



Darwin Initiative Main: Final Report

To be completed with reference to the “Project Reporting Information Note”: [\(https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/\)](https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

Submission Deadline: no later than 3 months after agreed end date.

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Darwin Initiative Project Information

Project reference	27-004
Project title	Building future resilience for wildlife and communities in Ambondrobe
Country(ies)	Madagascar
Lead Partner	Durrell Wildlife Conservation Trust
Project partner(s)	DREDD, DRAEP, GSDM, Graine de Vie, Marie Stopes Madagascar
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Project website/blog/social media	www.durrell.org/wildlife
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Table of Acronyms:

AC	: Agent Communautaire ;
ACI	: Agriculture de Conservation Intelligente
ACI	: Agriculture Climato Intelligente
AP	: Aire Protégée
AVEC	: Association Villageoise d'Epargne et de Crédit
C(H)A	: Community (Health) Agents
CEG	: Centre d'Enseignement Générale
CiRAE	: Circonscription Agriculture et Elevage
CISCO	: Circonscription Scolaire
CSA	: Climate Smart Agriculture
CTD	: Collectivité Territoriale Décentralisé
CV	: Chaîne de Valeur
DIU	: Dispositif Intra-Utérin
DRAE	: Direction Régionale de l'Agriculture et Elevage
DRAEP	: Direction Régional de l'Agriculture de l'Elevage et Pêche
DREDD	: Direction Régional de l'environnement Développement Durable
DREN	: Direction régionale de l'Enseignement Nationale
DRICC	: Direction Régional d'Industrie de Commerce et de la Consommation
EPP	: Ecole Primaire Publique
FFS	: Farmer Field Schools
FRAM	: Fikamabanany Ray AmandRenin'ny Mpianatra
GdV	: Graine de Vie
GSDM	: Groupe de Semi-Direct de Madagascar
HIMO	: Haute Intensité de Main d'œuvre
KMMFA	: Komity Miara-Manaramaso ny Faritra Arovana
MSM	: Marie Stopes Madagascar
PAG	: Plan d'Aménagement et de Gestion
PH_APCLFA	: Paysage Harmonieux Complexe Lac Forêt d'Ambondrobe
PTA	: Plan de Travail Annuel (workplan)
PTF	: Partenaire technique Financier
RMME	: Rizieres a Mauvaise Maitrise De L'eau(Rice fields with poor water control)
SMART	:
SPO	: Single Provider Outreach
STD	: Service Technique Déconcentré
TGRN	: Transfers de Gestion des Ressources Naturelle
VOI	: Vondron'Olonalofotony
VSLA	: Village Saving and Loan Association
ZAP	: Zone d'Action Pédagogique

1 Project Summary

Poverty is one of the main drivers of unsustainable natural resource use and habitat degradation in Madagascar. Eighty percent of Madagascar's 25.6 million people are living in rural communities with limited access to tools for, or methods of, sustainable natural resource use. Across much of Madagascar, including Ambondrobe, this has led to a continuing cycle of severe environmental degradation, loss of natural resources, reduced biodiversity and further reduction in human wellbeing.

Durrell began working in Ambondrobe in 1998, leading to the designation of the 7,000Ha lake-forest complex as a Protected Area in 2015. As designated PA Manager, Durrell works with local communities to address the principal threats of shifting cultivation, illegal logging, marsh clearance and invasive water

hyacinth. These negatively impact human wellbeing and threaten endemic biodiversity, including the Critically Endangered Madagascar side-necked turtle. Situated in the dry west of the country, climate change is also an increasing threat. This project will replicate a model of sustainable rural development activities already being implemented by Durrell at three other sites across Madagascar under a Jersey Overseas Aid funded project to 2022. It will enable communities in Ambondrobe (6400 people in 1000 households) to break the cycle of environmental destruction. The provision of skills training, support and resources will improve food security, financial prosperity, and reproductive health, and enable more robust governance at the local level. In doing so, the pressure that communities exert on Ambondrobe’s natural resources will be reduced. Alongside practical habitat restoration efforts and community-led patrolling, these activities will reduce and begin to reverse the trend of destruction. Activities will help ensure Ambondrobe’s ecosystems provide essential and sustainable services to communities, leading to increased human well-being and ensuring threatened species are more resilient to anthropogenic threats and climate change.

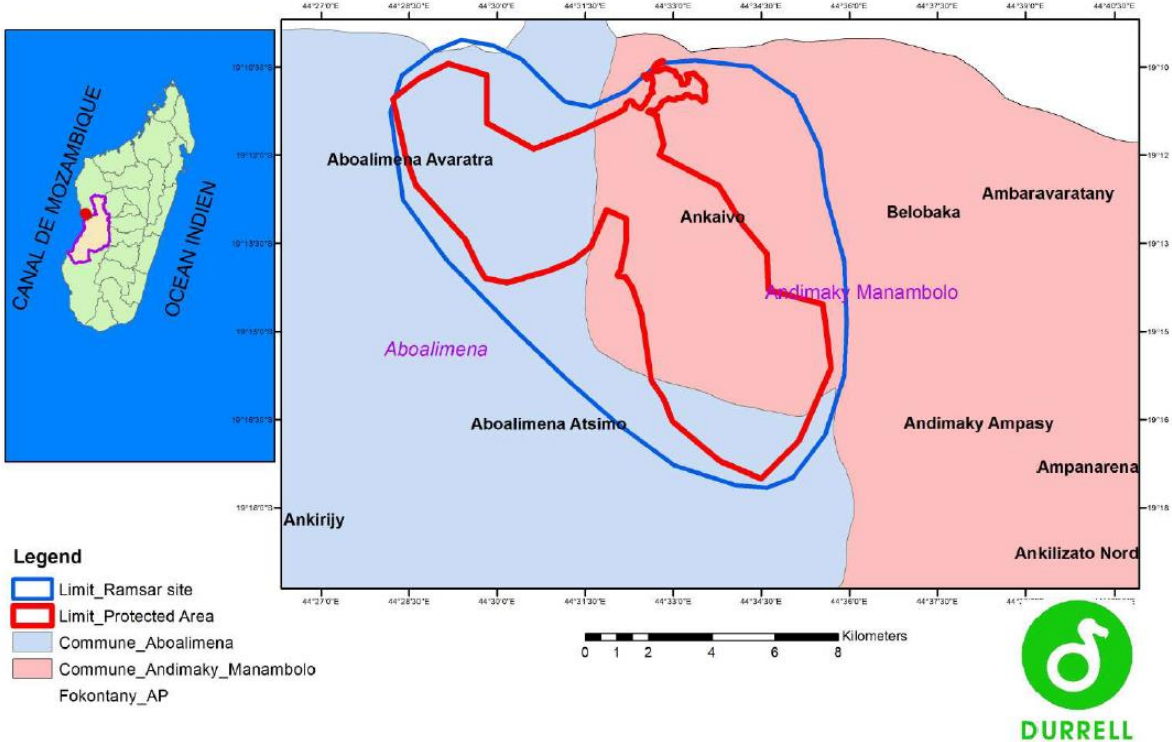


Figure 1: Map, Fokontany of Ambondrobe PA

2 Project Partnerships

DREDD (Regional Director of Environment and Sustainable Development)

The DREDD team supported and engaged in the project during the life of the project through the following activities:

- Ongoing communication and distribution of SMART patrol data reports to DREDD
- Collaboration for reforestation monitoring (June 2021 and July 2022)
- Illegal rosewood cutting issues detected by community patrols were escalated to DREDD, whose team carried out a mission in October 2021.
- Awareness-raising actions on firefighting, lemur hunting and information on laws and regulations have been carried out by DREDD, in particular the laws and regulations dealing with fires and land clearing (Ordinance 60-127 and the COAP Laws).
- A monitoring mission around the protected area conducted by DREDD and the national gendarmerie team was carried out in November 2021 and resulted in 6 people being given custodial sentences.
- Another law enforcement mission around the protected area conducted jointly by the DREDD, the national gendarmerie team and the representative of the Commune was carried out in November 2022, resulting in the conviction of 2 people due to planting in the core area.
- DREDD also held a meeting to distribute farming equipment to producer groups and fire-fighting equipment to communities.

DRAE (Regional Director of Agriculture, Livestock)

DRAE, through the District Agriculture and Livestock District (CIRAE), has supported the implementation and scaling up of Climate Smart Agriculture (CSA) techniques. It made recommendations regarding the adapted practice of CSA techniques and the CSA technical sheets approved by the DRAE in 2021 were used from the 2021 – 2022 crop year to the 2022 – 2023 crop year.

They also participated in the annual assessment of crop yields (2021 and 2022) during harvest periods (July-August) and provided technical recommendations on how the project can address issues such as crop pests and diseases that are the main causes of lower yields.

Although the partnership with the DRAE began in 2021, a collaboration protocol with DRAE was signed in April 2022 to strengthen the way of working between the two parties.

