civil society organizations (CSOs) given the challenges they face in this sector, particularly concerning illegal or questionable activities involving high-level public figures
- B. How to build the effectiveness of national level CSOs such as Alliance Voahary Gasy, ROHY, MIHARI, and Tafo Mihaavo to represent local CSOs or Community-based Organizations (CBOs) on the national stage?

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<sup>1</sup> The term “program” here is used colloquially and refers to the full suite of actions planned and implemented by the implementing partners involved. In official USAID parlance, the subject of this assessment is more accurately referred to as an “activity” or “implementing mechanism.”

<sup>2</sup> See UNESCO Rainforests of the Atsinanana World Heritage complex: <http://whc.unesco.org/en/list/1257>

<sup>3</sup> An Associate Award is a grant or cooperative agreement developed in collaboration with the implementer of a Leader Award. In this case, WWF was one of four partners in the global SCAPES program, whose four core Leader Awards advanced transboundary landscape scale conservation in 19 countries. Associate awards extended this approach to even more countries, including Madagascar. For more information, see <https://rmportal.net/library/content/scapes/scapes-sustainable-conservation-approaches-in-priority-ecosystems-2010-2014>.

- C. How to best utilize and scale up adoption of the Law Enforcement Management/Spatial Monitoring and Reporting Tool (SMART) nationwide, particularly for management purposes other than combating wildlife trafficking, including monitoring of ecological conditions and greenhouse gas sequestration?
- D. What were the key results and challenges of improving the knowledge base for and monitoring of trade in select overexploited and/or trafficked species? What work remains to be done?

To answer these questions, the team reviewed partner reports and related documents assembled by the mission, as well as information on the planned Hay Tao and Mikajy investments. With substantial mission and partner assistance, the team also identified key stakeholders requiring consultation in Antananarivo and representative stakeholders in one of three focus landscapes, and organized a schedule of meetings and field observations to better understand the process, successes and constraints of IRs 2-4. The team prepared an interview guide with a range of general and specific questions related to each IR, then organized these into sub-guides for each stakeholder meeting. Assessing IR 1 followed the same process, except key staff were interviewed by telephone due to their unavailability during fieldwork. Additional follow up questions for consortium partners were sent by email as necessary.

An assessment schedule, interview guide, and list of primary partner contacts are included as annexes.

## SUMMARY OF INTERVENTIONS AND MAJOR ACHIEVEMENTS

Annual and final reports from the project detail the interventions and results from each year and overall. Highlights are summarized below, by Intermediate Result (IR), followed by a list of approaches and achievements relying on collaboration across IRs.

IR-1: Improve understanding of unsustainable and illegal behavior associated with biodiversity loss and ecosystem degradation. Lead: **TRAFFIC**. IR-1 activities have included field work in timber sourcing and manufacturing regions and at primary exit points for timber to strengthen Madagascar's national knowledge-base on timber harvest and trade. Results include:

- Improved information about demand in China for tropical hardwoods from Madagascar, including main trade routes, price trends and volumes imported and traded.
- Greater awareness of timber and wildlife concerns among transit and destination countries for Malagasy products, facilitating border control strengthening where required.
- Biodiversity Management Plan (BMP) developed for rosewood and ebony species, formally adopted by the Government of Madagascar as the country's roadmap for meeting its CITES obligations, and published as an information document (E-CoP17-Inf-25) at CITES CoP17 in Johannesburg in September 2016.
- CITES Action Plan for *Dalbergia* and *Diospyros* spp. (Decision 16.1524 as updated in CoP17 Doc. 55.2 Annex 15) incorporated actions outlined in the rosewood and ebony BMP. In October 2016, CITES Parties adopted this Action Plan to support adequate implementation of Appendix-II listings for Madagascar rosewoods and ebonies, with an annotation specifying that this listing covers logs, sawn wood and veneer sheets.
- The Government of Madagascar was motivated to integrate good practices into its governance of the forest and timber sectors by a Timber Legality Framework, the BMP for precious timbers, and data collected by TRAFFIC in China. Madagascar's MEEF endorsed TRAFFIC's development of these resources (in close consultation with national stakeholders) and has committed to implementing the timber BMP.
- The process of issuing permits for rosewood harvest is better regulated because of TRAFFIC-collected information applied by MEEF. Since the program began, permits have been suspended in three of the five regions where timber harvest and trade data was collected by TRAFFIC. A legislative loophole allowing continued harvest and trade in "palisander," based on the mistaken belief that rosewood varieties known as palisander are not actually rosewood (*Dalbergia* spp.), was expected to be closed by a new ban on palisander exports (pending as of March 2017).
- A strategy document for developing a reptile BMP was completed, responding to CITES requirements for reduced illegal trafficking of Malagasy reptiles that are most impacted by collection and trade. This roadmap outlines time-bound activities that will be required for development of the reptile BMP, including the identification of species of concern and key stakeholders who should be involved in the process.
- The knowledge and capacity of 120 stakeholders regarding timber identification, reptile identification, and CITES Non Detriment Findings (NDFs) was enhanced by training administered by TRAFFIC. This includes 45 staff from government Ministries, including

the Ministry of Finance, Ministry of Trade, Ministry of Public Safety, and Ministry of Justice, who are better able to enforce the law, strengthen illegal trade controls and make progress meeting CITES commitments.

- Program training and tools were applied successfully by at least two enforcement officers. One timber identification course participant used the species identification guide to detect and intercept rosewood sculptures in trade. Another was able to intercept a shipment of rosewood planks claimed to be pine and eucalyptus.

**IR-2:** Strengthen capacity of community-based organizations to monitor illegal activities involving Madagascar's endangered natural resources and compliance with laws. Lead: **WCS**. IR-2 focused on expanding the operationalization and implementation of law enforcement and threats monitoring by community forest management groups and Madagascar National Parks (MNP) staff. Training, equipment and deployment routines were structured around use of the Spatial Monitoring and Reporting Tool (SMART), a software and system for data-driven allocation of patrol effort. Results include:

- The SMART system for improved oversight and response to poaching and wildlife trafficking in the three priority landscapes was refined to support both terrestrial and marine patrol areas and a data model accommodating Malagasy species.
- Recorded incidents of illegal precious timber extraction in patrolled zones of Masoala National Park and Makira Natural Park in the MaMaBay landscape decreased significantly since the roll-out of SMART at the landscape level, from 328 documented stumps in 2014 to 15 stumps following full SMART implementation in 2015.
- The quality and timeliness of information shared with CSOs and journalists working to promote effective law enforcement in forest areas were enhanced by SMART reports in each of the priority landscapes.
- The Government of Madagascar will adopt SMART+, the advanced field application of the tool customized for Madagascar combined with national-level data aggregation and analysis, together informing resource allocation across the protected area system.
- A national roadmap for the rollout of SMART+ developed and validated following three years of effort to progressively build support for SMART+ within NGOs, communities, and the Malagasy government.

**IR-3:** Increase proactive and results-oriented engagement of civil society organizations in combating illegal practices targeting Madagascar's endangered natural resources (IR-3). Lead: **WWF**. IR-3 has focused on strengthening the capacity of CSOs in the Atsinanana North ecoregion, primarily three CSO Advocacy Coalitions formed with support from SCAPES for the MaMaBay, Marojejy-Tsaratana-Anjanaharibe Corridor (CAZ), and Marojejy-Tsaratana-Anjanaharibe Corridor (COMATSA) regions that have been linked to broader regional and national environmental advocacy platforms. Results include:

- Formation of *Coalition Nationale de Plaidoyer Environnemental* (CNPE) in 2016, a national advocacy platform comprised of 38 environmental CSOs with the mission of merging efforts and amplifying voices to combat illegal logging and trafficking of natural resources. CNPE members received training and technical assistance in communication strategies, environmental laws, and strategic advocacy approaches.

- At least 109 Malagasy civil society organizations (27 CSOs from the CAZ landscape, 12 from the MAMABAY landscape, 32 from the COMATSA landscape and 38 at the national level) were empowered to combat the illegal exploitation of Madagascar's natural resources through strategic advocacy initiatives. Awareness-raising efforts by the three regional CSO coalitions targeted 6,300 local community members in 26 villages in the three target landscapes.
- Four CSO advocacy campaigns were launched (three at the landscape level and one at the national level) including eight public forums to address pressing policy, legal, and judicial issues relating to natural resources crimes. These activities involved 13 public institutions including the Presidency of the Republic, Malagasy Senate, National Assembly, Ministry of the Environment, Ecology and Forest, Secretary of State for Public Security, Ministry of Justice, Ministry of Energy and Mines, Customs Services, Ministry of Population, Border Police, Finance and Budget Ministry, Regional Authorities, and devolved Technical Departments. Certain activities were performed in conjunction with the Bureau Indépendant Anti-Corruption (BIANCO) and the Madagascar Financial Investigation Unit (SAMIFIN). Tangible results of these advocacy campaigns included:
  - Decision makers and key stakeholders drafting and signing letters of commitment, with follow-up monitoring workshops to assess the implementation of commitments;
  - The CAZ coalition's establishment of a legal document to serve as a reference on enforcement and prosecution procedures for forest violations;
  - Stronger connections among CSOs and the government, particularly services of the Ministry of Environment, Ecology and Forests, for effective follow-up and handling of forest violations; and
  - Commitment from the Government of Madagascar's legal departments (including the Court and Court of Appeals) in the three administrative regions of Antsinanana, Alaotra Mangoro and SAVA to assist the CSO advocacy coalitions to properly handle violations.
- Twenty-seven natural resource-related violations were reported with facilitation from the three landscape-based CSOs, drawing from information provided by CSO members, other citizens and patrols. After investigations were conducted (sometimes with the assistance of journalists), 11 cases were reported to the regional services of MEEF, and two cases were brought to court. As of March 2017, one case had been judged. Of the three individuals accused, two were released due to insufficient evidence while the third was found guilty and received a five-month prison sentence, sending a clear message to would-be criminals that illegal practices will not be tolerated.
- Enabling conditions for natural resource governance improved, including a new Environmental Charter informed by SCAPES-supported regional CSOs and adopted by the Madagascan Parliament. The Charter formally recognizes the important roles played by civil society.
- A Special Court for addressing rosewood and other precious wood trafficking was established by Parliament, to ensure that forest crime is more effectively controlled.

