

CEPF Final Completion and Impact Report

Organization's Legal Name:	Durrell Wildlife Conservation Trust
Project Title:	Mitigating the Unprecedented Loss of the Menabe Dry Forest in Madagascar
Grant Number:	CEPF-109355
Hotspot:	Madagascar and Indian Ocean Islands
Strategic Direction:	1 Empower local communities to protect and manage biodiversity in priority key biodiversity areas.
Grant Amount:	\$199,941.00
Project Dates:	January 01, 2020 - June 30, 2022
Date of Report:	September 01, 2022

IMPLEMENTATION PARTNERS

Graine de Vie

- Creation of village association nurseries
- Reforestation expertise
- Training of nursery technicians

GSDM (Groupement de semi-directe de Madagascar)

- Promotion of climate smart agriculture

Local Community Associations – VOIs

- Responsible for coordinating patrols
- Coordinating agricultural activities
- Collaboration to deliver project activities

Kew Gardens

- Training Durrell staff and local communities in yam cultivation

CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
Reduction in the rate of deforestation in the core conservation zone due to improved community led patrols, enforcement of laws and concurrent activities to improve agriculture	Deforestation rate in 2021 was 2,981 ha (6%)

Impact Description	Impact Summary
etc. Current rate: 4,360 ha/year End of project aim of <2,000 ha/year	
Active reforestation will have contributed to 100 ha by end of project (50Ha/year). (Note: The Madagascar Government has a target of 40,000ha/year with a regional target for Menabe of 1,800ha/year through their RFR project)	A total of 70.9ha within core zones was reforested
Protection of the forest and active reforestation will help safeguard the future and survival of Menabe's biodiversity. Population surveys of the endangered giant jumping rat (<i>Hypogeomys antimena</i>) undertaken in 2019 and in 2021 show stable population (co-funded with other grants)	Pyxis planicauda surveys show stable population encounter rates between 2017 (0.167), 2021 (0.152 KAI) and 2022 (0.147). Population estimate underway utilising 2021 and 2022 data. H. antimena surveys undertaken in 2019 and currently in 2022 so cannot compare change over project period.
Reduce number of people in severe poverty across 3 target villages (combined population of ca.3,475 in ca.750 households) through maintenance of forest ecosystem services and directly benefitting financially through employment and compensation for time engaged in the project. New knowledge on agro-forestry and nursery care will support their wider food security and income generation needs. We will assess the impact by the change in annual household income, agricultural yields and well-being indices, ascertained at the start and end of project (NB these indices will be replicated from those we are collecting at three other sites in Madagascar and include self-reported perceptions of well-being, food security and financial security).	Household surveys still being analysed for full results. Adopters of CSA techniques seen peanut yields increase from average 1 tonne/ha to 2.4 tonne/ha.
The development of a sustainable business model will enable climate change impact funds to be accessed and a framework for scaling-up reforestation planning to the wider western dry forest ecoregion.	Durrell's Rewild Carbon initiative developed. Still to be implemented in Madagascar.

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
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Unexpected impacts (positive or negative)?

This project has had the positive impact of creating attention for the issues facing the Menabe-Antimena region, which has in turn lead indirectly to further funding / interest from donors, such as the funding from the Madagascar Protected Areas and Biodiversity Fund (FAPBM). Initial funding has been secured from FAPBM for 2022 with the intention of continued funding in the long-term (FAPBM's model is that once they begin funding a protected area they do so for the long-term). There has also been additional funding

secured until 2027 from the UK Government's Biodiverse Landscapes Fund and interest from the Legacy Landscapes Fund.

PROJECT RESULTS/DELIVERABLES

Overall results of the project:

Objective 1: Maintain critical community led patrol efforts to halt deforestation and combat precious timber trafficking in the Menabe-Antimena PA

Throughout this project, Durrell has been working in 16 locations within the Menabe-Antimena PA (an additional 4 locations were added in 2020 to the original 12 as there was an increase in pressure observed in these areas). Within these locations we work collaboratively with 11 dry forest community associations (VOIs) to monitor and report pressures in their management transfer areas (TGRNs) and across the PA, by carrying out patrols. Patrollers (known as KMMFA) receive cash benefits for their patrol efforts and have been trained on the use of the smartphones for data collection. They undertake patrols 3 times per week collecting surveillance data, which was analysed and processed by Durrell staff. At the end of each month a patrol report was produced, containing the patrol effort; the list of patrollers and the number and type of pressures recorded. The report was distributed monthly with the managing partners (DREDD, Fanamby, CNFEREF, MNP) and also with the regional authorities (Region & Prefecture).