GSDM (Groupe de Semi-Direct de Madagascar)

An action plan for the implementation of CSA strategies in Durrell intervention areas was developed with GSDM in Year 1, which informed Durrell's agricultural work plan and technical guidelines. To strengthen the implementation of these strategies, GSDM conducted a follow-up field mission during Y2 in five villages to monitor the progress of the implementation of CSA techniques by Farmer Field School (FFS) members. Crop fields of selected farmers were visited to assess the adoption of CSA techniques, identify the main constraints and problems related to the implementation of CSA techniques and propose technical solutions. Following these visits, the CSA's action plans were reviewed and updated.

A practical training session for Durrell technicians was organized with GSDM in Y3 to strengthen the technical capacities of local staff and at the end of this session, the action plan for the 2022 – 2023 agricultural season was defined.

Marie Stopes Madagascar

The MSM team, through their SPO (Single Provider Outreach) agents, provided family planning services to village communities in the 9 villages around the protected area.

Field visits are discussed and scheduled together with the MSM team (central and regional) two months in advance to allow MSM to organize the visit to the SPO at their level. At the beginning of the collaboration, 9 Community Health Agents (CHAs) supported Durrell and MSM in community outreach and mobilization for the promotion and adoption of family planning in villages. In Y3, the number of such CHAs became 18 due to the expansion in the number of settlements (sub-villages) we were able to reach with family planning activities. These 18 CHAs were trained on family planning methods and reproductive health awareness.

Graine de Vie

Graine de Vie (GdV) is Durrell's main partner for reforestation across conservation sites. Collaboration with GdV started concretely in Y2, and a Memorandum of Understanding was developed to set up nurseries in 3 villages (Aboalimena, Ankaivo and Belobaka), to train village nursery teams and Durrell field staff and to assist village communities during the tree planting phase. GdV provided seeds and seedlings (mainly for fruit trees), equipment for the establishment of the three Y2 nurseries as well as the training of nurserymen and staff.

3 Project Achievements

3.1 Outputs

Output 1: Improved community engagement reduces negative impacts on lake and forest habitat and actively restores lake and forest habitat by 2023

Over the course of the project community engagement in environmental protection and restoration activities has improved which has led to a reduction in negative environmental activities, achieving this output. This is evidenced by the decline in the number of threats per km² over the project period – the project also actively reforested 129.4 ha of native forest, a process which was led by community association members.

Community patrols

Engagement in community patrol activities has increased since the start of the project. [REDACTED]

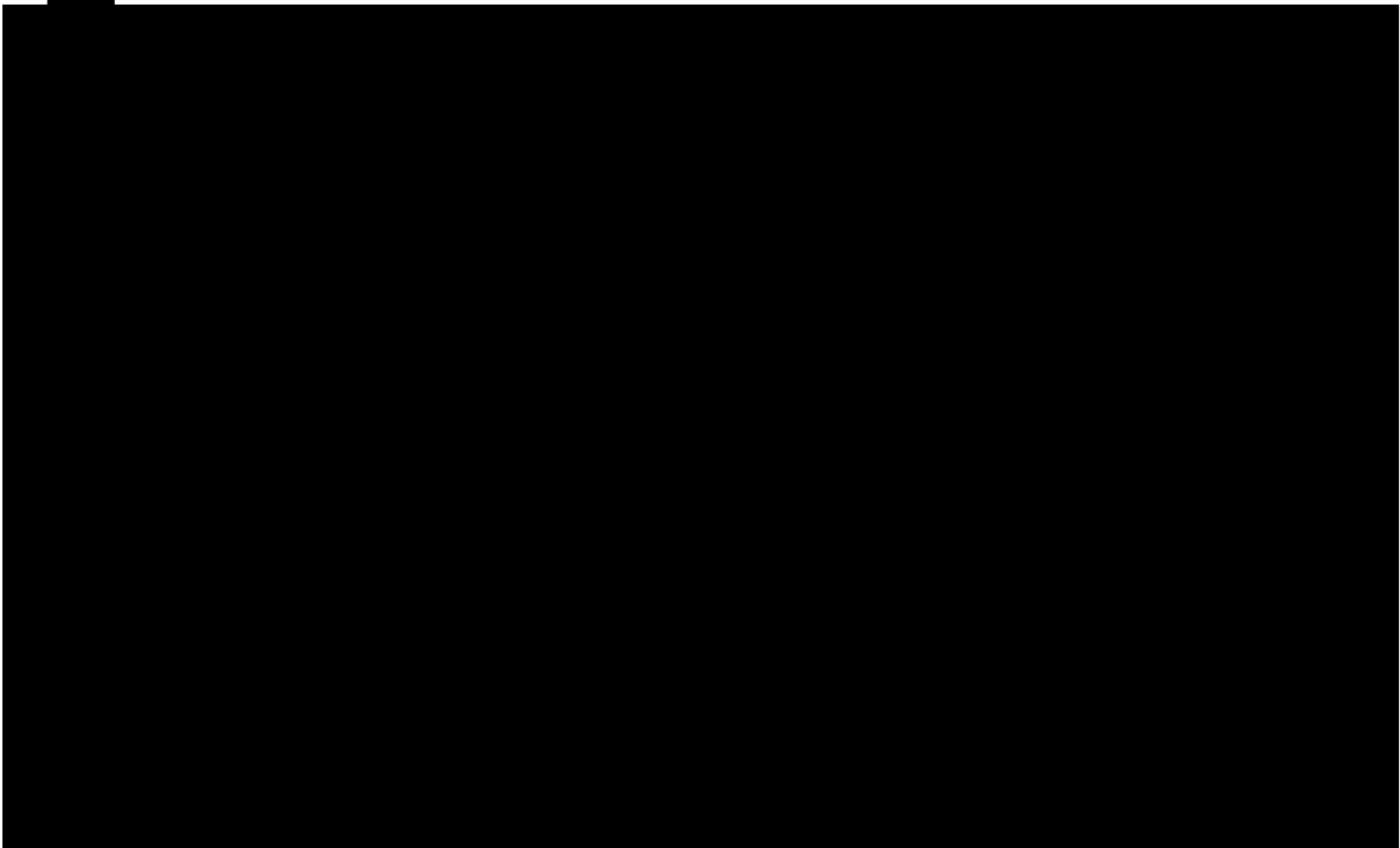
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Restoration activities

Marsh restoration activities led to an area of 27.14ha of marshes planted with *Phragmites communis* and *Tipha mangostifolia* by Y3 (Table 3) reaching just short of the 30ha predicted (**Indicator 1.3**). This was due to difficulty in identifying planting areas in Y1, which we were able to address via the use of a drone in Y2. The area replanted in Y3 was reduced as the water levels within the restoration area remained too high during the planting season. Water hyacinth was removed from 13ha of Lake Ambondrobe and from 1ha of a peripheral lake (Table 4), again just short of the 15ha total predicted for the project (**Indicator 1.4**). Priority areas for marsh restoration, including critical breeding habitat for waterfowl and fish, were

identified using drone images. Durrell patrollers and field staff who were conducting monthly monitoring of reforestation areas also recorded the presence of water hyacinth in the lake and identified priority places for planting and the extension of bird nesting habitat. Both marsh planting and water hyacinth removal were made effective through collaboration with Fokontany chiefs and VOI presidents, which increased the commitment and mobilisation of community members from villages surrounding the lake to participate in restoration.

Table 3: Area of marsh planted in hectares (ha) and number of people participating per year

	Y1	Y2	Y3	Total
Area of marsh planted (ha)	8.14	11	8	27.14
Number of people participating	44	180	51	275

Table 4: Water hyacinth removal in hectares (ha), and number of people participating per year

	Y1	Y2	Y3	Total
Area of lake cleared (ha)	3	8	3	14
Number of people participating	39	40	25	104

Through our collaboration with Graine de Vie (GdV), three nurseries growing native tree species in Ambondrobe PA were set up in Y2, and this was doubled in Y3 to six nurseries. GdV provided seeds, seedlings and nursery maintenance equipment (spades, watering cans, shovels) and communities were responsible for setting up nurseries, fences and firewalls. We exceeded the levels of seedling production needed to meet our reforestation targets (**Indicator 1.5**) by producing 133,360 native tree seedlings over the project (Table 5), as well as utility species such as papaya, orange and olive for communities. The number of seedlings produced in Y2 was fewer than in Y1 and Y3, which could be explained by security problems in the region, causing GdV to reduce their frequency of visits to the villages during this time.

Capacity building for nursery installation, seed treatment, planting methods and plant care was carried out by GdV in Y2 for 3 community members employed as nurserymen, 47 members of the VOI and 2 Durrell staff members. A further 3 nurserymen were employed and trained in Y3 to maintain the additional nurseries.