IR-4: Improve media coverage and exposure of abusive practices targeting Madagascar's endangered natural resources (IR-4). Lead: **CI**. IR-4 has focused on empowering journalists to organize forums, conduct investigative projects and increase domestic media coverage of illegal activities in national newspapers, radio and TV programs, with the objective of increasing awareness and catalyzing action. Results include:

- A total of 75 Malagasy journalists were trained in investigative journalism techniques, codes of ethics, professional standards, and effective use of social media.
- Investigations conducted by journalists in the three focal landscapes of CAZ (at Anosibe An'Ala, Alaotra, Andasibe, Maroantsetra, Anjanaharibe Sud, Antalaha, Didy), MAMABAY (Morafeno), and COMATSA (Andapa) involved 67 journalists from seven regions of the country, often in collaboration with CSO coalitions and patrol teams.
- Cumulatively, 132 stories were published in top newspapers; 29 radio programs and 27 television films were developed and broadcast; and at least 3,000 social media engagements were achieved via a program-supported blog and Facebook.
- An informal network of journalists helped members share encouragement and solutions, including a strategy of simultaneously publishing potentially controversial reports in order to decrease the risk of reprisal towards any one journalist.
- Social media outreach exceeded targets. The program's two Facebook accounts engaged 3,766 people; with at least 2,134 visitors to the program blog by December 30, 2016.

Cross-cutting: The final project report submitted by WWF observes that "many of the highest-impact program achievements have only been possible through close collaboration between consortium partners and across involved stakeholders." Some of these include:

- TRAFFIC's extensive research under IR-1 improved the understanding of CSO advocacy coalition members (coordinated by WWF under IR-3) of the motivations of timber and reptile traffickers and the global drivers of the illegal activities observed and reported at the site level by patrols in focal landscapes (trained under IR-2).
- COBA leaders and National Park managers who were trained in SMART by WCS under IR-2 were an essential source of information on illegal activities for TRAFFIC, CSO coalitions and journalists. This regular exchange of information fueled initiatives that have delivered important enforcement action.
- Journalists trained by CI under IR-4 conducted investigations in consultation with CSO coalitions; and that information was shared more widely to audiences at the local, regional and national levels via Malagasy radio, TV, newspapers and online outlets.
- Existing national and regional CSO networks including AVG, READ-DSS, and the *Plate-forme Corridor Ankeniheny Zahamena* (PLACAZ) contributed technical support to three landscape-level CSO coalitions, connecting them to policymakers for more strategic advocacy outcomes.

Specific cross-cutting results include:

- In each of the three priority SCAPES landscapes, regular meetings among CSOs, community-based forestry organizations (*Vondron'Olona Ifotony*, VOI), and the media helped coordinate activities and exchange information. In the last year of the program,

the SMART system served as a vital source of information on illegal logging and smuggling of timber and other valuable species. This information was shared with the CSO landscape coalitions to support their advocacy campaigns, including assistance to journalists. Local CSO members reported 29 violations of the law and used information generated through SMART to urge law enforcement and the courts to consider violations more seriously.

- Local public opinion and media pressures, including investigations by journalists trained under IR-4, contributed to more risks for perpetrators of wildlife crime. In 2015 (before the use of SMART+) only 22 percent of 45 recorded illegal activities in Makira were prosecuted either by local community regulations (*dina*) or the courts. In 2016, with the implementation of SMART+, 33 percent of the 24 recorded illegal activities were sanctioned by *dinas*. Remaining cases were taken to court and the more serious offenses were broadcast on local media channels thanks to CSO involvement and coverage by program-trained journalists. In one notable case, a program-supported investigative project resulted in the Ministry of Environment evicting illegal loggers from a CAZ forest.

# FINDINGS AND OBSERVATIONS FROM INTERVIEWS AND FIELDWORK

## Engaging Civil Society Organizations as Watchdogs on Sensitive Issues

*How to best engage with civil society organizations (CSOs) given the challenges they face in this sector, particularly concerning illegal or questionable activities involving high-level public figures?*

### **Overview**

CSOs in Madagascar do not have a long history of acting as an empowered force for social change. Most have been focused on humanitarian assistance, and the current legal framework that recognizes and governs CSOs is specific to humanitarian issues. A new environmental charter was adopted by the Malagasy Parliament in January 2015, and includes language on the vision and mission of environmental civil society and formally recognizes the important roles that civil society plays on environmental issues. The charter holds great promise, but as of March 2017 it had not been elaborated into policy and the timeframe for doing was uncertain.

CSOs have an important role to play regarding environmental crime. The program provided training in advocacy and communications techniques, investigative skills, and improved knowledge of laws and regulations pertaining to key natural resources. The regional CSOs were connected to local communities, to regional authorities, and to CNPE, the new national CSO coalition. These interconnections allowed each level to reinforce the others, providing support and stronger advocacy at multiple levels. However, CSOs faced challenges in moving forward against trafficking, including poor application of anti-trafficking laws and gaps in the legal framework for CSO voices to have any authority.

### **Findings**

Interviewees identified multiple risks to individuals speaking out against environmental crime, including potential reprisals from powerful actors engaged in trafficking in timber and wildlife. Individuals speaking out have been targeted, sued, arrested, and harassed. However, many of those interviewed affirmed that when people work together in multiple CSOs, they support each other and are more empowered to make a difference. In addition, when many voices come together, it is less likely that any one individual organization will be targeted.

While the political and social climate in Madagascar is far from transparent, one interviewee noted that “SCAPES was the first rung on the ladder” to improving transparency. The program’s work on empowering CSOs helped them to have a bigger voice and to connect isolated people to each other. With the establishment and support of more CSOs, an increased number of people have been willing to speak out, promoting transparency and awareness of environmental issues at multiple levels of society and government. SCAPES further promoted transparency by helping environmental CSOs gain national and international visibility. Interviewees noted that, once information is out, it is harder for powerful actors to deny or to hide. Risks remain,

however. One informant affirmed that “no project can remove risks - that can only come from a well-governed, transparent society.” Platforms such as CNPE, ROHY and others give citizens an advantage because they collect data and share facts with each other and with a broader cross-section of society and government.

### *Local CSOs*

Community monitoring teams served as a critical focal point of the SCAPES program. Community groups received training in the LEM-SMART system, empowering them to monitor and manage their forest resources. This includes awareness of laws regarding timber species, enforcement of *dina* (customary law), and reporting violations to Forest Service authorities. In the CAZ corridor, one informant noted that forest co-management has improved the state of the forest since CAZ was created in 2005.

Community groups acknowledged the importance of their connections to regional CSOs for technical support and outreach to actors and decision-makers that affect environmental crime at the local and regional level.

Members of the local community visited in this assessment recognized the important role that forests and natural resources play in their lives. They feel the impacts of climate change, citing increasing frequency and severity of cyclones, drought, lack of water, heat and unstable seasons.

Community members affirmed their long-term commitment to patrolling and reporting violations of environmental law and policies, but also noted the many challenges they face, including lack of equipment for patrolling and reporting, poor road and transportation options to reach authorities and resources, and no local access to cell phone towers. This means that patrollers have to travel to the nearest *point d'appel* where a cell phone signal is strong enough to share their patrolling reports. This slows down the response time of authorities and frustrates local communities. A final challenge is that the end of SCAPES also ended the modest stipend that community patrollers received for their efforts, an incentive for the community groups to continue to patrol.

Communities participating in SCAPES benefited from increasingly secure community forests and the ecosystem services that they provide, particularly water. However, USAID investments in these areas did not include key food security and health systems support. Without these essential co-investments, the long-term sustainability of biodiversity conservation in the three regions is at risk. Should a cyclone or drought jeopardize homes and crops, local people will have no choice but to take more from the forest for their livelihoods.

### *Regional CSOs*

Regional CSOs played an important role in providing training for local communities, collecting and analyzing information, leveraging the media, lobbying the government and filing official complaints. In addition, they organized public forums focused on policy, legal and judicial issues affecting environmental crime. Several interviewees noted the continued need for outreach and

training for forest management and judicial authorities, among others, to assure that reports of violations are investigated, prosecuted and sentenced appropriately. Regional CSOs are an important resource for communities; for example, when members of one community found illicit activities and tried in vain to contact authorities, they reached out to the regional CSO, which was able to connect with – and elicit a response from – the relevant authorities. The regional CSOs also verify the reports from communities, but would benefit from equipment such as dictaphones for more accurate and efficient information collection.

The regional CSO in the CAZ landscape, COCAZ, seems to be an important (and growing) regional connector among local VOIs, *Comités Locales du Parc* (CLPs) and regional or national-level advocates and decision-makers. COCAZ supported many trainings and “experience exchanges.” They have provided tools such as an advocacy plan, public awareness tools, resources/documents for authorities. In addition, they have hosted roundtables for discussing problems and potential solutions related to illegal natural resource exploitation.

COCAZ has worked on advocacy for environmental laws with the courts and tribunals. In Toamasina, they appealed to courts and prosecutors to “wake up” authorities with regard to how they were legally required to conduct their work. This outreach included all stakeholders, identified potential allies and opponents, and involved media coverage. The effort resulted in filing of five official environmental violations to appropriate authorities. COCAZ then worked to engage authorities in Atsinanana and Alaotra Mangoro and produced a toolkit on customary law. If additional resources are provided, COCAZ aims to expand their influence, continue supporting investigations with journalists, and participate in an international seminar on environmental education.

The regional CSOs played an important role in the transparency initiatives of SCAPES, particularly advocacy campaigns and collaborative investigations with journalists. Advocacy campaigns were held in each landscape and at the national level, involving CSOs, the public, and government actors affecting laws and justice such as the Senate, the National Assembly, and the Ministry of the Environment, Ecology and Forests. In collaboration with court authorities, the CAZ coalition developed a legal document with information on enforcement and prosecution procedures for forest violations, giving all parties a common base for reporting and acting on violations.