Durrell monitors two conservation target species, *Hypogeomys antimena* (Vositse) and *Pyxis planicauda* (Kapidolo) in the PA. For Kapidolo, three surveys were undertaken in January-February of 2020, 2021 and 2022. These surveys are to assess the density of the population and identify population trends. In carrying out the surveys, we engaged representatives of local communities and staff of PA management partners. A total of 33 people from local communities, CNFEREF, DREDD and Fanamby were trained and participated in the surveys alongside Durrell staff. Initial analysis suggests the Kapidolo population has remained relatively stable from 2017 to 2022. Surveys for Vohitse were carried out July-August 2019 and are currently being undertaken July-August 2022. Given the timings of the surveys CEPF funds have not been utilised for this work.

Objective 2: Promote and strengthen governance of PA

The Dinan'i Menabe was officially recognised in June 2021. The local Dina of each VOI TGRNs were consulted and considered and inserted later in the Dinan'i Menabe, including those relating to terrestrial, mangrove and wetland ecosystems. In June 2021, the updated Dinan'i Menabe was approved by the court of Morondava. Durrell participated in the planning meetings for this Dina update, initiated and supported by WWF. The endorsement of the Dinan'i Menabe including local Dina elements should lead to significant actions taken to address anthropogenic threats to the forest, and discussions undertaken and captured within the Dina committees will create impact through the reduction of these threats.

In December 2021 a 4-day joint mission involving regional authorities, Durrell, Fanamby and Miakjy, was undertaken in Marofandilia, Beroboka North, Tsimafana and Antsoha for awareness raising and formalisation of the Dinan'i Menabe led by the Menabe Region. Local Dina committees however are yet to be renewed following the officialization of the Dinan'i Menabe.

DREDD, supported by Fanamby, carried out forest control in the PA, although the frequency of raids carried out is quite low compared with the increasing pressures. There were cases

reported and law enforcement actions, however the DREDD have yet to provide any details to the wider Menabe Task Force on these.

Durrell has supported 11 VOIs to manage their areas, including support for the construction of association offices (between 2005-2009). During this project, CEPF enabled us to renovate 5 VOI offices (the remaining 6 offices no longer exist, and therefore would not have benefitted from renovation). These VOIs benefited from various construction materials (cement, sheet metal, planks, paint, spikes, etc.) and furniture, to ensure the renovation and operation of their office. Following the last evaluation in June 2022, 4 VOIs (first Tsianaloky, Lambokely, Marofandilia and Ankoraobato) successfully completed the renovation. Kiboy VOI is not yet finished due to theft of some materials.

Objective 3: Identify the land within the PA under crop production and identify who is engaged in illegal crop planting

Analysis of satellite images has identified areas within the PA under illegal crop production, with a new map produced in June 2022. Drone flights are scheduled to crosscheck these over the subsequent months.

We have not carried out surveys to discover who is engaged in illegal crop planting, due to a lack of clearly defined strategy to collect this type of sensitive data. Currently, local communities do not have the confidence in providing this type of information for fear of reprisals and revenge attacks from offenders.

The renewed Menabe-Antimena PA PAG (Management Plan), SAC (Community Development Scheme) and SRAT (Regional Scheme for Territorial Development) which is in development for the Menabe Region will be able to aid this as their implementation will require zoning the PA and collating information related to each zone. This will help identify who is planting in those areas. We also need to look at alternative methods.

Objective 4: Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities

There is a restoration plan drawn up by the Voahary Association, funded by USAID Mikajy in the year 2021. This document has been validated by the Menabe Task Force and is currently available for all PA stakeholders.