Reforestation of key areas in Ambondrobe PA more than achieved our target of 20ha per year (**Indicator 1.6**), reaching a total of 129.4ha over the project, increasing year on year (Table 5). These results were achieved by increasing the number of nurseries; increasing the number of native species planted, which increased from three native species in Y1 to ten in Y3; and the strong collaboration and commitment of the community nurserymen to this restoration activity. In Y2 of the project, 400 VOI members (45% of whom were women) participated in reforestation activities, and the Chief of Environment and Forests (the representative of DREDD at the District level) was also involved in the supervision of the communities during the planting phase. In Y3, community participation in reforestation activities greatly increased to 1,428 people.

Table 5: Native tree seedlings grown in community nurseries per year, and area of land planted for reforestation.

	Y1	Y2	Y3	Total
Native tree seedlings grown in community nurseries	44,200	34,200	54,960	133,360
Area of land planted for reforestation (ha)	36	46	47.4	129.4

Planted areas were monitored in collaboration with DREDD Menabe, who assessed tree survival in July 2021 and July 2022, and by community patrollers and Durrell staff who carried out monthly monitoring visits. Survival rates of planted trees differed greatly between years, dropping from an average of 75% in our three planting sites in Y2 to 9% in Y3 (Table 6). This was unfortunately due to fires in the reforestation areas of Aboalimena and Ankaivo villages in Y2. Monitoring of replanted areas, along with the maintenance of firebreaks, will continue beyond the end of this project.

Table 6: Tree seedling survival in three planting areas per year

	Y2	Y3
Aboalimena seedling survival rate (%)	59.23	17.16
Ankaivo seedling survival rate (%)	81.66	10.94
Belobaka seedling survival rate (%)	84.66	17.9
Average seedling survival rate (%)	75.18	9.37

Output 2: Provision of Climate Smart Agriculture training through Farmer Field Schools (FFS) leads to increased crop yields, improving income generation and food security for over 300 households whilst reducing harmful environmental impacts by 2023.

Over the course of the project, Climate Smart Agriculture (CSA) training, delivered through FFS, has led to demonstrably higher yields than the regional averages from cropland cultivated using these methods,

and therefore represents an improvement for participating farmers in terms of income and food security, achieving this output.

By the end of 2020, GSDM had assessed nine focal Fokontanys for the project on their physical, socio-economic and hydrological environments. They proposed systems for different types of crop production, good practice in agroecology specific to the area, and how to support local farmers (for example FFS, exchange visits etc.) (**Indicator 2.1**). This assessment was important to guide the development of project activities so that they were suited to the environmental context of the region and to the socio-economic contexts and structure of local farmers and led to the development of action plans for four relevant systems of crop production, which were reviewed in 2021. They also trained Durrell staff and partners on Climate Smart Agriculture (CSA) techniques, customised for specific crop varieties and techniques, using the diagnosis they had undertaken.

A total of 34 FFS groups (maximum 3 per village) with 647 members, including 238 women (37%), have been created over the past three years (Table 7), through mass awareness campaigns and help to identify beneficiaries from the chief of the Fokontanys, the presidents of the VOIs and others. Community members are motivated to join FFS groups as they are convinced by the success of the method and the access to equipment, materials, and training that this provides them.

Table 7: FFS groups created in each year of the project, with percentage of women in each group.

	2020 - 2021	2021 - 2022	2022 - 2023	Total
No. FFS groups created	14	11	9	34
Total members	276	215	178	647
Percentage of women (%)	32	44	35	37

By Y3, the project almost doubled our target by training 647 farmers in CSA techniques (**Indicator 2.2**), with 37% female members, and an additional 802 farmers outside of FFS groups (1449 total). Durrell's Agricultural Technician (recruited for this project in November 2020), trained FFS groups in the basic concepts of CSA, FFS technical management and accounts, crop cultivation techniques, biological crop treatment, and harvesting techniques. Agroecology fact sheets were also developed with the support of the GSDM and endorsed by DRAE Menabe; these were used during the training and have been shared with beneficiary farmers since Y1. To implement the agricultural techniques post-training, FFS members were provided with materials and equipment to practice, and the lead farmers supervised farming technicians to implement the new techniques. A demonstration plot was also set up in each of the 33 FFS groups, serving as sites for collective learning, observation and reference.

As per the proposal by GDSM, farmers cultivated land using improved agricultural techniques such as a system of crop rotation, crop combinations and biological pest control. The area under cultivation reached 274.1 ha by Y3 (**Indicator 2.3**). These systems reduce harmful environmental impacts by maintaining and improving soil fertility, controlling weeds, and preventing plant diseases. In addition, the use of organic pesticides prepared from plant extracts, natural products and compost limits chemical pollution, prevents soil impoverishment, and reduces the harmful impact on soil micro-organisms and human health. By Y3, the proportion of farmers using chemical fertilisers had dropped to 0%, from 50% in Y1 (**Indicator 2.4**), although 10% still used pesticides to control insect pests.

The climate resistant and highly nutritional cover crops chosen (**Indicator 2.3**) serve as food supplements for the local population, increasing food security. Crops are grown in combination, as follows:

Y1: Peanut, black eyed peas with maize, irrigated rice, rice and Tsiasisa (ricebean).

Y2: Peanut with cajanus, peanut with maize, rainfed rice with cajanus, RMME(rice fields without controlled irrigation) and cowpea, black eyed peas and maize, peanut and maize.

Y3: Peanut with cajanus, rainfed rice.

CSA techniques measurably improved the yield of farmers employing CSA techniques in the two growing seasons assessed during the project (**Indicator 2.5**). Crop yield assessments undertaken by the DRAE (Ministry of Agriculture and Livestock) district representative, Durrell technicians, and FFS groups showed higher average yields for the majority of crops growing in areas under CSA cultivation than regional averages in both the 2021 and 2022 growing season (Table 8 and Table 9). The only two crops that showed a decrease from regional averages were maize in 2021 and beans in 2022, both due to low levels and delay in rainfall in these seasons. In 2021, the yield result for rice is remarkably high due to the fertility of the soil on the baiboho (lowland fields) and the use of improved seed varieties. In general, the improved

cropping system under CSA encourages the interaction of nutrients assimilated by the two crops grown in combination and avoids the problem of plant spacing.

Table 8: Average yield for CSA cultivated land and regional averages, 2021 season

Type of crop	Average yield ACI (T/ha)	Regional average yields (T/ha)
Peanut	1.7	1.1
Rice	6.9	3.5
Black eyed peas	2.7	2.5
Maize	2.8	3.5
Niébé (ricebean)	3.2	2.6

Table 9: Average yield for CSA cultivated land and regional averages, 2022 season

Type of crop	Average yield ACI (T/ha)	Regional average yields (T/ha)
Peanut	1.6	1.24
Rainfed rice	2.8	2.55
Bean	0.8	1.55

School gardens were created in four primary schools (**Indicator 2.6**), covering a total of 6ha and the first harvest took place in June 2021, with yields which were comparable to regional averages. As reported in 2022, the provision of agricultural inputs and training directly benefited 90 households in the four villages involved in this project, with indirect beneficiaries from another 130 households in all villages. The first successful school canteen project benefited 110 students, and an additional 100 households benefited from wells built under this project, both through improved irrigation and access to domestic water. Unfortunately, the collaboration with the secondary school did not succeed due to the non-commitment of the parent-teacher associations, and various factors have also hindered the school gardens in primary schools, including instability in the villages and a lack of motivation from beneficiaries to take responsibility for maintaining the gardens. This activity was co-funded by the Special Self Help fund of the Embassy of the United States in Antananarivo (a full report is available in Appendix 11).

Output 3: Sustainable financial tools and market-based opportunities are developed for 9 fokontany and reach at least 270 individual members (60% of which are women) by 2023.

By the end of this project, VSLAs were promoting the financial stability of vulnerable populations through a community-based savings culture adapted to the local context.

Through this system, VSLA members can efficiently manage their income through savings and have the capital to start income-generating activities. Members will then be able to grow their funds and have access to economic opportunities, and even after the life of the project, members will be able to continue and reproduce these financial tools on their own. For groups that have already done the sharing, the annual savings capacity of members varied from 529,000 Ar to 1,666,500Ar. In 2023, VSLA groups seized market-based opportunities including collective sale of rice during the lean season (February to April of the year), and response to a family's order for fabrics at a cultural ceremony.

The feasibility of establishing VSLAs in Ambondrobe was assessed in Y1 of the project (**Indicator 3.1**), with the collaboration of local and traditional authorities, VOIs, and individual producers in focus villages. It was found that there were no formal financial services available. Households saved in their own way, but were vulnerable to seasonal changes in income, for example agricultural off-seasons. In times of financial need, for example for medical or other urgent situations, if people hadn't saved enough in the agricultural season, then they relied on borrowing from neighbours, or even loan sharks or other lenders with high interest rates. The VSLA approach seemed appropriate to address the needs of our focus communities as it is flexible and self-managed, it could integrate well into existing institutions, and operating costs are minimal. Four Durrell staff members therefore received training on how to form and provide ongoing support to VSLA groups at the end of 2021, with annual refresher training and experience sharing between trainers e.g., various activities of VSLA groups to increase the fund, rules applied by different groups for access and repayment of loans.