Collaboration with journalists was also beneficial, though challenging. Engaging with journalists was seen by many at the regional CSO and international NGO levels as critical to increasing transparency and exposure of abusive practices regarding Madagascar’s endangered natural resources. However, powerful actors trafficking in timber and wildlife pose a threat to those who speak out about criminal activities. Collaborative investigations, and subsequent reporting across multiple media outlets, have helped spread risks and reduce the threat to any one individual. This approach is now being applied to other sensitive issues, not just the environment. Given the severe limitations on free press in Madagascar, additional support, resources, and influence, such as that leveraged by the U.S. Embassy’s Public Affairs Section, would enable the journalists to continue their work in support of biodiversity conservation.

### *National CSOs*

The creation of CNPE, the national environmental CSO, is seen as a benefit by many interviewees. Following some challenges, it has made important connections with both regional CSOs and actors in the government. CNPE has identified five priority themes including tortoise trafficking, mining in protected areas, mangrove conservation, rosewood trafficking, and forest clearing. This new coalition will require additional support and long-term business planning to be a sustainable and strong presence in the country. Key leaders must take initiative to seek funding and support for their priorities or CNPE will not be a long-lasting, meaningful and effective advocate for Madagascar's natural heritage.

### *Essential Co-investments*

With enormous threats from slash-and-burn agriculture, natural disasters, climate change, and trafficking in natural resources, biodiversity conservation in Madagascar cannot succeed without long-term investments in people. SCAPES recognized this, and succeeded in part because of existing relationships with local communities and support for sustainable livelihoods. For example, program partner Conservation International had been active in the CAZ landscape for about a decade before SCAPES began. Local communities generally saw them as a known and trusted actor. In the community visited for this assessment, local people were already engaged in fish farming, though it was not supported through SCAPES. This community recognized the benefits of their forests in providing essential ecosystem services such as water recharge and distribution, but they also have demands for improved roads and access to cellular towers.

Food security, health, and economic growth are enormously important co-investments for the success of biodiversity programs. While local communities in the CAZ corridor grow sufficient and nutritious food, they cannot sell any to markets because of the poor condition of the roads, thus limiting their prospects for economic development. People in areas suffering from drought struggle to produce enough food for subsistence. With food insecurity and few livelihood opportunities, offtake of lemurs for bushmeat seems to be on the rise, threatening the survival of primate species found nowhere else. Conservation organizations are often not equipped to carry out food security, health, and economic growth programs. Collaboration with experienced providers of traditional development assistance may yield much better results, especially with appropriate monitoring of mutual progress and co-benefits of taking an integrated approach..

## **Building the Effectiveness of National CSOs to Represent Local and Regional Interests**

*How to build the effectiveness of national level CSOs such as Alliance Voahary Gasy, ROHY, MIHARI, and Tafo Mihaavo to represent local CSOs or Community-based Organizations (CBOs) on the national stage?*

As part of its effort to support CSOs at multiple levels in addressing environmental crime in Madagascar, SCAPES sought to engage national-level CSOs to play a more active role in addressing the illegal exploitation of natural resources. The national CSO Citizen's Organization for Defending Common Properties (ROHY) was identified as a potential host for such an effort.

However, the ROHY leadership was not supportive of the organization engaging directly on these issues in the existing political and economic climate. Interviewees noted the interest of many local and regional CSOs in collaborating at the national level, and thus WWF supported the creation of CNPE. Many government agencies participated in the workshop in September 2016 that formally established CNPE.

### *CNPE Structure and Priorities*

While ROHY has a broad mandate, CNPE is focused on five environmental themes: rosewood, tavy, mining, mangroves, and turtle trafficking. As of December 2016, CNPE had 38 members from throughout Madagascar. The coalition has three operational bodies: a General Assembly, a Coordination Board, and subcommittees, including a technical commission and a communications commission. There are also regional coordinators for key landscapes. For each of its five themes there is a lead CSO member. The COCAZ coordinator currently serves as CNPE coordinator.

CNPE was established to strengthen and amplify the voices and needs of regional and local CSOs, and they are seeking to develop good relationships with government and other decision-making institutions to do so. CNPE does not wish to only broadcast bad choices and negative information about natural resources. According to one interviewee, the ministry recommended that connections between regional people and regional offices would be more beneficial in achieving action against illegal natural resource exploitation, rather than relaying information between NGO offices and government offices in Antananarivo.

Improving communication is another priority for CNPE. The communications commission does both a “push” and a “pull” for information among the CNPE members and accomplishes this via email. The CNPE coordinator noted, however, that not everyone reads email regularly, nor responds promptly.

A third priority for CNPE is developing alliances with large CSOs. Relationships with both ROHY and AVG are improving, and CNPE hopes that they will become CNPE members in the near future. AVG has 30 organizational members and Tafo Miahaavo has 200 communities as members. While ROHY was not initially supportive of a national platform on the environment, they are now having discussions with CNPE about roles and collaboration moving forward.

The final priority is identifying sustainable funding for the coalition. CNPE developed a vision for working beyond SCAPES, and its members are committed to change, according to WWF. However, they did not have significant funds following the close of SCAPES and were relying on small contributions from member CSOs. At the time of the assessment, no external funding plans were in development nor were proposals out awaiting response. A more proactive fundraising approach is needed.

CNPE leadership identified (1) training in law and prosecution and (2) communication as their top two needs. They also wanted to develop a database on advocacy action, trends in natural resource trafficking, and media coverage of environmental issues.

The momentum for CNPE seems to be positive, but without a development plan and additional funding, this momentum may not be sustained.

## **Development, Application and National Scaling of SMART Law Enforcement Monitoring**

*What are the best practices for applying and scaling up adoption of the Spatial Monitoring and Reporting Tool (SMART) nationwide, particularly for management purposes other than law enforcement monitoring, including monitoring of ecological conditions and carbon sequestration?*

### **Overview**

SMART has emerged as the global gold standard software and system for conservation law enforcement monitoring (LEM). SMART facilitates collection and rapid analysis of patrol data on conservation threats and targets, to strategically direct the timing and location of future patrols where monitoring is needed most. It also collects important ecological data and evidence of infractions that can be used to set conservation priorities or justify a rapid law enforcement response. Because SMART documents when and where patrols take place, patrol members are more accountable for following assigned routes and protocols, and supervisors have additional insight into patrol performance. In turn, SMART has been reported to improve morale among patrol members because their work is more clearly valued and used, and impacts of their work (e.g. reduced crime) are more easily observed.

USAID assistance through SCAPES introduced SMART to Madagascar. After less than three years of implementation, Madagascar National Parks decided to adopt SMART as the national standard for LEM across the protected area system. SCAPES partners demonstrated the value of SMART in pilot sites, and customized the data model and approach to fit local species and biomes. National Parks and community-managed areas alike benefited from this work. With the support of other donors and implementers, SMART is already expanding across the country and replacing other LEM systems that are more difficult to customize and maintain.

### **Findings**

#### *The Situation*

During a meeting with government and community leaders in the CAZ landscape, participants summarized the overarching reason for natural resource overexploitation: poverty. During the recent political crisis, when economic and agricultural development efforts stopped, people turned to the forest where they encountered little in the way of control or law enforcement. This was backed up by statements like “People go into the forest because they lack things. They can always find buyers for their goods in Tamatave.” We also heard the proverb “you could die tomorrow, so you should do it today.”

According to WCS, illegal activity in most of the country’s protected areas is persistent and tenacious but not at particularly high levels. Information is key to curbing this threat, specifically

the law enforcement monitoring assisted by SMART. Using Cybertracker-enabled devices (e.g. Android phones) rather than pen and paper to record threats is essential to more rapidly inform where patrols for focus effort. Working with community rangers is particularly important in the many places where government agents are too few or absent altogether.

Illegal logging and mining are major threats to biodiversity, but lemur poaching is on the rise. In the north, in Maroansetra and Masoala, an estimated 17 tons of bushmeat is harvested every year, including a large amount of lemur meat representing thousands of animals. Despite a popular myth that lemur hunting is *fady* (taboo) and not a problem in Madagascar, the reality is that cultural protections apply to only some places and some species. Makira has always had an issue: up to 95 percent of communities have eaten lemur in lean periods. The problem is not that there is now hunting where once there was none, but rather that subsistence hunting is becoming commercial. There are many more traps set than local use would justify, some with poison that is clearly provided by outsiders. Restaurants are even serving lemur. There is also sport hunting for lemurs outside Masoala National Park, including by Malagasy citizens made wealthy by rosewood trade. Harvard researchers are working to understand the scale and dynamics of hunting in and around Maroansetra.

#### *Deploying SMART in Madagascar*

At the start of the project, SCAPES focused on introducing SMART in community-managed forests. WCS trained trainers for MaMaBay, COMATSA and CAZ landscapes, who in turn trained others, on how to collect data during patrol using pen and paper. Two SMART Focal Points--high level technicians for each landscape--were designated as resources for community patrols, and handled data entry into SMART software as well as subsequent analysis. There are also national SMART backstops for each landscape.

Following a presidential election deemed sufficiently free and fair that previous U.S. prohibitions on working with government were lifted, SMART was introduced to Madagascar National Parks (MNP), with each park having two focal points. MNP staff use Cybertracker-enabled devices to document threats, which allows instant download to SMART and rapid analysis to inform subsequent patrols. In contrast, communities (at least in CAZ) were still using pen and paper at the end of the project, meaning each SMART focal point entered data manually, reducing opportunity for timely, information-driven patrols.

Patrols in community managed areas involve NGO partner field agents managing teams from the local VOIs engaged in community forestry. In CAZ, they patrol an area once a month, at the end of each month, for about four hours each day over four days. Teams of five conduct patrols because illegal loggers often operate in groups of five people, to cut trees and carry back logs or rough-hewn boards. According one member of the VOI patrol we observed in CAZ, four or fewer patrollers cannot do much against five loggers with hatchets except "throw rocks."