In 2020-2021, 4 community nurseries were created in Ankoraobato (25% seedling success), Marofandilia (10%), Beroboka (60%) and Antsoha (60%) with 4 nursery technicians trained to manage the nursery (watering, etc.) with the support of Graines de Vie for Marofandilia and Ankoraobato. Unfortunately the Ankoraobato nursery was abandoned due to a lack of water supply, with a replacement nursery established in Tsimafana; a nursery technician was trained in 2021-2022. Success rates in 21/22 ranged from 50%-90%.

In total 70.9 ha of land within the core zone of the PA has been reforested during this project, comprising approximately 85,000 saplings of six native species (Arofy, Ankaraka, Mafay, Baobab, Handy, and Kily). All saplings were grown in the community nurseries established in this project with many coming from Tsimafana.

Four Durrell staff were trained by GSDM in Climate Smart Agriculture (CSA) techniques and cultivating alternative crop varieties, and a CSA action plan was developed by GSDM after data collection and analysis carried out in the field.

The Farmer Field School has been a great success, training 279 people (181 men and 98 women) in CSA techniques within 11 FFS groups across the three target villages. A lead farmer has been appointed for each village to help farmers and collect data. An area of 104.4ha is now under cultivation using CSA techniques. The principal crops being grown include peanuts, dry grain, cowpeas and assorted vegetables within market gardens.

Objective 5: Business model and monitoring framework for ensuring long-term sustainability of reforestation and habitat restoration in Madagascar identified

This CEPF project was designed and proposed before the Durrell 'Rewild Carbon' initiative was launched. This initiative is Durrell's flagship carbon offsetting and long-term reforestation model, beginning in the Atlantic Forest in Brazil. The long-term aim for this initiative is to apply it to other sites, such as Durrell's Madagascar rewilding sites (e.g., Menabe-Antimena PA), if these areas are able to support the framework.

A significant new grant through the UK Government's Biodiversity Landscape Fund has been secured for 2022–2027 which will continue this aspect of the work in Menabe and Madagascar more broadly.

Results for each deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1.0	Maintain critical community led patrol efforts to halt deforestation and combat precious timber trafficking in the Menabe-Antimena PA	1.1	Monthly SMART reports	<p>Over the whole project, CEPF has supported 4,327 patrols, by 196 persons (22,138 person-days) covering 118,327 hectares (39,476 km²). This includes 30 new patrollers from 5 villages (5 new groups of 6 patrollers) increasing patrol coverage since September 2021.</p> <p>A decrease in threat level has been observed during the whole CEPF grant period:</p> <ul style="list-style-type: none"> • 2,125 threats reported in 2020 (0.15 threats/km) • 1,691 in 2021 (0.11 threats/km) • 736 for the first 6 months of 2022 (0.07 threats/km) <p>Thirty monthly patrol reports have been produced and distributed to local and regional partners since January 2020.</p> <p>Three Menabe Durrell staff have been trained on the use of SMART (www.smartconservationtools.org) since January 2020. All patrollers were trained on the use of smartphones to collect patrol data in October 2020, and in August-September 2021, 30 new patrollers were trained on patrols and on the use of smartphones to collect patrol data.</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1.0	Maintain critical community led patrol efforts to halt deforestation and combat precious timber trafficking in the Menabe-Antimena PA	1.3	Attendance lists for survey training/participation; monitoring report produced for each species.	<p>Durrell monitors two conservation target species, namely Hypogeomys antimena (Vositse) and Pyxis planicauda (Kapidolo) in the PA.</p> <p>For Kapidolo, surveys were undertaken January-February 2020, January-February 2021 and January-February 2022. These surveys are to assess the density of the population and identify population trends. In carrying out the surveys, we engage representatives of local communities and staff of PA management partners. In total 33 people trained: 2021: 10 (1 Fanamby, 1 CNFEREF, 6 VOI, 2 students) 2022: 23 (11 CNFEREF, 4 Fanamby, 4 DREDD, 2 MNP, 1 VOI, 1 student).</p> <p>Surveys for Vohitse were carried out July-August 2019 and are currently being undertaken July-August 2022. Given the timings of the surveys CEPF funds have not been utilised for this work.</p>
2.0	Promote and strengthen governance of Protected Area	2.1	Official evaluation report; list of renovations undertaken	There are 11 management transfer areas in Menabe-Antimena PA working in conjunction with Durrell through the local associations (VOIs). Durrell has supported these 11 VOIs so that they can manage their area more effectively. The construction of the