Four pilot VSLA groups were set up in Y1 of the project (**Indicator 3.2**), of which 3 are still operational (the fourth was unable to continue because of instability in the village), with an average of 47.6% female participation. By the end of the project, 22 VSLA groups of 440 members were operational in all of Durrell's intervention villages, as can be seen in Table 11, accounting for 12.4% of the adult population of the nine focal Fokontans, of which 66% are women (**Indicator 3.3**). Five groups among them were preparing to complete their second cycle by the end of June 2023. Women are motivated to join VSLA groups because they have seen that the system can help them improve household budget management, which women are generally responsible for. The new groups received VSLA toolkits and were trained on 9 VSLA-specific modules, including capacity building in financial education, to educate members from the creation of the group up to autonomy of the group after a 12-month cycle.

Members dropped out due to non-compliance with group rules and other various personal reasons, and so to remedy this we strengthened follow-up of groups during the development phase and better explained the objectives, regulations, and benefits of the VSLA process. The groups allocate a fairly large sum to the social fund, which proves that VSLA strengthens member solidarity.

Members in the first 8 groups to complete a cycle (at the end of Y2, Table 10) got a fairly high rate of return on investment (20%), due to interest on credit repaid and a relatively high number of applications for credit. The weekly membership fee varies depending on the group members' standard of living. For the last year of the project, unlike the two previous years, almost all the groups in the second cycle were able to contribute the maximum value. At the end of March 2023 (Table 12), the cumulative total savings of the 22 groups amounted to 3,913 GBP, generating a net profit of GBP 892 (23%). 121 loan applications were granted in the 22 VSLA groups, amounting to GBP 1,907 (49% of the group's cumulative total savings). 26% of members carry out loans at group level, with the average loan value taken out by members being GBP 15.80.

During the second half of Y3, the project began to identify and set up Village Agents (VAs). The VAs are intermediary members selected from the VSLA groups, who will replicate the VSLA approach on a large scale, deliver services on request and ensure the continuity and sustainability of the approach. In general, members borrowed to finance income-generating activities such as trade, to pay for agricultural labour, or to buy agricultural materials. Apart from improving livelihoods, loans have also been used to meet other household needs such as health, and school fees for children.

Table 10: Group composition and financial performance of the 7 VSLA groups created in Y2 of the project and including the 4 pilot groups created in Y1. 1 GBP = 5,455 Ariary.

Indicators	At creation	At the end of the cycle
Group compositions		
Number of groups	11	8
Number of group members (for the 8 groups at the end of the cycle)	150	131
Number of female members	83 (55.33%)	76 (58.02%)
Drop-out rate (for the 3 groups at the end of the cycle) (%)		12.67
Financial performance (end of 2022)		
Total value of savings (GBP)		1,437
Cash credit fund (GBP)		1,731
Net profit (GBP)		294
Average annual savings per member (GBP)		12
Average share per member (GBP)		13.21
Applications for loans		64
Interest rate (%)		between 5-20
Rate of return on savings ¹ (%)		20

Table 11: VSLA groups in Durrell's intervention villages, with group compositions and numbers of cycles completed.

Fokontany	Number of groups	Number of members	Number of women	Number of groups per Cycle
Ankaivo	2	41	27	Cycle 1: 1; Cycle 2: 1
Belobaka	2	52	27	Cycle 1: 1; Cycle 2: 1
Aboalimena Atsimo	3	52	52	Cycle 1: 1; Cycle 2: 2
Aboalimena Avaratra	2	34	24	Cycle 1: 2
Ankilizato	3	64	30	Cycle 1: 3
Ampanarena	5	103	80	Cycle 1: 4; Cycle 2: 1

¹ Profit or rate of increase in savings

Ambaravarantany	2	36	23	Cycle 1: 2
Andimaky	1	21	9	Cycle 1: 1
Ankirijy	1	18	11	Cycle 1: 1
Bevaho	1	19	6	Cycle 1: 1
TOTAL	22	440	289	

Table 12: Financial results for the 22 operational VSLA groups from March 2023, 1 GBP = 5,455 Ar.

Indicators	Data collected in March 2023
Group composition	
Number of groups created	22
Number of group members	440
Number of women	289 (65.68%)
Financial performance	
Cumulative value of savings during this cycle	3,913 GBP
Loan fund in the kitty	2,898 GBP
Net profit	892 GBP
Outstanding loans	1,907 GBP
Number of loans in progress	121
% of members taking loans	26
Average loan value	15.80 GBP
Utilization rate of the loan fund (%)	49
Rate of return on savings (%)	23
Minimum membership fee	500 Ar
Maximum membership fee	5,000 Ar
Balance of the social fund	1,136 GBP

The presence at regional fairs by beneficiaries was significantly hampered by the Covid-19 pandemic, which prevented the cancellation of events (and a ban on regional travel) in 2020 and 2021. A regional fair on sustainable agriculture was organised in Morondava in Y1, which was attended by 12 beneficiaries (5 FFS members, 3 women), and the 'Fier-Mada' fair was organised in Tana in Y2 and attended by 2 beneficiaries (**Indicator 3.4**) in order to exhibit their agricultural products at the event. The objectives of the fairs are to promote the sustainable socio-economic development of the region through sustainable agriculture and agricultural value chains, and to strengthen resilience to climate variability. Exchanges with other groups, cooperatives and partners took place and they were able to have contacts of economic operators for their commercial opening.

Market value chains for local products and services to improve community incomes and sustainable use of natural resources were identified through a study in Q1 2022 (**Indicator 3.5**), carried out by the Durrell Agri-economist and with the support of an intern. This was carried out in three main steps:

1. **Selecting the value chains and developing the methodology.** Selection criteria were: to use a value chain that is included in the protected area management plan, developed in the region (agro-ecological approach), promoted by the project, has a functional market opportunity for distribution, and which reaches the target population (standard of living, gender). Questionnaires were developed, based on these criteria, for the different groups targeted in each of the value chains.
2. **Field data collection.** The survey was conducted in 6 villages (Aboalimena, Aboalimena North, Ankaivo, Andimaky, Apanarenana, Ankilizato). Data collection took place in two phases, first with target producers, fishermen and breeders who are members of VSLA groups. For household surveys, 30 people per village and one focus group per village were undertaken. A total of 174

households were surveyed (including focus groups) in the 6 villages. Secondly, surveys and interviews with other actors in the value chain, such as collectors, collectors, transporters, service providers, input sellers. They were mainly based at the district and regional levels.

3. **Data analysis.** The survey data were supplemented by a review of available secondary data (agricultural statistics, regional development plans, national food and crop assessment, periodic national household surveys, etc.). Techno-economic analyses to validate the technical feasibility and economic profitability of each pre-selected sector are complete. Following analysis and consultation with local communities, the three main priority value chains are groundnuts, grain legumes (beans, lentils, Tsiasisa, cowpeas and black eyes) and fish. The secondary value chains are rice, beekeeping, poultry, fruit trees and pigs.

For each of these selected Value Chains, the development strategies consist of establishing a vision of overall improvement integrating community development objectives and protection of the protected areas concerned. The aim is therefore to set up Value Chains that are both profitable and sustainable: (i) profitability is achieved by increasing the incomes of the producers concerned and (ii) sustainability includes the resilience of the Value Chains to changes in the context and their consistency with the imperatives of protecting the protected areas, which is the aim of the intervention. The actions will therefore affect all the links in the chain as well as the overall environment surrounding the sector:

- Production, including the supply of inputs and equipment,
 - Post-harvest management and processing,
 - Marketing,
 - The environment and governance: organising producers, structuring the sector, strengthening the managerial capacity of the leaders of Producers' Organisations and sector platforms, political and legal framework, etc.
4. Following the value chain study, field agents conducted sensitization in three villages (Abolimena North, South, Andimaky and Ampanarena) at the level of farmers' organizations to be able to create a cooperative that will ensure the marketing of their products. Following this, a cooperative was created in the village Aboalimena with 18 members. Capital of 20,000Ar per member has been collected (a sum of 360,000Ar). The files for formalization are ready (statute, list of board members, list of members' shares in the capital of the cooperative, minutes of election of board members, request for receipt). Currently, members are in agreement to collaborate with DRICC to train them on the process to follow towards the effectiveness of the formalization of their cooperative.

Output 4: All households across 9 fokontany in Ambondrobe have access to reproductive health support by 2023 to make choices concerning family planning and household wellbeing.

The partnership with MSM and the work carried out throughout this project means that all households (approximately 1,200), and particularly women, in the 9 focal Fokontany in Ambondrobe now have access to regular reproductive health support and family planning (FP) services, where previously it had lapsed in these communities (after the government led 'Mahefa' project). Therefore, we consider this output achieved.