Community patrollers are chosen by the community to serve based on their strength, youth, and deep knowledge of the forest. During early project implementation, each patrol member received a modest stipend for every day on patrol. In forests around Anjahamana, women used

to be part of patrol teams, but this gender diversity ended when payments for patrols stopped in early 2016 if not before, when funding for SMART in CAZ was discontinued. Community members continue to conduct patrols, and are proud of their participation, reporting “the forest is our life.”

CI reported that paper and pen data collection is sufficient for the moment because “we don’t want to disturb too much, just want to improve.” CI wants the community to take ownership over patrols first, and introduce Cybertracker slowly. Regardless of the data recording process, GPS units are used by both community and MNP patrols to document locations and, for communities, to photograph the team at start and end of each patrol, as well as photograph key findings (both ecological and criminal). CI continued to provide some technical assistance and supplies for community patrols after USAID funding ended, including GPS units, clipboards and paper monitoring sheets.

A new co-management agreement (known in Madagascar as a “transfer agreement”) between the VOI and the local *Direction régionale de l’environnement, de l’écologie et de la foresterie* (DREEF, the regional office of the Ministry of Environment, MEEF) allows community patrols to confiscate and hold illegal material, if found in the forest, at least for a few days. To do this, community patrols need to catch people in the act of breaking the law, or have very good evidence. Confiscation is one example of a sanction allowed by *dina* (customary law) and recognized in the transfer agreement. Another customary penalty for illegally cutting wood could be to plant trees to compensate for those that were cut.

The patrol joined by the assessment team identified at least two cut trees known to be allowed for local use, and one large illegally cut tree. VOI teams can differentiate legal from illegal use based on the species, diameter and location of cut trees, complemented by knowledge of what local cutting has been permitted.

In CAZ, community patrols file their reports with the local Federation of VOIs and DREEF, with a copy to CI. One *rapporteur* delivers the paper data sheets, often involving hand delivery by bush taxi. It takes about two months to provide data to DREEF after a community patrol is completed. Authorities - DREEF or gendarmes - are alerted immediately by telephone if there is opportunity to investigate, make an arrest, or take other law enforcement action on a crime detected during community patrols. There are two contacts in each of four districts that are responsible for verifying the information reported, with dictaphones and cameras to collect evidence.

According to CI, authorities often lack fuel and sometimes vehicles to respond in a timely manner, if at all. If reports of crime do not generate a response by DREEF after a month, the community gets discouraged. CI has had to subsidize DREEF’s response by paying for fuel or other costs, to ensure authorities fulfill their responsibilities and community patrol members stay motivated. Local authorities in Anjahamana validated this perspective, reporting that without law enforcement authorities available to arrest, it is difficult to hold people accountable for crimes. They said it would be better to have gendarmerie closer to Anjahamana, that they are based too far away to be useful. An alternate or complementary strategy offered by residents of

Anjahamena was to build a mobile phone tower, so chiefs could call gendarmes and each other, and thereby control illegal exploitation better.

The Anjahamana commune is one of three communes in Federation Taratra. The federation helps with organizing VOIs and addressing problems that arise within and between them. Federations also help with fundraising for VOI activities, while VOIs are responsible for implementing activities. The CAZ landscape has nine federations, which each take responsibility for VOI agreements and valorize their rights. CI reports it is easier to work with federations than VOIs, in part because federations maintain relationships with the COCAZ CSO and DREEF.

Patrols in government protected areas such as Mangerivola Special Reserve in CAZ involve MNP leading patrols of *Comités Locales du Parc* (CLPs), which are patrol teams drawn from communities peripheral to the park. Mangerivola Reserve has strict rules about resource access that frustrate VOIs around it, but collaboration between MNP and CLPs helps ameliorate this. CLPs have a quarterly workplan w/ MNP, which used to require three patrol outings per year but has been doubled to six patrols per year. Mangerivola Reserve has only six rangers and neighboring Analamazaotra- Mantadia National Park has only 18 rangers, so CLPs and SMART are essential force multipliers.

Gendarmes lead investigations into reports of illicit activities in national protected areas, sometimes receiving assistance from CLPs and, under this project, investigative journalists. The Director General of the gendarmerie decides whether to pursue an investigation or not based on initial evidence. Only gendarmes are empowered to destroy illegal camps in protected areas, enter properties suspected of containing illegal timber or other goods (with a warrant), and arrest criminals.

#### *Value demonstrated*

Data collected in Makira National Park showed that as SMART was introduced, observed incidence of rosewood takings decreased. In the forest near Anjahamana, there appears to be decreased conversion of forest into farm as well as decreased poaching and more indri (the largest species of lemur, whose loud vocalization makes it easy to detect) since patrols were instituted, but illegal logging for timber is still a problem. The increased vigilance of SMART-led community patrols appears to be deterring most illegal activity in both cases, reinforced by reduced international demand for Malagasy rosewood and fewer remaining accessible trees in Makira.

Local community members are intimidated by what they believe SMART patrolling and GPS satellites are able to detect about their activities, so patrols are working even better than they might. Prosecutors of tribunals are aware of the evidence collection built into SMART law enforcement monitoring, but it was unclear if location data, notes and photos from patrols have been used successfully to prosecute or convict accused criminals.

SMART has become an important management tool for improving performance and accountability. WCS work with MNP to enter old patrol data into SMART revealed that some

rangers were patrolling short paths and not doing a good job. Payments to CLPs used to be based on number of days patrolled, but now compensation is tied to patrolling the assigned route. Management benefits combined with robust visualization of threats and patrol results make SMART attractive to decision-makers at the local and national levels.

Community members noted benefits from their participation in SCAPES-supported patrols (both VOIs and CLPs) and CSOs. For example, women are able and encouraged to participate in community patrol groups when before they did not (acknowledging their participation has declined again). Further, people used to observe illegal activities but take no action; now they are more confident in enforcing customary laws and can contact relevant authorities.

#### *Improving SMART system over time*

SMART Phase I was paper based, but by the end of USAID support WCS begin switching to Cybertracker for data entry in parts of Makira. And, whether data are collected on paper or device, a chief of the sector with a computer and solar panel imports or enters SMART data for each patrol and sends it to managers in the local office for each park in MaMaBay. These steps are reducing previous delays in decision-making and missed opportunities for data-driven patrols because paper data sheets were not entered into the SMART database quickly. That said, discussions with some partners indicate that paper documentation and monthly patrols may be sufficient in low-threat community forests, where rapid response is less necessary. Low tech, predictable patrols may be enough to deter unauthorized local timber extraction, ensure big operators have not moved in, and confirm farmers are not clearing land beyond allowed limits.

Partners are applying important lessons about the most effective frequency and duration of patrols. Makira used to have 15-day patrols every six weeks, but after observing a rapid decline in energy and effort after day two, they have moved to having 6- to 8-day patrols on a more frequent but also more random schedule. As of March 2017, the paths taken by patrols were still too predictable even though patrol presence was more randomized. WCS is also working to address this, and better protect information about where and when patrols will take place.

SMART is designed for customization to meet local requirements. SCAPES partners worked together to improve the Madagascar data model to accommodate all possible observations of target species of plants and animals, including a list of species endemic to the country. The data model also helps rapidly note observed threats, such as *tavy* (shifting cultivation) in protected forests and other violations. The data model can also accept details about violators, such as home village, names, evidence of wrongdoing, etc. WCS is now working to include details of marine violations and details as they have done with forests. The latter has been tested in MaMaBay and WCS is sharing with other marine sites using SMART, in Madagascar and elsewhere.

Ecological data is collected using SMART in some national parks but not in community-managed areas, including the community forest in the CAZ landscape where a patrol was observed. VOI patrols could monitor local trends and better document anecdotal observations

about increasing or decreasing wildlife, for example. Even presence/absence data from community forests could be useful. WCS suggest that ecological data would be nice to have in community areas but is not as critical, and may already be adequately collected using systems other than SMART.

SMART can collect data relevant to monitoring, reporting and verifying (MRV) carbon stocks in forests, but has not been used for this in Madagascar. WCS said they need to conduct a verification survey in 2017 of carbon credits received in 2016 and plan to use a SMART plug-in to ground truth forest intactness observed from satellites and record measurements of tree size (diameter at breast height, DBH) which is used to estimate carbon stocks. Data will be compatible with that collected during the previous MRV, but will have to be exported because SMART software cannot conduct the needed analysis.

MRV surveys conducted in 2008/9 (for the period 2005-2009) and 2013 (for 2010-2013) determined the quality and therefore influence the price of carbon credits purchased on the voluntary carbon market. Different years or “vintages” of credit have different value, and buyers are keen to purchase 2014 and 2015 credits. Those cannot be sold until a new survey is conducted in 2017 (verifying the period 2014-2016).

Ongoing SMART monitoring already helps meet Climate, Community and Biodiversity Alliance (CCBA) standards for carbon credits because infraction data is one measure of effectiveness for biodiversity. Previously this was done by aerial survey. CCBA standards add value to credits, which is essential since the revenue sharing agreement does not cover the costs of administering and monitoring carbon credit sales from Makira. At present, 50 percent of revenue goes to communities, 20 percent to the park, 20 percent to the central government, and 10 percent for MRV, administration and marketing.

#### *Rolling out and Scaling up*

As SMART implementation expanded from VOIs to MNP, and users expanded from members of field patrols to include focal points, park directors and finally headquarters staff, the value to forest and protected area managers was easily grasped. Decision makers in each landscape that did not have a thorough background on the software still appreciated the result, which is a map indicating where patrols have gone, what they observed, and where they need to focus next. MNP has adopted SMART as the LEM platform for the entire protected area system, including a roadmap for building the capacity and connectivity required.

Whether or not SMART should be rolled out nationally to include non-LEM functions is not certain. Plug-ins and data models for carbon and/or ecological monitoring are available or under development, but other methods are also available or already in use. For example, WWF has their own ecological monitoring protocols that meet the needs of the COMATSA landscape.