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				<p>associations' offices was among the support provided to the VOIs between 2005 and 2009.</p> <p>With CEPF funding starting in 2020, the renovation and maintenance of five VOI offices was part of the support provided. Only 5 VOIs still have their association office active, with the other 6 offices now lost. This is the reason why CEPF funding has only supported five VOIs with this. VOIs were provided with various construction materials (cement, sheet metal, planks, paint, spikes, etc.) and a few plastic chairs to ensure the renovation and operation of their office.</p> <p>Following the last evaluation in June 2022, 4 VOIs (first Tsianaloky, Lambokely, Marofandilia and Ankoraobato) successfully completed the renovation. Kiboy VOI is not yet finished due to theft of some materials.</p>
3.0	Identify the land within the PA under crop production and identify who is engaged in illegal crop planting	3.1	Map of land in the Protected Area under illegal crop production	Analysis of satellite images have identified areas within the PA under illegal crop production, with a new map produced in June 2022. Drone flights are scheduled to crosscheck these over the subsequent months.
3.0	Identify the land within the PA under crop production and identify who is engaged in illegal crop planting	3.2	Record of where people engaged in illegal crop planting are from; list of specific actions taken to	We have not carried out surveys to discover who is engaged in illegal crop planting, due to a lack of clearly defined strategy to collect this type of sensitive data. Currently, local communities do not have the confidence in

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
			address issues of illegal crop planting.	<p>providing this type of information for fear of reprisals and revenge attacks from offenders.</p> <p>The renewed Menabe-Antimena PA PAG (Management Plan), SAC (Community Development Scheme) and SRAT (Regional Scheme for Territorial Development) which is in development for the Menabe Region will be able to aid this as their implementation will require zoning the PA and collating information related to each zone. This will help identify who is planting in those areas. We also need to look at alternative methods.</p>
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.1	Reforestation plan for Menabe region developed (to include monitoring and incentives scheme).	An overall APMA restoration plan created in 2021 has been validated by the Menabe Task Force, so we can use this document as a basis for establishing a restoration plan which works for us, including the monitoring plan.
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.4	Four staff trained in Climate Smart Agriculture techniques and cultivating alternative crop varieties and non-native yams; 3 demonstration plots set up.	4 Durrell staff were trained by GSDM on climate smart agricultural techniques and by Kew Gardens on yam cultivation.
5.0	Business model and monitoring framework for ensuring long-term sustainability of	5.1	Document produced describing business model and monitoring framework	Not completed. This CEPF project was designed and proposed before the Durrell 'Rewild Carbon' initiative was launched. This initiative is Durrell's flagship carbon offsetting