To launch the project, MSM and Durrell met to organise and plan the logistics and collaboration of the interventions, and also made courtesy visits to representatives of the Ministry of Health based in Belo District, Tsiribihina and to public hospital officials in Aboalimena and Andimaky communes. In Y1, initial workshops were held in all 9 Fokontany (**Indicator 4.1**): a first round was held to inform communities about the project and to seek input and advice from village elders, local and traditional authorities; and then a second round was held to inform communities of the MSM's first visit. After the selection of community health workers (CHWs) with whom we work in each village, community sensitizations were conducted jointly by the socio-organizer of the project and the CHWs, and where appropriate, the CHW carried out home visits to sensitize households.

The first visit to communities to carry out awareness-raising and information missions on the different FP methods started in March 2021. This was then repeated quarterly, providing FP services and involving the community in family planning initiatives, meaning that active reproductive health programs are now operative in the two communes and 9 fokontany (**Indicator 4.2**). Both Y2 and Y3 had 36 community information meetings (4 per each of the 9 fokontany), which are carried out quarterly (**Indicator 4.4**). To date, 693 women (257 in Y2, 436 in Y3) have benefited from family planning services from these visits, the services provided are detailed in Table 13.

Increased access to community health workers (CHWs) was created in Y2 by doubling the number per fokontany to two. Fourteen CHWs were trained by MSM-SPO and Durrell in Y2 and 18 in Y3, including 8 women (**Indicator 4.3**). The main topics discussed were long-term family planning methods, appropriate methods of community reproductive health awareness, and the population-health-environment (PES) approach. These CHWs provide awareness-raising, information on long-term family planning methods and

organize visits to their respective villages. They also act as facilitators between the project, MSM and communities.

Table 13: FP services provided to the 9 fokontany in the 4 annual visits in Y2 and Y3 of the project (8 visits in total to each fokontany).

Visit	FP Methods		Number of reproductive health clients
	Implant	IUD (intrauterine device)	Total
June 2021	60	9	69
September 2021	49	7	56
December 2021	63	16	79
March 2022	40	13	53
June 2022	107	21	128
September 2022	76	11	87
December 2022	109	0	109
March 2023	107	05	112
TOTAL	611	82	693

Output 5: Local governance capacity and community cohesion is increased across 4 local associations (193 community members) through the provision of capacity building, improved local association infrastructure and social events.

Following delays in Y1 due to COVID-19, the Good Governance Training Programme began delivery in Y2. This was accompanied by the construction of VOI offices and a well-attended football tournament in December 2021 and 2022, which sparked community interest in reforestation activities (participants were split at both events). Starting with Y2, the quarterly joint mission with DREDD took place to strengthen the capacity of VOI members on taking responsibility and enforcing existing laws regarding fire and land clearing. Then, a monthly decision-making meeting on VOI's active life with existing associations took place, during which VOI was able to convince members to join together to make chairs useful for meetings organized by the VOI. Therefore, we would consider that the local association infrastructure has been improved and that this output is achieved. More detail is provided below.

A needs assessment for the 4 local associations was carried out in Y1, and based on that, a training program focused on community leaders was developed (**Indicator 5.1**) which covered nine core modules under four themes:

- **Planning**
 - Establish regular and systematic planning and monitoring of management activities
- **Associative life**
 - Manage the associative life of the association
- **Communication**
 - Maintain effective communication and good working relationships with stakeholders and partners
 - Organize and facilitate presentations and meetings at local/regional level
 - Identify, prevent and resolve interpersonal conflicts
- **Good governance**
 - Contribute to the development, implementation and monitoring of a business plan
 - Manage the financial resources of the community organization
 - Make effective decisions
 - Demonstrate a commitment to transparency and participation

In Y3, 45 VOI members (Table 14) were trained in the above nine training modules (**Indicator 5.2**) and in Y3, another 55 VOI members were trained (Table 15) with DREDD Menabe in three good governance modules so that they can put into practice their role and responsibilities in the operation of the TGRN and the implementation of conservation activities. These were VOI Associative life (roles and responsibilities of members, status, and rules of procedure); a reminder of the use of management tools (PAGs, Terms of Reference, DINAN'MENABE, PTA); and communication and conflict management.

Table 14: VOI members trained in the 9 good governance modules in Y2.

Name of the municipality	Name of VOI	Number of members trained
Aboalimena	Vonona Ho Maitso	11
Andimaky	Magnirisoa Soatalily	13
Ankaivo	Soatahiry	10
Bélobaka	Mahateza Soa	11
Total		45

Table 15: VOI members trained in good governance in Y3.

Name of the municipality	VOI	Number of members trained
Aboalimena	Vonona Ho Maitso	20
Andimaky	Magnirisoa Soatalily	20
Ankaivo	Soatahiry	15
Total		55

At the beginning and end of the training, participants completed pre and post training questionnaires determine their level of knowledge on the subject, varying from "don't know at all", "has some knowledge", "mastery" to "mastered perfectly". Almost all the answers given to the pre-training assessment were "don't know at all" or "have basic knowledge". There were some who say they master it or master it perfectly, but these were the presidents of the VOI. For the post-training assessment (**Indicator 5.2**), their knowledge improved as they answered either "moderately" or "yes" to some of the key questions.

By the end of Y2, 2 VOI offices had been constructed, and by the end of Y3, the remaining 2 were also complete (**Indicator 5.3**); the delay being due to the inaccessibility of construction sites during the rainy season and the seriousness of the security problems in the area. In June 2021, four protocols which stipulate the method of land acquisition, the responsibilities of each actor and the contributions of VOI members were developed with the community villages of Aboalimena, Ankaivo, Belobaka, Andimaky. These protocols were signed by the chiefs of the fokontany, the presidents of the VOI, the commune to which they belong and Durrell. A contractor was employed in November 2021 and the construction began in January 2022. The land for the construction was donated either by the municipality, by the fokontany, or by the members of the VOI, and members of the VOI also provided the raw materials such as sand, blocks, and water. The transport of office furniture to the premises of the four VOI is planned for the end of June 2023 and the official presentation of furniture and billboards is planned for July 2023 in the presence of local authorities (Fokontany Chiefs, representatives of Communes and traditional authorities).

The percentage of households participating in local associations appears to have decreased since the baseline report (**Indicator 5.4**) (in Y3, 56% of households announced that they had participated compared to 67% in the baseline report), however, the average number of participants in monthly meetings had increased by the end of the project, from an average of 35 participants per meeting to an average of 50 participants per meeting; the number of meetings held in each village had increased; and by the end of Y3, the groups represented at the meeting had also increased.

Table 16: Number of monthly meetings, number of participants and composition of members in four villages.

	Y1	Y2	Y3
Number of meetings	3	10	12
Average number of participants		35	50
Members present	VOI members, village patrollers, fokontany chiefs and traditional authorities (VSLAs and FFS not yet created).	VOI members, village patrollers, fokontany chiefs, traditional authorities, female members of VSLA groups and FFS groups.	VOI members, village patrollers, fokontany chiefs, traditional authorities, female members of VSLA groups and FFS groups, DREDD.

In Y1, only 3 monthly meetings were held (Jan – March 2021) and this was to organise the community contributions and responsibilities for the construction of the VOI offices. In Y2, 10 monthly meetings were held – meetings were not held in Dec 2021 and Jan 2022 due to the inaccessibility of the sites during the

rainy season and because most communities were occupied by the start of the agricultural season. In Y3, meetings were held every month, and these included information and experience exchange and mobilisation of the communities regarding fire-fighting. DREDD's presence at meetings has provided more support to VOI members and the community on their accountability for various pressures on the environment and compliance with the law. Thus, three VOI have finished the establishment of their annual work plans (PTA) for 2023 (VOI Vonona Ho Maintso in Aboalimena, VOI Ambondrobe Soa Tahiry and VOI Magnirisoa Soatalily in Andimaky) and the fourth VOI have to wait until their village is accessible (Belobaka).

Annual football competitions were held each year, which have generated a lot of interest and speeches by local authorities such as the district chief and mayors, which have focused on raising awareness among young people about environmental protection and participation in reforestation actions. It was noted that there was an active participation of these young people during the reforestation campaign in January and February 2023.

The tournament was not able to be held in Y1 due to COVID-19 restrictions. However, it was organized in December for the two years 2021-2022 in the two municipalities Andimaky and Aboalimena in the presence of local authorities. Five villages in Andimaky commune and three villages in Aboalimena commune took part in these preliminary matches. In 2021, 8 teams participated in the tournaments with the presence of four female players while in 2022, 12 teams participated including 4 teams in Andimaky (2 women's teams, 2 men), 8 teams in Aboalimena (2 women's teams, 6 men). A total of 154 jerseys were distributed to the players. Compensations such as cups and cash were distributed to the winners. In Y2, 450 community members were engaged including 150 players, 300 spectators; and in Y3, 468 people were engaged including 168 players and about 300 spectators (**Indicator 5.6**).