WCS had a contract to train all of MNP in SMART, and that relationship is continuing. WWF and CI are still using SMART in COMATSA and CAZ, respectively, and are convinced of its utility.

Smaller international NGOs operating in Madagascar, like Durrell Trust and Peregrine Fund, are also interested and have had some training.

SCAPES gave WCS the ability to leverage other money, such as UNESCO funding that rolled out SMART throughout western coast. Madagascar national parks receiving assistance through the World Bank's EP3 project have all taken up SMART, even where competing LEM systems were in use. The German development bank KfW has a marine food security program that is using SMART as well.

National level SMART is an important part of scale up, involving work in the capital and at sites to install SMARTConnect, the system for receiving data collected using SMART and conducting analyses focused on cross-site comparison and resource allocation. SMARTConnect will require additional funds to test, and WCS is pursuing these for the northwest region, another area of focus for them. Since the SMART roadmap is modular, based on building out systems by region which then roll up to the national level, regional investment can contribute to national SMART by making the upfront investments in equipment and training.

With a range of protected areas, international NGOs and community federations holding data useful to a national system, a data sharing policy is necessary and currently under development. This will inform how and what gets shared among sites, between sites and the capital, and what are the triggers for action. NGO Blue Ventures and DREEF are part of a pilot to establish and test data sharing at sites in the southeast. Security of data is a priority concern, especially when patrols indicate the exact location and size of standing or cut rosewood. Interviews with project partners suggest that some information shared nationally should be masked to obscure info that is only relevant to local site managers, providing summaries only, or focusing on the number and type of violations or resources but not their locations. At the national level, the government needs enough information for oversight and making budget decisions, but not the level of detail required to direct patrol effort.

### **Understanding and Monitoring Timber and Reptile Trafficking: Progress and Next Steps**

*What were the key results and challenges of improving the knowledge base for and monitoring of trade in select overexploited and/or trafficked species? What work remains to be done?*

#### **Overview**

TRAFFIC committed to long-term in-country staff in Madagascar for the first time under SCAPES. This helped fill major gaps in knowledge needed for evidence-based decision making by the government. TRAFFIC performed fieldwork in timber source and manufacturing regions, live reptile source regions, and at primary exit points to strengthen Madagascar's national knowledge base on timber and reptile harvest and trade. Findings were incorporated into a Madagascar timber trade report and timber legality framework, Non-Detriment Findings (NDF) report, and a Biodiversity Management Plan (BMP) for rosewood and ebony (*Dalbergia* and *Diospyros* spp.).

Information from TRAFFIC reports and associated materials enabled targeted delivery of trainings that enhanced enforcement capacity in Madagascar. TRAFFIC-generated information and resources contributed to IR-4 efforts to improve media coverage of abusive practices targeting the island's endangered natural resources, and also helped Civil Society Organization (CSO) advocacy coalitions raise awareness in target landscapes in the Atsinanana-Nord region. In sum, TRAFFIC data and analyses have enhanced implementation of the the other three IRs.

## **Findings**

### *The Situation*

Many of Madagascar's unique plants and animals are harvested at high levels to meet demand from a variety of consumers buying pets, jewelry, furniture, meat and traditional medicines. These species need improved management, regulation and enforcement but the government lacks the information about the species under threat and the dynamics of exploitation and trade to determine and implement the most effective response. Improved information and priority setting is anticipated to increase political will and raise international attention and donor funding for conservation action.

### *Improving the knowledge base*

To better understand the actors and routes involved in timber trade, TRAFFIC investigators interviewed people in 20 locations in three villages in the northeast of Madagascar. They found that rosewood was already becoming scarce and inaccessible, with illegal harvest decreasing since mid-2015. In 2016, it took about two days to reach large trees, compared to half a day in 2010. Further, law enforcement monitoring in parks was effective at keeping out most loggers, deterred by the increased risk but no increase in pay to harvest trees.

Increased mining in the northeast seems to be unrelated to decreased logging, except that some local people actually digging for precious stones and metals or providing services to mine workers were previously employed by logging operators. The mining operators themselves are mostly Chinese or Malagasy from Antananarivo, while the big logging operators were from the northeast region of the country. Many of the latter have gone on to build houses, hotels and service-oriented businesses in the most attractive locations rather than continue exploiting forests for timber or take up mining. These ex-logging operators would benefit from additional tourism promotion and revenues and may even be future partners in conservation.

Timber exports during the project period, when exploitation was still high, involved a range of actors and generally avoided large ports. More than 80 percent of the volume was transported on small boats in shallow waters to large ships waiting 2 to 100 km away. Many of these bigger vessels were en route to or from Mauritius, which plays a role as a major sea port in the region. Even small fishing boats were engaged in the trade, carrying small logs out to big ships a little at a time. This practice, involving dozens of informal ports along the northeast coast, is similar to timber trafficking occurring off Tanzania.

Efforts to disrupt rosewood trafficking have been largely unsuccessful. Satellite tracking of illegal transport boats generates no response from the gendarmerie, likely due to the involvement of powerful elites who bribe and threaten the police. Madagascar's ability to police the longest coastline in Africa and surrounding international waters is limited even without corruption factored in. Security improvements to the country's largest port in Tamatave would have limited impact due to the nature of the trade.

Complementary analysis of timber trade with China found that the three most important rosewood exporters to China no longer import much from Madagascar, and they are paying lower prices what little they do import. Angola, Namibia and Mozambique are the new source areas of concern, according to trade data from China and other Asian countries.

While rosewood trafficking has generated the most international attention, many of Madagascar's unique reptiles are quietly being extirpated to satisfy the demand of local and international consumers. TRAFFIC investigated tortoise and lizard trafficking to inform policy and management actions.

All five species of tortoise in trade are CITES Appendix I, meaning trade is prohibited. Local people and officers involved in export controls know that they are protected and how to identify them. Nevertheless, hundreds of thousands of tortoises are taken from the wild annually, with larger specimens consumed as wild meat locally or taken via boat to Mauritius, and smaller individuals shipped by direct flight (as cargo or in luggage) to Nairobi, Bangkok or Guangzhou, where they are sold as pets. Most confiscations of tortoises take place in these consumer countries, not Madagascar. Increased security and inspections at Antananarivo airport, using sniffer dogs and/or biological scanners, would be the most important law enforcement intervention.

In contrast, Madagascar's endemic chameleons and geckos have a more varied protected status, there is confusion among collectors and sellers about these regulations, and officials are not able to distinguish species from each other as easily. These lizards are primarily sold as pets to foreign collectors, although the giant day gecko (*Phalsuma* spp.) was purported to have healing properties and was used in traditional Chinese medicine for a short time in recent years. Increased airport security inspections are needed here as well, but species identification is also essential.

#### *Strengthening monitoring and management*

One of the most important achievements under IR-1 was enhanced timber identification. The first ever training conducted in Madagascar for timber identification reached regional and national levels, including key enforcement officers. Officers have used a timber identification tool produced by TRAFFIC and as a result have confiscated some logs of rosewood.

Before training and the identification tool, officers did not know the range of colors and patterns of wood grain of different species, and only confiscated clearly red-hued wood. Further, control measures were not implemented every day. Uncertainty about other hues prevented

enforcement action and illegal timber was not confiscated nor traffickers apprehended. After training, officers were motivated to check trucks more thoroughly, check individual logs using a knife and lens, and call gendarmes to help confiscate logs among other enforcement tasks.

Another key result of TRAFFIC's work with the government was establishment of a legality framework for timber, clarifying regulations and responsibilities from harvest to export. Everyone now can find their responsibilities and duties. The Ministry of Environment promised they would seek funding to provide training on the legality framework for government officials and timber operators.

Associated with the framework is a biodiversity management plan (BMP) to help Madagascar monitor and manage timber stocks and meet its obligations to CITES, including collecting and reporting information on timber harvest and trade. The BMP was determined to be necessary to resolve a ban on rosewood exports from Madagascar by setting reasonable quotas and conditions for timber harvest and trade and providing evidence for making non-detriment findings. Post-program changes to agreed international trade regulation of *Dalbergia* spp. have raised the bar again (see next steps, below). The BMP was to be promulgated by March 2017.

TRAFFIC also made progress on a BMP for reptiles, completing a draft BMP roadmap with CITES and MEEF. If funds allow, TRAFFIC will continue to support BMP development and implementation.

### *Challenges*

Because illegal harvest was ongoing during TRAFFIC's fieldwork, investigators made clear that they were doing work for scientific purposes. They also guaranteed anonymity, particularly since recent investigations by another NGO published the names of informants in reports that were repeated in online media. Some of those named informants were subsequently arrested and jailed for about ten days until being released for lack of evidence, a finding likely facilitated by bribes. Some involved in the trade were willing to speak with TRAFFIC investigators, some still felt threatened and declined. Regional and local authorities and local NGOs generally helped.

Research on timber trade between Madagascar and China proved also challenging. TRAFFIC in Madagascar leveraged the global network, particularly TRAFFIC-China and its lines of dialogue with the timber industry, as well as Chinese government agencies involved in timber management, to secure required data and trade information. WWF leveraged additional funding from its network (via the WWF Coastal East Africa program) to enable TRAFFIC-China to conduct additional field surveys in main ports, wholesale timber markets, and furniture manufacturing centers in China. This and other baseline information contributed significantly to enhancing available information on current dynamics of the Malagasy timber trade in China.

### *Next steps*

Timber identification remains a big problem, and the most critical element for achieving progress on the timber BMP according to TRAFFIC's David Newton. It is not possible to understand species level impacts until a species ID system is developed and monitoring established. This

applies to cut logs and boards as well as living trees. With good monitoring, sustainable trade may be possible for certain species of trees, along with the jobs, foreign investment, and conservation finance opportunities associated with sustainable logging elsewhere in the world.

The need for a timber species identification system was amplified in October 2016. Just as Madagascar's SCAPES program came to a close, parties to CITES agreed to list all *Dalbergia* spp. - rosewood - as Appendix II, meaning trade is regulated and requires an export permit from source countries. Non-source countries with importers that process, sell or consume App. II species often require an import permit. The decision took effect January 1, 2017.