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	reforestation and habitat restoration in Madagascar identified		for sustainable reforestation in Madagascar	and long-term reforestation model, beginning in the Atlantic Forest in Brazil. The long-term aim for this initiative is to apply it to other sites, such as Durrell's Madagascar rewilding sites (e.g., Menabe-Antimena PA), if these areas are able to support the framework.
2.0	Promote and strengthen governance of Protected Area	2.2	List of Dina committees created/strengthened and membership register; monthly evaluation reports	<p>The Dinan'i Menabe was officially recognised in June 2021. The local Dina of each VOI TGRNs were consulted and considered and inserted later in the Dinan'i Menabe, including those relating to terrestrial, mangrove and wetland ecosystems. In June 2021, the updated Dinan'i Menabe was approved by the court of Morondava. Durrell participated in the planning meetings for this Dina update, initiated and supported by WWF.</p> <p>In December 2021 a 4-day joint mission involving regional authorities, Durrell, Fanamby and Miakjy, was undertaken Marofandilia, Beroboka North, Tsimafana and Antsoha for awareness raising and formalisation of the Dinan'i Menabe led by the Menabe Region.</p> <p>Local Dina committees however are yet to be renewed following the officialization of the Dinan'i Menabe. As such we have been unable to formally assist the local Dina committees.</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
2.0	Promote and strengthen governance of Protected Area	2.3	Number of awards made and record of recipients.	There has been no distribution of patroller awards during the project due to lack of agreement with the other bodies (MNP, DREDD) responsible for patrollers in Menabe-Antimena PA. It was planned to award the best patrollers each year during the World Patroller's Day (31 July) but the discussion stopped on the criteria to be adopted to select the patrollers who will receive the awards.
2.0	Promote and strengthen governance of Protected Area	2.4	Number of high profile cases mediatized and details of coverage.	There is no widespread dissemination of cases of serious offences in view of the results of verbalisation from the DREDD and/or the Tribunal, with the exception of the case of the former deputy of Mahabo who was incarcerated thanks to the intervention of the AVG in 2020.
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.2	Three village community nurseries established in Menabe region; list of technicians and training attendance register	In 2020-2021, 4 community nurseries were created in Ankoraobato (25% seedling success), Marofandilia (10%), Beroboka (60%) and Antsoha (60%) with 4 nursery technicians trained to manage the nursery (watering, etc.) with the support of Graines de Vie for Marofandilia and Ankoraobato. Unfortunately, the Ankoraobato nursery was abandoned due to a lack of water supply with a replacement nursery established in Tsimafana.
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable	4.3	Record of number of hectares reforested (target 50Ha/yr). Record of number of trees planted of which	In 2020-2021, 18.5 hectares in the core zone of five TGRNs (Tsianaloky, Kiboy, Lambokely, Kirindy, Marofandilia) were reforested. A total of 22,753 saplings were planted, consisting of

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	agriculture and reforestation income generating activities		species (ca.2500 seedlings/Ha based on experience).	<p>six different species (Arofy, Ankaraka, Mafay, Baobab, Handy, Kily). These young plants come from our three community nurseries installed in Ankoraobato, Marofandilia and Beroboka center).</p> <p>In 2021-2022, 52.4ha within the core zones across 7 TGRNs were reforested, with seedlings from Tsimafana, Beroboka, Antsoha, and Belamoty nurseries.</p> <p>Total reforested = 70.9ha.</p>
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.5	Household survey data collected from ca.150 households, disaggregated by age, gender (target: 60% male/40% female respondents), profession etc. Impact report produced.	Baseline survey of 150 households across 5 villages (three intervention villages and 2 control villages) undertaken in November 2020. Second survey of same households undertaken in May 2022. Households surveyed were 71.9% headed by men and 28.1% headed by women. Analysis of 2022 surveys underway.
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.6	Official document produced describing Menabe work plan.	A Climate Smart Agriculture action plan was developed by GSDM after the diagnostics carried out in the field.
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable	4.7	Membership list for each Farmer Field School (minimum 30 members recruited per annum);	For the first year of the project (2020-2021) 5 FFS groups were created with 124 members trained, including 100 men and 24 women, with a cultivated area of 50.4 ha (peanuts and