3.2 Outcome: The wellbeing of c.6400 people in 1000 households across 9 fokontany is enhanced and negative impacts on natural environment decreased in Ambondrobe by 2023.

When planning any conservation intervention, Durrell strives to maximise our ability to improve people's well-being at the same time as reducing negative impacts on the environment. The support offered to VOI members and community leaders is designed to improve their capacity to ensure the protection, preservation and restoration of the environment, especially in areas where they have had the power to transfer management. Through this project a total of 55 community leaders have received training and have demonstrated leadership, responsibility to inform and sensitize communities to respect the law related to the environment. These community leaders assisted in overseeing 1428 community members in forest and marsh restoration efforts.

Moreover, KMMFA members who are currently at 145 people were doing their patrol tour to observe and detect illegal actions.

In addition, with the FFS groups of 647 households, the practice of the new ACI/CA technique contributed first to the improvement of soil fertility, then to the improvement of production yield and especially to the guarantee that there was not too much risk that these supported households thought of destroying nature (animals, birds, firewood, lumber, or picking)

Support for VSLA members, currently comprised of 440 households, was aimed at their financial stability. They had learned to use funds, to save and many of them have already enjoyed the profits from this activity (purchase of solar kit panels, mattress furniture, land, zebus, seeds; land rental, ...). The important thing is also that they have turned away from actions with negative impacts on the environment.

Similarly with the 693 women beneficiaries of family planning, since their households were able to limit the number of children conceived, these women could contribute to activities to improve household income and also to environmental conservation activities for example to integrate into FFS / VSLA groups, ...

To conclude, the negative impacts on the environment are reduced thanks to all these alternative activities offered to communities including the 50% decrease in burned areas of 237.83 ha in 2022 against 462.17 ha in 2021. During the three years of the project, patrol activities contributed to the year-on-year decrease in observed violations per km (0.08Y1; 0.043 Y2 and 0.040 Y3), and also almost 100 ha of abandoned crop fields are restored using the ACI technique.

Ecological and reproductive health indicators (**Indicators 0.1 – 0.3**) were collected in all three years of the project, whereas indicators of human wellbeing (**Indicators 0.4 – 0.8**) were only collected in Y1 and Y3 through household surveys and surveys of VOI members.

3.2.1 Indicators 0.1- 0.3: Ecological indicators

0.1 Area of dry forest by end Yr3 is at least 5,300Ha (current area 5,467Ha) representing a decrease in deforestation rate from current 2.1% to less than 1%

In December 2021, the drone team conducted a field visit to the Ambondrobe site (Aboalimena and Ankaivo) to collect real data on the state of forest cover, identify and assess the state of forest cover to aid in forest protection and conservation, and use the use of drones to validate Landsat data with high-resolution images (5cm/pixel vs. 30m/pixel for satellite imagery). Three overflights over a total area of 33.19 ha were carried out. In Y2, through ground verification of satellite imagery via drone imagery, we were able to confirm the baseline of forest cover status, to confirm baseline for outcome indicators 0.1 (deforestation rate) and 0.2 (marsh cover). The area of 5,467Ha includes both the Protected Area and the 4 Natural Resource Management Transfers (TGRNs).

In 2022, a drone overflight assessment was conducted to determine the rate of forest loss. Thus, the loss of forest for this year 2022 was 7.08% caused not only by fire but also by the transformation of forests into corn cultivation land (clearing or cutting trees), planting and especially the fire created by zebu thieves. However, efforts to reduce burned areas in the Protected Area by 50% are effective with 237.83 ha in 2022 against 462.17 ha in 2021. 5300 was the total area including the PA and 4 Natural Resource Management Transfers.

Information on the results of these activities is included in section 3.6.

Baseline data on forests and marshes have been verified from 2021 through an annual drone survey which has been used to assess forest cover. The loss of forest for the year 2022 was 7.08% caused not only by fire but also by the transformation of forests into corn cultivation land (clearing or cutting trees), planting and especially the fire created by the Zebu Thieves. The forest area in 2022 was therefore 3,122.88 ha if in 2021 it was 3,360.71 ha. However, efforts to reduce burned areas in the Protected Area to 50% are effective with 237.83 ha in 2022 against 462.17 ha in 2021.

0.2 Improve area of quality marsh within 50Hectares by 60% from 2020 baseline

In total, 27.14 ha of marsh was replanted, improving the quality of the 50 ha of marsh habitat that was surveyed in 2020 to create the baseline, by 54%. Assessments were conducted and maps created, identifying priority areas for restoration using drone technology, guiding and assessing restoration efforts. Planned activity was reduced as the water levels within the restoration area remained too high during the planting season in Y3. The maps generated by this project will continue to be used to guide future planned restoration efforts within the marsh.

0.3 Populations of threatened Madagascar Pond Heron and Madagascar side-necked turtle at least same in 2022/23 compared with 2020 baseline

Madagascar Pond Heron

Monthly population counts of Madagascar pond heron were conducted throughout the project and the results were compared with the 2020 baseline established in Y1. In Y2, the average number of individual birds recorded per month dropped from 117 to 70. This then increased to 294 in Y3. This significant increase is thought to be due to high water levels flooding nests in early 2023 forcing more birds to settle on tree branches and fly over the lakes becoming more visible for counting. We do believe, however, that the population remains stable.

Rere: The number of nests detected and protected during the project period varied. A baseline of 153 nests was recorded in Y1. This increased to 256 nests in Y2 and then decreased to 184 nests in Y3. This figure is still higher than the baseline and when looking at the long-term data set, the number of nests detected and protected is still increasing (158 nests recorded in 2011-12).

The population of Rere in Lake Ambondrobe is stable compared to 2020.

Summary table of nest data 2020-2021, 2021-2022 and 2022-2023

Year	2020-2021	2021-2022	2022-2023
Number of nests	156	252	187

Number of nests destroyed by wild boar	14	52	06
Number of nests destroyed by humans	05	26	23
Number of flooded nests	0	0	57
Number of babies	1957	1968	1208

All these babies were released into the lake after measurements and markings at marginal level. During the project period, 5133 babies were safely released into Lake Ambondrobe which will improve the population status in the lake.

Y2 surveys found 256 nests (Oct-Mar 2022), an increase of more than 60% of the nests found compared to the previous year's 153. Unfortunately, 60 of them were destroyed (22 by men and 48 by wild boars). The number of young Reres released by the headstarting program is 1622 (compared to 1882 the previous year). However, rere surveys (November-December 2021) detected 88 individuals (36 adults, 37 subadults and 16 juveniles), a decrease from Y1, possibly due to low water levels in the lake (only 3 were caught in the vegetation surrounding the lake, compared to 42 in Y1). Thanks to collaboration with fishermen during this period, 44 individuals were caught with nets, 4 by hand and were measured – an increase from 15 last year. This shows the success of outreach to fishers (who were asked to report when reres were caught as bycatch). This difference between detected nests and wild individuals will continue to be monitored and awareness continues to be essential.

Indicators 0.4-0.7: Indicators of human well-being

The baselines for these indicators have been established in Y1 and are included in Annex 1. The endline survey was carried out in Q4 Y3.

The baseline survey took place during year 1 and year 3 was marked by the completion of the end-of-project survey carried out at 09 Fokontany d'Ambondrobe.

Indicator 0.4: Household wellbeing

On average, the score of the Global Person Generated Index increased from 44 to 61 between the two survey periods in Y1 and Y3. Households enjoyed their standard of living with the score above average (61) as 100 was the highest score.

The data shows the following: 35% of households reported they were satisfied with their lives compared to 23% in Y1; 49% of those who think their actions are useful compared with 19.5% in Y1; 29% of people felt anxious yesterday compared with 18% in Y1; 45% of people felt happy yesterday compared to 23% in Y1.

Indicator 0.5: Food insecurity

Measures of food insecurity in intervention villages have improved. In Y1 households reported that they had 9.74 months of adequate household food provisioning. By Y3 this increased to 10.04 out of 12 months. The food consumption score still remains within the acceptable level reported as 50.79 in Y3 compared with 52.05 in Y1. (Score classification: score of 0 -21 considered low, 21.5 -35 borderline and 36+ acceptable).

Indicator 0.6: Reproductive health

At the end of the project, 81.70% of women aged 15-49 years were aware of long-term family planning methods, while only 32.44% had known about these methods at the beginning of the project. In addition, 65.50% of households interviewed know about access to the service providing long-term family planning methods compared to 61.10% in the baseline survey.

Indicator 0.7: Good governance

Data from both household surveys showed a significant increase in the proportion of households that believe they have the power to influence decision-making in their communities as 71% in Y3 compared to a baseline of 66% in Y1.

Indicator 0.8: Financial resilience

Results from the household survey showed an increase of 30% of households using VSLAs to manage their savings by end Y3 demonstrating improved economic independence.