This global listing of *Dalbergia* is a serious issue for many countries. Few have given it much thought and many have need for financial and technical support to identify *Dalbergia* species and put up management structures for cross-border movement. While the listing may level the playing field somewhat because all countries will have to deal with it, countries in Latin America and mainland Africa are better prepared to meet requirements. Madagascar is more prepared than it was, thanks to TRAFFIC and the SCAPES consortium, but continued assistance is needed for the government to put management systems in place that fulfill CITES requirements and allow some precious hardwoods to be sold. TRAFFIC believes that ebony and palisander could be sustainably harvested if the BMP was implemented well.

Political will for reform exists but continued pressure from civil society for transparency and anti-corruption measures is necessary, in addition to further scientific work required by CITES. Building on the the government's enthusiastic collaboration with TRAFFIC is key, acknowledging that for some their primary incentive to collaborate may be to expedite permission to sell stockpiled rosewood and restart legal trade. Destroying stockpiles of seized rosewood, akin to seized ivory, is not a viable option for the cash-strapped government of Madagascar at this time.

For reptiles, species identification tools are essential for combating trafficking in geckos and chameleons, and better inspection at airports would help deter pet trade in lizards and tortoises. Additional research and solutions are needed to tackle bushmeat trade in tortoises as well as a growing local market for lemur meat. In addition to trade in protected species, permitted trade in red crabs and some reptiles regularly exceeds quotas and needs attention.

Madagascar cannot respond to illegal trade in animals and plants on its own, so greater participation in regional processes should be encouraged. For example, in 2015, Madagascar's Director of Forests signed the Zanzibar Declaration on Illegal Trade in Timber and Forest Products along with peers in the Southern African Development Community (SADC) and East African Community (EAC) nations, and TRAFFIC facilitated Madagascar's participation in Zanzibar Declaration implementation meetings that occurred in Nairobi in June 2016. A SADC anti-poaching strategy should include Madagascar, and better policy and law enforcement cooperation with China and other consumer countries should be fostered where possible.

## CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations associated with the four guiding questions of this assessment are listed under each question below, preceded by overarching observations that span one or more of the four major areas of investment.

### Overall

- **The four intermediate results and efforts to achieve them were mutually reinforcing and leveraged the strengths of the consortium.** For example, TRAFFIC's species and trade research helped CSOs understand and represent the scale of international wildlife trafficking and financial flows associated with the timber and reptiles. In return, local communities, CSO members and conservation NGOs supplied TRAFFIC with information on timber harvest and reptile collection on the ground, largely because of the roll out of SMART for collecting data on illegal activities in protected areas. The information on poaching and trafficking was disseminated to the broader public and government via journalists, building a constituency and incentive for government action and accountability.
- **Corruption facilitates natural resource crime in Madagascar, and has greatly complicated efforts to conserve biodiversity.** The press, community groups and associations have had some success encouraging more accountability and transparency by agencies responsible for managing natural resources and/or responding to crimes, but these members of the media and civil society remain weak and vulnerable to threats when they uncover bribery, complicity and other forms of official corruption.
- **Conservation actions must be combined with social and economic activities for long-term sustainability.** SCAPES NGO partners have been working in the three landscapes for many years, and had already developed the relationships and some institutional structures that helped them in achieving the goals of the project. However, lack of economic development opportunities, food security, and alternative livelihoods was not addressed explicitly through SCAPES. These drivers of biodiversity loss should be considered in future interventions, and actions, if successful, are likely to grow the existing constituency for conservation.
- **Bushmeat hunting and trade is increasing in scale and commercialization in Madagascar, and needs greater attention, particularly for lemurs and tortoises.** Partner reports of lemur hunting as well as recent reports from the IUCN Tortoise and Freshwater Turtle Species Survival Group are alarming in terms of the scale of offtake. In the MaMaBay landscape, an estimated 17 tons of bushmeat is harvested each year, including thousands of lemurs. Contrary to popular belief, most lemurs are not protected by taboos and most people in local communities will eat lemur during lean seasons. Bushmeat is increasingly hunted for income rather than merely subsistence, and additional investments in food security, alternative livelihoods and law enforcement are needed in many areas.
- Targeted gender objectives may not have been met; **further effort to increase and elevate the participation of women is needed in future work on forest resource**

**governance.** While the conservation NGOs implementing SCAPES had women in technical and leadership positions, this was generally not the case at the local level. One known exception was that women had been involved in community patrolling in the CAZ landscape, but they stopped doing it once payments stopped. During conversations we heard that women were needed in the village, and if they were out on patrol, the “family tentpole” collapsed.

- **Serious capacity gaps in the use of social media came to light during the program and were only partially resolved.** Journalists were registered on many social media platforms but not actively using these until training was provided. Facebook groups were found to be more engaging than blogs, but also required substantial management to prevent abuse of privacy or inappropriate comments. Reliable internet connectivity remains an ongoing barrier to posting stories and reaching local readers.

***How to best engage with CSOs given the challenges they face in this sector, particularly concerning illegal or questionable activities involving high-level public figures?***

- **SCAPES’ local-to-national approach seems to have worked well, with important connections being made at the regional CSO level.** Continued support for all levels of CSOs in the long- to medium-term will be important in assuring that their momentum continues, and that coordination can be done with national-level CSOs, including CNPE.
- **Biodiversity conservation donors should continue to provide support to address environmental crime and livelihoods needs at multiple levels,** including local, regional and national CSOs. In an environment where powerful actors can threaten those speaking out against illegal natural resource exploitation, support for multiple voices helps to spread the risks to any one individual or group, improves communication and helps protect natural resources.
- **Knowledge of community forest resources and the threats facing them is a powerful tool for local communities and regional CSOs.** Continued support for implementation of SMART in community forests and in protected areas elevates the importance of communities as government partners and the first line of defense.
- **Democracy and governance experts should be engaged to assist in supporting the legal framework for environmental CSOs,** to ensure that the CSOs have the rights and authorities necessary to be effective.
- **Media coverage of government corruption and inaction is an important complement to CSO advocacy.** Continued support for training of journalists is needed, in the areas of ethics, investigations and reporting. Advice, encouragement and amplification from the U.S. Embassy Public Affairs Section would be welcome. Connecting Malagasy journalists to international media outlets, and maintaining the new practice (that emerged from the network of SCAPES-trained journalists) of publishing in multiple media simultaneously and anonymously, are two ways of reducing the career and safety concerns associated with publishing stories that are critical of the government or particular businesses. The latter strategy has since been applied to other sensitive sectors: better environment reporting has emboldened the press to increasingly play a watchdog role.

***How to build the effectiveness of national level CSOs to represent local CSOs or Community-based Organizations (CBOs) on the national stage?***

- **SCAPES partners, including local and regional actors, identified a need to establish an environment-focused national CSO to play a key role in connecting local CSOs to national actors.** Several national-level CSOs already active prior to the SCAPES program, including AVG and ROHY, were seen as likely partners in addressing environmental crimes. These organizations are well-known and respected in the country. Some key influencers active in AVG and ROHY were not supportive of SCAPES when the partners were identifying collaborators for the program. Fortunately, the two CSOs are now more supportive of CNPE and are exploring opportunities for collaboration.
- **CNPE has promise to be an important voice for local and regional issues at the national level, but will need continued support so that they can play a long-term role.** They have a well thought-out strategy for the next several years and are taking on some key challenges the environmental sector including rosewood, shifting agriculture, mining, mangroves and turtle trafficking.
- At the operational level, CNPE needs strong leadership and skills to manage both the day-to-day as well as the larger-scale vision for the organization. **Funding sustainability is a key concern for CNPE.** They do not at this time have proposals lined up for various donors; they are awaiting additional support from USAID. To be viable in the medium- to long-term, they will need to take initiative to identify funding opportunities, draft proposals, and pursue donors.
- One interviewee noted that **CNPE needs capacity building to improve operations,** including running meetings, recruiting members, and political advocacy to remain viable. These skills can be strengthened through targeted training.
- A key role for national CSOs working on environmental issues is elevating local and regional CSO issues to the national level. An essential element of that role is good communication and outreach. **CNPE has primarily relied on email for communication; however, face-to-face communication is critical in a country where most people do not have regular access to email.** In addition to identifying funds for travel to connect directly with members, CNPE can use cheaper, more accessible tools such as WhatsApp to engage with and support their members. Such tools can also help with encouraging coordinated advocacy throughout the country.
- CNPE identified several key priorities including improving communication, strengthening government relations, developing alliances with other large CSOs, and identifying sustainable financing for the coalition. **Support for training in identified priorities would help solidify CNPE as a capable and valued player at the national level.**
- National CSOs working on environmental crime and conservation need access to reliable information, such as reports from local communities, contacts with local and regional authorities, trends in natural resource trafficking, and advocacy action. **Interviewees recommended development of an environmental advocacy database accessible to regional and national CSOs to improve information flows.** This will assist national CSOs in sharing relevant information with national actors and in advocating for appropriate interventions to curb environmental crime.

- Some regional efforts have not been well supported, such as PLACAZ. Though this assessment did not look closely at such institutions, they may have a role to play moving forward, particularly in connecting local CSOs that have information on environmental crimes at a local level with national CSOs that can elevate such issues to a high level.