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	agriculture and reforestation income generating activities		register of training attendance.	<p>dry grain) following Climate Smart Agriculture (CSA) techniques.</p> <p>For the second year of the project (2021-2022): 6 FFS Groups were created with 155 members trained, including 81 men and 74 women (the gender approach was applied in all 3 intervention sites regardless of the members' ethnicity). 54ha of land were cultivated using CSA, the main crops of which are peanuts, dry grain and market gardening.</p> <p>In addition, in 2022, farmers in Tsimafana have utilised CSA techniques for off-season growing of cowpeas over 10ha.</p> <p>For the two years of the project, a total of 11 FFS groups were structured and trained in CSA techniques in the 3 intervention sites which bring together 279 members, including 181 men and 98 women. An area of 104.4ha is cultivated using CSA techniques.</p>
4.0	Reduce slash-and-burn in the core forest zone through promotion of alternative sustainable agriculture and reforestation income generating activities	4.8	300-450 community members trained in and implementing Climate Smart Agriculture techniques in 40% of cropland by project end.	279 community members are trained and have adopted climate-smart agriculture techniques in the 3 intervention sites. 104.4ha total area of land cultivated and applied the technique.
5.0	Business model and monitoring framework for	5.2	Number and description of people who form investment	Please see 5.1.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	ensuring long-term sustainability of reforestation and habitat restoration in Madagascar identified		panel(s); number of presentations given.	
1.0	Maintain critical community led patrol efforts to halt deforestation and combat precious timber trafficking in the Menabe-Antimena PA	1.2	Minutes from stakeholder meetings; including lists of actions taken/agreed	<p>A Working Group consisting of the Menabe-Antimena PA managers (DREDD, Fanamby, Durrell, CNFEREF, MNP) was created in 2019 to ensure the planning of all conservation activities within the PA. The group was scheduled to meet Monday of each week to discuss the renewed activities and the forecast of the activities of the new week and to share various facts related to the conservation activities of the PA. Due to the Covid 19 situation during 2020, it was not possible to respect the schedule of the meeting and there was also frequent absence of some partners due to their unavailability.</p> <p>In late 2020 the Working Group was reformed into the Menabe Task Force that included all the environmental actors and institutions working in the PA. The DREDD leads the Task Force which meets twice per month to discuss how to tackle pressures facing the PA e.g., forest control, community patrols, daily monitoring of fire points, development activities carried out, sharing of news etc. According to the terms of the Task Force, official minutes should be established by the</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				DREDD (to make it official) and shared with all the members following the meeting. This however has not happened regularly. Nevertheless, there is sharing of actions and information verbally and Durrell maintains our own minutes.

Tools, products or methodologies that resulted from the project or contributed to the results:

There were no new significant tools, products or methodologies that resulted from this project.

PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
1.1	Threat levels to at least 25 priority sites reduced through locally relevant conservation actions implemented by local communities.			1	Menabe-Antimena PA
1.2	Awareness of the values of biodiversity and the nature of threats and drivers raised among local communities in at least 25 priority sites.			1	Menabe-Antimena PA

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
1.3	Effective participation of local communities in the management of at least 10 new protected areas at priority sites.			1	Menabe-Antimena PA
1.5	Economic tools and models improving livelihoods while preserving natural capital and biodiversity (ecotourism, payments for ecosystem services, conservation agreements, etc). piloted and implemented in at least eight priority sites.				
1.6	At least 75 percent of local communities targeted by site-based projects show tangible well-being benefits.			16	Ampataka, Andranomandeha, Ankarobato, Anketrevo, Antsoha, Belamoty, Beroboka, Kiboy, Kirindy Village, Lambokely, Mandroatsy, Marofandilia, Nosibe, Tsianaloky, Tsimafana, Tsitakabasia
1.7	Capacities of local community organizations in charge of			1	Menabe-Antimena PA

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
	conservation and local development improved in at least 20 sites, allowing for increased sustainability and efficiency of these organizations				

GLOBAL INDICATORS

Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion
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*World Database of Protected Areas

**If this is a new protected area, 0 should appear in this column

*** This column excludes the original total size of the protected area.

Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management
Menabe Central Corridor NPA	MDG97		77,719

Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
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Benefits to Individuals

- **Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
380	104	<p>Farmer Field School (FFS) = using Climate Smart Agriculture (CSA) techniques, the main crops of which are groundnuts, dry grain and market gardening (mixed vegetables). The training modules included: soil preparation techniques; peanut and mung bean cropping techniques; respecting the agroecological approach; biological pests and disease controls; soil fertility restoration with leguminous plants (Mucuna, Cowpea).</p> <p>SMART software = training on the use of SMART technology to collect patrol data on smartphones, data analysis and reporting, and on the use of fire alerts and deforestation alerts.</p> <p>Patrol techniques = baseline training in patrolling; refresher training on patrol techniques, and use of the OSM tracker.</p>

Number of Men Trained	Number of Women Trained	Topics of Training
		Species surveys = training in techniques for and participation in surveys for <i>Pyxis palnicauda</i> (Kapidolo). Include GOS and compass use, data recording, taking biometric information.