3.3 Monitoring of assumptions

The hypotheses are listed. When the same assumption applies to multiple outputs, it is not duplicated.

Hypothesis 1: No significant reduction in the current level of political stability.

Comments: Political stability was disrupted by protests organized by opponents in Antananarivo in February 2021, but these were eventually brought under control by the current government. Technical services are functioning normally.

Hypothesis 2: Landsat, etc. continues to offer images for free and these are easily accessible to us.

Comments: To date, Landsat's imagery service is functional and free of charge.

Hypothesis 3: The safety of field staff and local communities is maintained - no serious threats or incidents for staff and villagers.

Comments: Despite the presence of dahalo (bandits) in some villages, the safety of field staff and local communities is maintained. Insecurity in the region has interrupted some activities (and rendered them unsustainable in others).

During the last quarter of 2022, insecurity began to increase because the 02 personnel of Ambondrobe were attacked by bandits on the road from Aboalimena to Belo Tsiribihina and ox theft intensifies, some Zebu who carry the plough are attacked by bandits in the Rural Commune of Aboalimena almost every day for 01 months. Subsequently, during the main growing season (December 2022 to April 2023) the agricultural yield in the rural municipality of Aboalimena decreases to 1.2 T/Ha for groundnuts against 1.7 T/Ha in year 2 (2022).

Fortunately the Commander of the Gendarmerie Company and the Military Company 510 of Belo / tsiribihina sent 40 gendarmerie people to do the operation in this area for 01 month. In addition, the Military Company 510 of Belo/tsiribihina also sent 10 military personnel to reinforce the existing Gendarmeries.

On the other hand, the NGO Durrell decided to make decisions and rules at each mission such as making the caravan by motorcycle, escorted by the 02 gendarmeries at the month, do not move after 16 in the afternoon).

Hypothesis 4: The commitment of local communities to PA objectives and rural development activities is not decreasing, which has a negative impact on the recruitment of community staff.

Comments: Local community engagement with PA objectives and rural development activities is not diminishing. It has improved each year with the creation of 03 VOI, the creation of 34 FFS groups consisting of 647 members including 37% of women until the end of the project, against 32% women for year 1; the increase in the number of VSLAs from 03 groups in year 1 to 22 groups in year 3 composed of 440 members including 289 women or 66%, as well as the number of patrollers which continues to increase from 76 in 2020 to 145 in 2023. These digital evolutions of our beneficiaries lead to an increase in the participation of community commitments in relation to the management of the Harmonious Landscape of the Lake Forest Complex of Ambondrobe and especially the participation of women because of the creation of VSLA. This was also demonstrated by the high levels of engagement in the football tournament.

In addition, the collaboration agreement concluded with the FFS groups that received the support of the project obliges these beneficiaries to adopt sustainable cultivation techniques that are not harmful to the environment (such as the prohibition of the use of chemical inputs and pesticides) and to actively participate in conservation initiatives around the PA such as reforestation activities, restoration, planting of marshes and the installation of firewalls. Thus, the participation of male members of the FFS and VSLA groups in conservation activities has increased to 70% and 40% for women.

Output 2:

Hypothesis 1: Environmental conditions change to negatively impact growing seasons and crop productivity, e.g. increased cyclone activity, prolonged lack of rain/drought.

Comment: In general, climatic conditions have changed somewhat and have a slight impact on growing seasons and crop productivity. Indeed, there was a delay in rain resulting in a prolonged drought until December 2020; But then the rain fell, and the team was still able to catch up with the crop calendar. In addition, from October 2022 to December 2022, there are rains every week during the main growing season and in 2023, more precisely following cyclone CHENENSO in February, there are still rains almost 02 weeks causing the flooding of several growing areas. As a result, cultivated areas are flooded and lead to reduced yields.

Output 3:

Hypothesis 1: The feasibility study shows that it is not feasible for reasons of insecurity - keeping the species in a centralized and known place is not safe. Savers cannot be engaged in the plans and, therefore, the plans are not sustainable.

Comments: The feasibility study concluded that the VSLA can be implemented even though there are minor risks associated with the existence of dahalo.

The members of the groups decided to change the location for the weekly meetings per week so that the place of the box would not be spotted. Moreover, the box was taken away through a bag to move it to the place of the meeting.

Hypothesis 2: Community members fail to meet their commitments to VSLA during the process. To avoid this, a verbal agreement is established between the members and a unanimous agreement is required regarding the amount that the members must pay each month.

Comments: Community members have committed to VSLAs because of the outreach process on the approach. An agreement is reached between the members regarding the amount that members must pay each month.

Currently, all VSLA members follow regulations because of the training and coaching provided monthly by the team. In addition, the application of the sanctions set out in the rules of procedure has been effective, including the sanction for those who do not want to pay their shares. As a result, the VSLA is operational in the 9 fokontany of the project with a participation of 12.39% of the total population, and this shows the strong commitment of the community to the VSLA.

Hypothesis 3: Theft of project savings occurs during implementation.

Comments: VSLA group members have taken maximum precautions to avoid theft of their groups' savings by distributing the keys to the safes to 3 different people and encouraging members to make credits so as not to have too much money in the till. 49% of the amount of savings is currently used for credit. No theft of savings to date.

Output 4:

Hypothesis 1: Community members do not respond negatively to reproductive health interventions. Financial or other circumstances do not require MSM to withdraw from the project partnership during the implementation of the project.

Comments: Community members remained receptive to reproductive health interventions. Indeed, during the life of the project, an increasing number of beneficiaries of family planning methods were recorded: 257 women in Y2 and 436 women in Y3.

In Y2, the project's partnership with Marie Stopes Madagascar worked well as the planning of quarterly activities was done jointly by the team of the two institutions, then the refresher trainings of community workers were conducted by the representative of the MSM headquarters. In addition, MSM has always invited Durrell to participate in their coordination meeting at the regional level with partners to discuss together the progress of activities and identify areas for improvement. Given the good collaborations between the two institutions during the Darwin project, Durrell is currently extending this partnership with MSM in the case of another DEFRA-funded conservation project in the same area.

Output 5:

Hypothesis 3: Willingness of local associations and fokontany chiefs to engage.

Comments: Following sensitization by project staff, the community, local associations and fokontany chiefs have expressed their willingness to engage in the implementation and training activities organized by the project. The communities and the fokontany chiefs are convinced of the support offered such as agricultural equipment, seeds, various training that have contributed to the improvement of their living conditions. In addition, the offices built for VOIs and fokontany chiefs have contributed to the increase of their pride in being in their places, their self-confidence in fulfilling their roles and responsibilities.

Hypothesis 4: The government contributes to the costs of office buildings.

Comments: The commune, the fokontany and the community have made their contributions as beneficial contributions for the construction of the offices of the fokontany by giving land, time, and raw materials with transport such as sand, gravel, and water transport ...

The communities represented by VOI members also assumed their share of responsibility for monitoring during the construction of the VOI offices. To do this, they monitored, for example, the progress of the work, the number of entries and Outputs of building materials in the storage warehouse; they supervised the dosing of cements as well as the location of the sheets.

Impact: achieving a positive impact on biodiversity and poverty reduction

Original project impact: “Improved community well-being and protected area management is ensuring Ambondrobe’s dry forest and wetlands are protected providing vital ecosystem services; improved ecological resilience and havens for threatened species.”

Assessing contribution to achieving community well-being is primarily achieved through the household survey undertaken in Y1 (baseline) and in Y3 (endpoint). On average, the score of the Global Person Generated Index increased from 44 to 61 between the two survey periods in Y1 and Y3. Households enjoyed their standard of living with the score above average (61) as 100 was the highest score. Full results from these are provided in Appendix 1 and an endline survey report will follow this report once analysis is complete.

Of course, the project length (33 months) is a short time in which change on these well-being and poverty indicators are likely to be seen. However, the project has put in place practices which through continued post-project support will further improve community well-being including the implementation of CSA techniques leading to gradual agricultural yield and restoration of old crop fields; VSLA groups improving financial independence and empowering local governance systems through training and providing fokontany offices.

PA management has improved through a demonstrable increase in community patrolling efforts accompanied by improved data collection that has led to more effective reporting and sharing of information. This coupled with training of both patrollers and VOI members alongside actions to build community cohesion forms the basis for continued and increasingly effective PA management. A demonstration of this is the increased participation of youth in conservation activities observed by the team such as the installation of firewalls, firefighting, implementation of reforestation and other decision-making meeting for the management of PA.