***How to best utilize and scale up adoption of SMART law enforcement monitoring nationwide, particularly for other management purposes than wildlife trafficking, including monitoring of ecological conditions and greenhouse gas sequestration?***

- **USAID support through SCAPES introduced SMART to Madagascar, opening the door to improved law enforcement monitoring and ecological monitoring throughout the country.** NGOs that were not part of SCAPES are now choosing or transitioning to SMART instead of less reliable systems, and most importantly, the government is adopting SMART throughout the country. As the system enables data collection and transparency of aggregated information, it should serve as an important component of improved environmental governance for multiple actors.
- **SMART is working.** As the system was introduced to Makira Natural Park, observed incidences of rosewood logging decreased. In the forest near Anjahamana, communities report decreased conversion to farms and decreased poaching, with the population of Indri (a large lemur species) stable or increasing according to local accounts. In terms of governance and empowerment, using SMART to document infractions has emboldened communities to enforce customary laws and contact authorities when needed. Analysis and visualization of SMART data is helping decision-makers allocate resources.
- **Digitize the entire patrol data collection process wherever possible.** The promise of SMART - data-driven patrols and rapid response to threats - is not fully realized. Many SMART pilot sites, especially community-managed forests, are recording data on paper and hand-delivering data to authorities several weeks after patrol. The delays caused by data entry and poor infrastructure prevent information from one patrol from informing the plan for the next, foregoing the main intent of using SMART. We recommend collecting data using Cybertracker software (compatible with phones and tablets using the Android operating system) - this was piloted in Makira and should be applied more widely. If cost or capacity prevents 100 percent Cybertracker roll out, prioritize using it where threats are urgent, or where the threats require a formal law enforcement response, and law enforcement is reasonably available to assist.
- **Paper and pen application of SMART may be sufficient,** especially when a community is in the early stages of managing and taking ownership over patrols, where the nature of threats makes local community sanction a sufficient punishment and deterrent, and/or where monitoring to detect and deter crime but the response is not as time sensitive (i.e. where agricultural encroachment or mining is the main crime).
- **Reduce barriers to a rapid law enforcement response.** Because community patrol members and MNP agents are not themselves law enforcement authorities, their effectiveness and indeed their motivation to continue patrolling depends on the support of DREEF forestry agents or local gendarmes when crimes are detected. In many cases, forestry agents and police are willing to respond but legitimately need additional funds or

equipment to come to remote places and make an arrest, confiscation, or investigation. Better communication and access – short-wave radio communications, mobile phone networks, road or bridge repairs, new or relocated police stations and forestry agent operating bases, provision of fuel or vehicle repairs – may be necessary for patrols to request and receive the law enforcement assistance they need.

- **Foster rapport and motivation along the enforcement chain.** Though not raised as a concern in CAZ, it is essential to consider whether law enforcement authorities are sufficiently motivated and prepared to assist communities when called. They must take environmental crime seriously, and be equipped and trained to arrest people, process a crime scene and/or confiscate illicit products. Likewise, prosecutors and courts must be motivated and prepared to prioritize environmental criminal cases rather than dismiss them or be too lenient. Community motivation relies on knowing their work to detect crime leads to police or DREEF agents bringing criminals to court. Police or agent motivation is in turn improved by knowing that their actions result in justice.
- **Ensure that violations are characterized and addressed appropriately.** Related to the recommendations above, SMART patrols should characterize the urgency of the threat to the forest and/or the urgency of the opportunity for law enforcement intervention. DREEF and/or gendarmes naturally need to allocate their manpower and other resources wisely, so should only be called upon when law violators are caught red-handed, or where their assistance is needed to rapidly document evidence or confiscate illegal products (such as a mining camp, mechanized logging operations, a truck filled with logs or boards). The severity or certainty of the violation is another factor, for instance poaching or logging inside a national park is definitely illegal whereas hunting or tree cutting in community forests may be sufficiently penalized through customary law and local sanctions (such as timber confiscation or tree planting/restoration). It is important for the different actors involved – MNP, CLPs, VOI patrols, DREEF, gendarmes -- to understand their roles, authorities, and expected actions in advance.
- **Promote shorter, more frequent, less predictable patrols.** Makira used to have 15-day patrols every six weeks: easy to manage but also easy for criminals to avoid. After also observing the decline in energy and morale over those 15 days, WCS moved to 6-8 day patrols, conducted more frequently and on a more random schedule. For many of the same reasons, in Mangerivola (CAZ), MNP-led patrols involving communities have increased from three to six per year.
- **Apply the Madagascar data model country-wide.** SMART is designed for customization to meet local needs, and in MaMaBay WCS built a data model to accommodate details about species, threats and law violators specific to the Malagasy context. This is ready for national roll-out and should be done as soon as possible in sites previously supported under SCAPES as well as others in the country.
- **SMART can support general ecological monitoring, but need not replace existing systems.** Partners generally feel that, while SMART can monitor environmental indicators in addition to threats, this feature and use is a lower priority in most community-managed areas. It can be a good addition, particularly to assess whether community perceptions about species abundance or forest intactness are correct, but adding ecological monitoring to patrol team purview may reduce patrol area coverage

and should therefore be considered carefully. Rarely if ever would it make sense to switch to SMART for ecological monitoring in sites that already have a working system for collecting ecological data.

- **Do use SMART to monitor carbon sequestration capacity and meet standards for higher-value carbon credits.** SMART can accommodate data on tree diameter at breast height (DBH) as well as logging infractions, thereby verifying tree growth and ground truthing forest intactness. The Climate, Community and Biodiversity Alliance (CCBA) accreditation of Makira forest garners a higher price for credits sold on voluntary markets, but also requires evidence that biodiversity is being conserved, which SMART also supports. WCS will use SMART to support their next rounding of monitoring, reporting and verification (MRV) in 2017-2018, which will document carbon sequestration capacity and trends, and allow 2014 and 2015 carbon credits to be sold. It is uncertain whether using SMART will be more cost effective or increase the value of credits sold, but the current revenue sharing arrangement only allocates 5% to MRV and associated costs, currently insufficient and in need of subsidy by donors.
- **Support SMART+ (a.k.a. “SMARTConnect”).** National level SMART is in development but requires work in the capital and additional field sites to install SMARTConnect, the system for receiving, aggregating and analyzing data across sites, to improve national level decision-making and resource allocation. SMARTConnect will cement SMART as the LEM system of choice and encourage other sites and donors to institute SMART. SCAPES partners are well-positioned to provide training in particular.
- **Resolve data sharing and security concerns.** A data policy is needed and currently under development, since information on high value trees and criminal activity could be used to facilitate rather than counter crime. As national level SMART emerges, some data should be masked to obscure info only relevant to site managers, focused on the number and type of violations but not their locations (for example). This would be enough for oversight and budget decisions.

***What were the key results and challenges of improving the knowledge base for and monitoring of trade in selected overexploited and/or trafficked species? (and -- what is most important to continue?)***

- **Develop and deploy a timber species identification and monitoring system** for both inspection and in the field. By all accounts this is the most urgent need to achieve progress in the biodiversity monitoring plan (BMP) prepared with TRAFFIC assistance. Without better understanding of which species are in trade and where/how many trees of each species remain, Madagascar cannot regulate exploitation and will not be permitted to engage in sustainable, high-value trade in rosewood (including palisander) or ebony. Extensive taxonomic work being conducted by the department of Plant Biology of the University of Antananarivo and the University of Zurich, along with the development of guidance and protocols by a new CITES working group on how to enforce the genus-wide uplisting of rosewood (*Dalbergia* spp.) with stricter permitting and legality verification for trade to proceed.

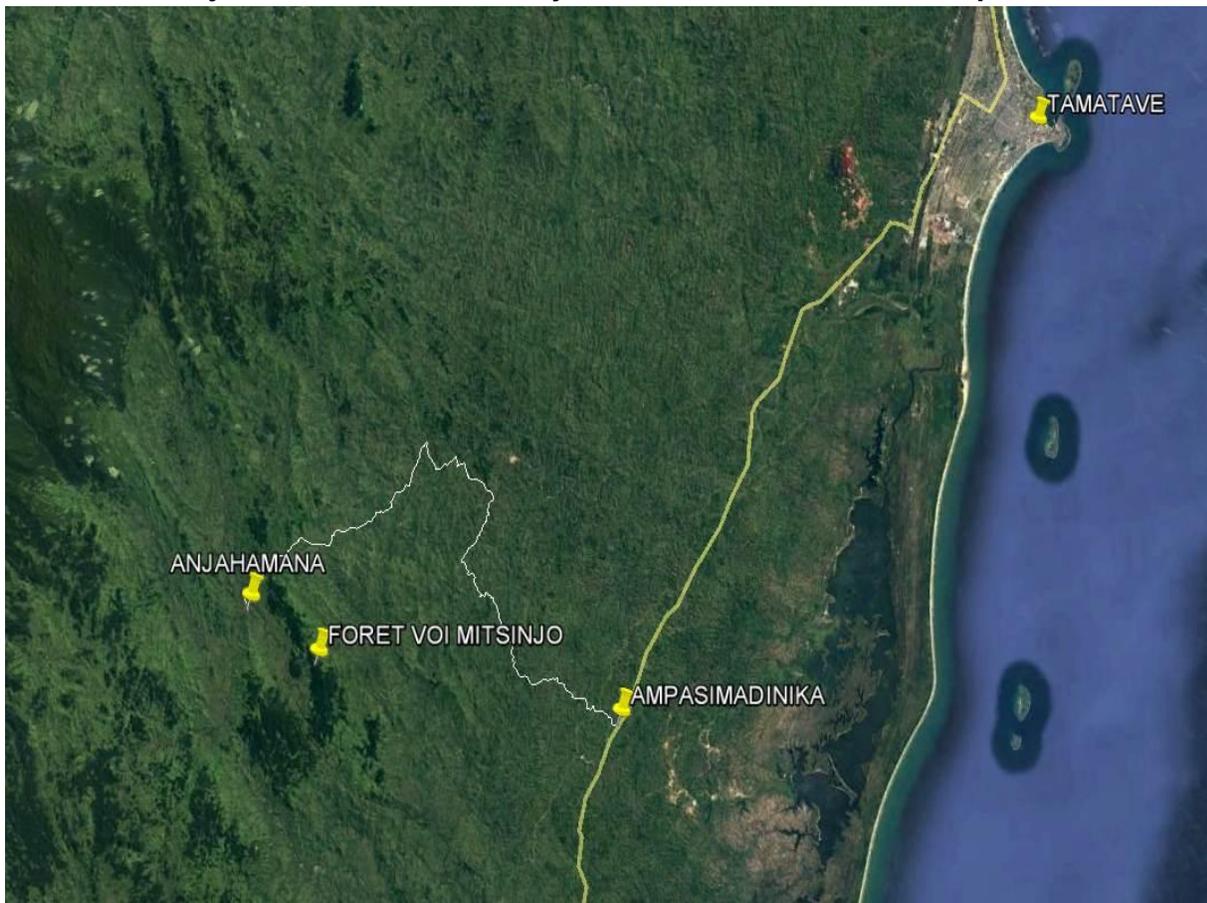
- **Inventory and responsibly dispose of timber stockpiles.** If legal origin can be determined, confiscated rosewood and ebony could be sold internationally (pending CITES permission) and be a source of finance for conservation. Logs of indeterminate origin may be able to be used for local construction, if regulated. Destroying timber, akin to an ivory burn, is not politically palatable.
- **Facilitate or provide training on the Timber Legality Framework** developed with TRAFFIC assistance, which clarifies the laws and roles of different agencies in promoting legal timber harvest and trade.
- **Increase luggage and cargo inspections at the Antananarivo airport.** This is the main departure point for reptiles in trade. Biological Scanners and detection dogs would help the most. Further training on identification of chameleons and geckos in trade, and monitoring of legally traded reptiles, is also needed.
- **Increase cargo inspections at the seaport in Mauritius, not Tamatave.** More than 80 percent of timber trade is via small boats to large ships 2-100 km offshore. There are lots of informal ports for such boats, similar to along the Tanzanian coast. Mauritius is the major sea port in the region.
- **Conduct analyses of crime safely and responsibly.** When TRAFFIC conducted investigations into logging and timber trade in the north, they made clear it was for science and to meet CITES requirements for legal trade. They maintained the anonymity of sources. People were reticent to come forward with information because they are employed by timber operators and a previous investigation named names and got people in trouble - or jail (at least temporarily).
- **Support analysis of transnational trafficking.** With leveraged funding, TRAFFIC was able to conduct research in China to complement their SCAPES-funded work in country, and better understand dynamics and data gaps.
- **Continue to provide information on trade dynamics to CSOs and media.** Though corruption prevents law enforcement action and deters CSOs and the press from playing a watchdog role, ultimately their pressure and this data helps the government of Madagascar achieve its national objectives and international commitments.
- **Develop a biodiversity monitoring plan for reptiles,** building on the roadmap developed with assistance from TRAFFIC and modeled on the BMP for timber species.
- **Make sure SADC's wildlife trafficking strategy includes Madagascar.** SADC member country resources and experience addressing organized crime and poaching would have broad application to the timber, reptile and lemur crises faced by the country.
- **Establish a wildlife trade data platform for Madagascar.** This could be populated initially with the data collected by TRAFFIC. Access to this platform should be provided to appropriate stakeholders involved in combatting illegal wildlife collection and trade.
- **Promote data sharing on law enforcement.** To overcome reluctance of public officials to share information on law enforcement cases, implementing partners can develop Memoranda of Understanding (MOU) with key government agencies that include specific language on information and data sharing.