- **Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits
376	98	<p>For the two years of the project, a total of 11 FFS groups are structured and trained in CSA techniques in the 3 intervention sites which bring together 279 members, including 181 men and 98 women. An area of 104.4ha is now cultivated using CSA techniques. An example of impact is that pre-CSA techniques peanut yields on average were 1 tonne/ha but using CSA techniques 2.4 tonnes/ha.</p> <p>Patrollers are paid to carry out patrols in the Protected Area to monitor and report threats and pressures.</p>

Benefits to Communities

View the characteristics column below with the following corresponding codes:	View the benefits column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	Community Characteristics							Type of Benefit									Country	Number of Males Benefitting	Number of Females Benefitting
	1	2	3	4	5	6	7	a	b	c	d	e	f	g	h	i			
3 communities: Lambokely, Kiboy, Marofindilia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Madagascar	181	98

Characteristics of "Other" Communities:

Policies, Laws and Regulations

View the topics column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	Name of Law	Scope	Topics															
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

“Other” Topics Addressed by the Policy, Law or Regulation:

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment

Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted

Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
Menabe Task Force	2020	Madagascar	No	A Working Group consisting of the Menabe-Antimena PA managers (DREDD, Fanamby, Durrell, CNFEREF, MNP) was created in 2019

Name of Network/Partnership	Year Established	Country/Countries	Established by Project?	Purpose
				<p>to ensure the planning of all conservation activities within the PA. The group was scheduled to meet Monday of each week to discuss the renewed activities and the forecast of the activities of the new week and to share various facts related to the conservation activities of the PA. Due to the Covid 19 situation during 2020, it was not possible to respect the schedule of the meeting and there was also frequent absence of some partners due to their unavailability.</p> <p>In late 2020 the Working Group was reformed into the Menabe Task Force that included all the environmental actors and institutions working in the PA. The DREDD leads the Task Force which meets twice per month to discuss how to tackle pressures facing the PA e.g., forest control, community patrols, daily monitoring of fire points, development activities carried out, sharing of news etc.</p> <p>This CEPF project has resulted in strengthened partnerships within the project scope, more specifically between the various non-profit organisations operating in the region, such as Fanamby, RBG Kew, FIVE, and WWF who are all part of the Menabe Task Force. The work throughout this project highlighting issues within the Menabe-Antimena PA has only strengthened the resolve of partners and has also led to increased attention for the area, which has in turn led to further interest from international donors (e.g., a partnership with the UK</p>

Name of Network/Partnership	Year Established	Country/Countries	Established by Project?	Purpose
				Government's Biodiverse Landscapes Fund) for investment in the area. These long-standing relationships will continue to work beyond the life of this project to safeguard Menabe.

Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/Countries	Project Intervention	Delivery of Funds?

Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Hypogeomys	antimena	Malagasy Giant Rat	EN	Species monitoring	Unknown
Microcebus	berthae	Berthe's Mouse Lemur	CR	No intervention to date	Unknown
Pyxis	planicauda	Flat-backed Spider Tortoise	CR	Species monitoring	Stable

LESSONS LEARNED

Farmer Field Schools

- People who participated in the Farmer Field Schools (FFS) continue to follow and implement the CSA techniques with advice shared amongst the wider community with new people adopting the approaches. This shows they are motivated to continue the practice of the acquired technique and to improve their standard of living. This leads them to the objective of not destroying the forest in the PA and to conserve it.
- It is necessary to increase the number of lead farmers at each site to directly support FFS members and to have an up-to-date picture of the beneficiaries' production. With a sufficient number of lead farmers per site (at least 2), the extension of the CSA techniques to FFS members and beyond is ensured increasing the number of beneficiaries implementing the technique increases.
- The use of organic fertiliser is an important activity that cannot be underestimated for all crops as it ensures soil quality.
- It is essential to compile a list of members of FFS groups to avoid duplicating names on other FFS lists or other interventions in the region where same training will be given.