## ANNEXES

## **ASSESSMENT SCHEDULE**

Dec	Refining scope, key assessment questions
Jan 18-19	Consultations with USAID and partner World Wildlife Fund in Antananarivo
Jan 20	Travel to Toamasina
Jan 21	Field visit to Anjahamana and patrolling with community members in Bevoalavo community forest
Jan 22	Consultations with community leaders in Anjahamana
Jan 23	Visit to Analamazoatra Reserve with community scout Consultations with COCAZ and CNPE leaders and journalists
Jan 24	Consultations with WCS and USAID Mission staff
Jan 25-26	Consultations with USAID Mission staff
Feb-Mar	Telephone interviews with TRAFFIC staff and verification of information with various partners; draft assessment report

### **Location of Anjahamena and community forest visited in CAZ landscape**



## **INTERVIEW GUIDE**

### **IR 1: Improve understanding of unsustainable and illegal behavior associated with biodiversity loss and ecosystem degradation**

- What is the evidence that timber and reptile identification/traceability tools (BMPs) are improved by training provided and/or actually working?
- Is there evidence that SCAPES analysis and advocacy regarding rosewood trade contributed to decreased trade from Madagascar and the Appendix I listing at CITES? OR is it really that large trees are increasingly scarce and hard to access, and reduced demand or substitution for comparable wood from other countries?
- What is the connection between areas of previous timber harvest and areas of current illegal mining?
- Is the palissandar loophole closed? What is happening regarding the supply of rosewood for domestic furniture production?
- Are current levels of trade in sawn rosewood at all sustainable?
- What implementation of the rosewood BMP is needed given its CITES Appendix I listing?
- Is Madagascar ready to meet new CITES obligations re: rosewood/palisander, other species?

### **IR 2: Strengthen capacity of community-based organizations to monitor illegal activities involving Madagascar's endangered natural resources and compliance with laws**

- Has detection of crime increased?
- Are would-be criminals deterred?
- How do you know that SMART patrols are effective?
- How much oversight is required for quality control? Is information about patrols leaked from communities to operators? How do you manage that? Do patrolling community members feel pressure from operators in the area?
- What conditions needed for LEM/SMART to continue without USG assistance?
- What is the status of the roadmap for rolling out SMART+?
- Why did many sites start with paper data collection instead of cybertracker? Do you expect paper to be entirely replaced for patrols by existing and new CLPs?
- To what extent / what is the timing of rollout in COMATSA, MaMaBay and CAZ?
- What is the role of MNP rangers vis a vis community patrols (CLPs)? Directing effort? Acting as extension agents? How and how frequently is patrol data shared?
- What is the remit of the COBA?
- In the Year 3 report you state that increased vigilance of COBAs in Mikara led to a near-absence of illegal rosewood activities. Increased risk of loggers or decreased reward associated with reduced demand for Malagasy rosewood?
- Local communities in CAZ have recommended SMART expand beyond the six pilots. Will that happen? How will you choose new sites?
- To what extent is/will SMART collect ecological data and how was/is this info used?
- Do community patrols get informed when their LEM leads to forest crime detection? Is SMART contributing to motivation or accountability of participants?

- Was SMARTConnect released for testing at the end of 2016 as anticipated? What challenges do you anticipate or are you encountering?

**IR 3: Increase proactive and results-oriented engagement of civil society organizations in combating illegal practices targeting Madagascar's endangered natural resources**

- Are community role(s) clear and what contribution are communities making?
- Can you tell us more about why ROHY, the existing civil society platform, declined to also be the platform for combating illegal and/or unsustainable natural resource exploitation?
- How is CNPE doing since its creation? How is it operating? Does it have paid staff, or are member organizations doing the work themselves? How do national actors, especially government officials, view it?
- What are some observed or anticipated benefits or challenges of creating a new network (CNPE) vs. building on the existing one (ROHY)?
- Have CSO coalition members used the six customized tools developed for them to use regarding local and national advocacy campaigns?
- To what extent has the reference on enforcement and prosecution procedures been used by authorities in CAZ? How does having that document support any CSO watchdog role?
- To what extent has building rapport and trust between CSO and the government improved how violations are handled?
- To what extent have commitments by decision makers and legal departments been implemented or violated? Do they feel accountable to their commitments? Do CSO coalitions hold them accountable?
- How do figures for numbers of natural resource violations, investigations, and court cases in the final year of SCAPES compare to previous year's figures? How did local and national actors respond to these cases? How do you track cases through the legal system? Is there a database for tracking progress of individual complaints/cases through the legal system?
- What are the challenges regarding arrest of violators? Prosecution? Sentencing?
- In December 2015, a capacity assessment was performed for members of each target CSO coalition. Was this a self assessment or expert (partner) assessment? Do scores represent the average of individual member scores or is the assessment tool applied to the whole group?
- Was any survey conducted to determine the reach and impact of the COCAZ mass communication campaign?
- Due to the campaign, is there a greater constituency for conservation and/or are would-be criminals deterred from engaging in crime?
- In MaMaBay, what is the status of customs operations in Maroantsetra? Are gendarmes still using the space and/or can customs operate from elsewhere?
- Is there a report available from the workshop regarding land clearing and brushfires?
- Was the CNPE advocacy campaign (or specific actions to initiate it) completed by end September as anticipated?

#### **IR 4: Improve media coverage and exposure of abusive practices targeting Madagascar's endangered natural resources**

- How were investigative reports received by government? All seven reports are critical of some aspect of government mismanagement or corruption.
- Where there repercussions on journalists, media outlets, VOI members?
- Will investigative reporting on environmental crime and poor government response be continued by the journalists involved in SCAPES?
- Could you describe how CSO coalitions, patrol teams, and journalists collaborated? Provide an example?
- Is radio the most important media?
- Have you explored citizen reporting?
- What evidence do you have that intended awareness and behavior change occurred as a result of work with media, direct outreach to key constituencies?
- How is this measured or inferred?
- The Year 3 report noted that it was necessary to carefully vet requests to join SCAPES-endorsed social networks to reduce risk of negative/unwelcome activities. How common were these? Who was doing the "spying," as noted in the report? Were there negative impacts?
- Who was the intended audience for the social media outreach? Local Malagasy? Others?

#### **Cross-IR coordination and results**

- How have the different IR's leveraged each other successfully?
- In hindsight, what missed opportunities to collaborate/leverage effort occurred?
- Is sum greater than parts?
- To what extent did consortium efforts to map supply and trade routes, exist points and international players inform government action? Which parts of government? Do government partners desire ongoing information?

#### **Other:**

- *For partners* - What are you concerned will not get done or stop happening, post-SCAPES? What if anything are you already observing in terms of problems maintaining momentum under SCAPES?
- *For government* - What are your priorities/needs to better address natural resource crime?
- *For local communities* - What benefits do you perceive or expect based on your investment(s) of time, resources?
  - Why is it important to conserve biodiversity? Whose responsibility is it?
  - Why are you involved in patrols? Or public awareness efforts?
  - What do your families and neighbors think of your involvement?
  - Do you have enough support for your role in conservation?
  - What else would you like to be involved in re: conservation?

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