Community patrols

- There is still insufficient law enforcement support. Community patrollers and Durrell have no right of arrest and identified infractions need to be followed up by the appropriate law enforcement agencies but there has been a lack of will / support on the part of the DREDD team to do so. In addition, there has been a lack of funds to support the implementation of joint missions with the various law enforcement agencies including DREDD, Police and Gendarme. This latter intervention is not in line with CEPF policy but is vital to improve protection of the PA.
- There is still insufficient consultation between conservation partners. There are multiple organisations working in the Menabe region but there is still a lack of coordination and communication that needs to be addressed. A consequence of this is the lack of coordination on similar activities and initiatives being implemented across the PA and Menabe region
- Training in the classroom is not enough for community patrollers. Conducting patrols with a Durrell agent helps teach them patrolling techniques, good use of the smartphone and improves the quality of data
- Monthly feedback to patrollers showing them the results and routes helps improve their efforts and working methods.
- There is a need for quick communication from patrol officers to Durrell staff (by phone) in case of emergency
- It takes a long time to implement new technology and systems e.g., SMART mobile.
- Data processing still takes a long time for the team. There have been issues trying to get SMART connect up and running
- The existing community patrols do not cover the whole PA (some areas are a very long way from villages) and further patrol groups will need to be established.

SUSTAINABILITY/REPLICATION

Successes:

- Successful implementation of multiple community-led conservation actions including community patrols, reforestation and Climate Smart Agriculture (CSA) practices
- The majority of FFS members are convinced of the importance of IFA practice in improving their yields and the quality of their cultivated land. 40% of FFS members have seen an increase in production between two successive years.
- The vegetation cover of the cultivated land reinforces the reforestation of the surroundings of the PA such as the associated Cajanus crop. It can cover the land faster.
- Actively supporting the PA manager (Fanamby) and DREDD through the Menabe Task Force to lead the joint fight against pressures. Despite some issues there has been effective collaboration between the stakeholders on this.

Opportunities:

- Giving the opportunity to support local communities to apply the Dina at least to slow down the advance of pressures on resources
- Effective collaboration and involvement of all stakeholders in the common struggle to reduce pressures in the PA
- Opportunity to collaborate with stakeholders to limit the impacts of migration on natural resources

Challenges:

- Lack of initiative by relevant authorities in law enforcement hampers efforts to protect the PA
- Corruption still a prevalent issue
- In some instance community patrollers viewed with suspicion by other sections of communities and on occasion feel threatened. For this reason, it is good to work with representatives of VOIs (local community associations) in forest conservation work.
- A lack of experienced staff to be able to deliver certain activity areas in timely manner
- Covid 19 led to a delay in undertaking several activities

ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

In order to mitigate unanticipated environmental and social safeguard issues, we have continued our active participation in the Information Sharing Task Force meeting to ensure any potential issues are flagged and shared immediately.

We have continued to work closely with the International Office of Migration (OMC), to provide information and advice, to work jointly towards a solution to manage the migration situation in the region (as described in the last report). Violence has been simmering in the communities as a result of the high migration rate into Menabe, and a forest officer was severely wounded in early 2022 during a check on illegal cultivation. It should be noted that this incident did not cause any change in the delivery of our activities in the area. Following this incident, meetings were held between the DREDD and PA managers, both for information sharing and precautionary measures, and subsequently between DREDD and OMC. It was recommended to inform the Joint Design Body before any actions to be undertaken regarding site monitoring activities. From now on, for each joint control activity, the three bodies (gendarmerie, police, military) must be represented and always in pairs.

As part of our commitment to robust social and environmental safeguarding, Durrell has recently recruited a new Global Risk and Safety Advisor to support us to update our Health and Safety policies and procedures and roll out more consistent and comprehensive

safeguarding policy across the organisation and through all of our projects, including Madagascar.

ADDITIONAL COMMENTS/RECOMMENDATIONS

ADDITIONAL FUNDING

Total Amount of Additional Funding Actually Secured (USD)	\$285,282.00
Breakdown of Additional Funding	World Resources Institute = \$88,347 (2019, this is not all the funding as it started in 2018) Turtle Conservation Fund = \$4,935 (2020) Mikajy = approx. \$125,000 (2020-2021) Biodiverse Landscapes Fund = approx. \$67,000 (2021 – Q1 2022)

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

Durrell Wildlife Conservation Trust - info@durrell.org