Progress towards this impact is further highlighted in Sections 3, 4 and 6 , and in the progress report against the above objectives. The project’s baseline household survey, which covered well-being, access to financial capital and perception of access to decision-making, provided the basis from which we intend to demonstrate improved community well-being and more effective management of protected areas at the local level. The results are covered in Appendix 1, with key results, of which 23% of respondents are satisfied with their lives, 16% have financial savings and 39% feel they can influence decision-making in their communities. These data will be compared with ecological indicators, for example, aerial data on forest/marsh cover and species surveys, and patrol data to assess the impact of the project on Ambondrobe’s social and natural systems. This project makes a significant contribution to the survival of a critically endangered species, the rere (*Erymnochelys madagascariensis*). This is done through support for the management of the Ambondrobe Protected Area, the very first new protected area in Madagascar to be created primarily for the conservation of a single species (the rere). This project contributes through community patrols and restoration of rehabilitative habitat, alongside community engagement and support for poverty reduction, thus reducing dependence on destructive activities. Representative governance in these communities, alongside access to livelihoods, will contribute to the well-being and resilience of the communities that are custodians of these critically threatened habitats. This is done through support for the management of the Ambondrobe Protected Area, the very first new protected area in Madagascar to be created primarily for the conservation of a single species (the rere).

According to the results, all the activities described in the Darwin project contribute to improving the living conditions of the communities bordering the Protected Area and, also to maintaining the viability of endemic and threatened species (meeting the objective of rewilding) such as:

The involvement of the methods of Conservation Agriculture activities in the face of climate change through the creation of FFS groups leads to a gradual increase in agricultural yield with each speculation, the restoration of old crop fields already abandoned almost several years and a decrease in clearing in the forest.

The creation of VSLA group in each village ensures the financial security of each member’s household and also increases the number of women at each monthly meeting of the grassroots, VOI and KMMFA communities to make decisions.

The construction of the 04 offices of VOI and Fokontany with the provision of office equipment (04 billboards, 08 tables with 03 drawers and 24 chairs) increases their responsibility for conservation and also makes their empowerment.

The football competition is a local pride strategy that brings young people together because this competition is associated with environmental conservation and management awareness. The impact of the implementation of this activity during 02 successive years (2021 and 2022) was noticed by the increase in the participation of young girls and boys in conservation activities such as the installation of firewalls, firefighting, implementation of reforestation and other decision-making meeting for the management of PA.

Currently, the number of women taking charge of their lives and taking responsibility in society is increasing. On the other side, there was a change in the attitude of men who accept and encourage women to do family planning, which is why the number of women practicing FP increases to 693 at the end of year 3 compared to 69 at the beginning of year 2.

The recruitment of village patrollers at the level of the 08 riverside villages of the AP leads to the improvement of their living conditions and also to the increase in the area of the forest covered by the patrollers.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Project support to the Conventions or Treaties (e.g. CBD, Nagoya Protocol, ITPGRFA, CITES, Ramsar, CMS, UNFCCC)

This project clearly supports the objectives of the CBD by promoting and facilitating the sustainable use of natural resources (Target 3, also ITPGRFA), the fair and equitable sharing of benefits from the use of natural resources (Target 16, also ABS), and the transfer of appropriate knowledge and technologies to integrate agricultural and protected area management practices that minimize negative impacts on biodiversity (Target 11). Habitat restoration and protection activities will reduce habitat loss (Target 5), help ensure that ecosystems provide essential services (Target 14), improve ecosystem resilience (Target 15) and protect populations of threatened species (Target 12), namely critically endangered Madagascar. the Madagascar fish eagle and side-necked turtle, and the endangered Madagascar heron. This project was developed with direct reference to the strategic objectives of Madagascar's National Biodiversity and Action Plan 2015-2025. The reconnaissance studies undertaken under this project provide essential data for the development of an action plan for the species, to be undertaken as part of Project Y3 (informed by a co-funded range-wide species study, to be undertaken in 22-23).

Lake Ambondrobe and the surrounding watershed are a designated Ramsar site. In line with the mission of the Ramsar Convention, this project promotes the wise use of wetlands through the sustainable implementation of environmentally sound agricultural practices (including the use of short-cycle, disease- and drought-resistant genetic varieties), which increase household nutrition, crop yields and incomes while alleviating pressures on wetland habitats and dependent species.

4.2 Project support to poverty reduction

On average, the score of the Global Person Generated Index increased from 44 to 61 between the two survey periods in Y1 and Y3. Households enjoyed their standard of living with the score above average (61) as 100 was the highest score.

The data shows the following: 35% of households reported they were satisfied with their lives compared to 23% in Y1; 49% of those who think their actions are useful compared with 19.5% in Y1; 29% of people felt anxious yesterday compared with 18% in Y1; 45% of people felt happy yesterday compared to 23% in Y1.

Measures of food insecurity in intervention villages have improved. In Y1 households reported that they had 9.74 months of adequate household food provisioning. By Y3 this increased to 10.04 out of 12 months. The food consumption score still remains within the acceptable level reported as 50.79 in Y3 compared with 52.05 in Y1. (Score classification: score of 0 -21 considered low, 21.5 -35 borderline and 36+ acceptable).

In the short term, we have seen an increase in crop yields for target beneficiaries above the regional average. For example, in 2021, in Andimoky FFS, rice yields were 6.9 T/ha, almost double the regional average of 3.4 T/ha. In the Famaitso, Miezaky and Vonona Hiray groups, yields of groundnuts (1.7 T/ha), blackeye beans (2.7 T/ha) and vigna umbellata (3.2 T/ha) all exceeded regional averages (1.1, 2.5 and 2.6 respectively), providing increased food security and income generation capacity in Y2 for our partner FFS groups, This leads to an improvement in the income of the target beneficiaries

Access to finance and financial resilience through VSLAs increased in Y2 with the expansion of the VSLA model of 07 new groups (127 members) in four new villages and in Y3 of 13 new groups in addition (262 members) in eight villages including four new ones. Three VSLA groups created in Y1 have completed their first sharing cycle and moved on to the second cycle. During Y3, the capacity of beneficiaries was strengthened by the financial training provided to members so that they can better manage their financial

benefits (borrowing) and their sharing is planned for the month of May and June 2023. At the same time, the study of the market potential for local value chains, the creation of a groundnut cooperative in particular for Aboalimena, would serve to explore alternative livelihoods. The Aboalimena Cooperative was recently created with 18 members. So they began to group peanut products in last harvests (May 2023) to facilitate the negotiation of group sales to collectors and to better meet the needs of members. Thus, 1,450kg of groundnuts were grouped and sold by members at a price of 2,400Ar/kg or a sum of 3,480,000Ar (low production due to heavy rainfall due to cyclones and insect pests / snails they carried away). As an advantage, they were able to sell their products at the same time with the price they assumed was beneficial for them.

Some activities continue to provide indirect incentives to communities (VOIs, patrollers, village communities) to fulfil their roles and responsibilities in the management and conservation of natural resources and biodiversity. KTI techniques aim to improve crop productivity but also to adapt and mitigate the negative effects of climate change. In addition, family planning services provide long-term and sustainable solutions to food security, community well-being, and biodiversity conservation efforts.

Patrollers receive a payment of 10,000 Ariary per day to patrol. At most, they each received 120,000 Ariary per month if they were able to carry out the 12 patrols planned. With the increase in the number of patrols this year (836 patrols per 148 people), the direct financial benefits of the project for community members have increased in Y2.

4.3 Gender equality and social inclusion

Please quantify the proportion of women on the Project Board ² .	4
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ³ .	3

The continued provision of knowledge and access to long-term family planning methods in nine communities in Ambondrobe continues to improve women's reproductive health, giving them greater freedom of choice. Women also continue to actively participate in business and entrepreneurial activities, with 37.31% of FFS members and 6-6.52% of VSLA members being women.

However, the evaluation conducted by DRAE at the FFS group level in August 2021 found that women's participation in the groups was not sufficient (Andimaky and Ankaivo), with only 24% of women on average. However, this situation has changed significantly over the past two years with the increase in women's participation in FFS activities to 37%.

As for VSLA activities, the members are mixed, composed of both women (66.52%) and men (33.48%). These women actively participated in the weekly meetings and social activities of their groups. They dared to participate even in the activities at the level of their respective VOI. Thus, for example at the level of VOI Vonona Ho Maintso of Fokontany Aboalimena, a decision was taken for the manufacture of the chairs necessary for their meeting and 36.41% of the members are women, having contributed to the membership fee for this manufacture.

4.4 Transfer of knowledge

The lessons learned during this project have fed significantly into the design of the DEFRA-funded “Fitantanana maharitra ho lovainjafy” project, led by Kew Gardens (with Durrell as a partner) to be implemented across nine protected areas in Madagascar, as a model for community-based sustainable landscape model.

This project trained over 100 community leaders in good governance but also critical skills for landscape management, with DREDD and other government agencies delivering training to 145 community members on fire management.

² A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

³ Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

4.5

Capacity building

Julliette Veloso, who manages the implementation of rere work in Ambondrobe, was successful in securing continuation funds from the [Whitley Award for Nature in 2022](#). During this project, Juliette led the coordination and writing of a National Rere Species Action Plan, bringing together national and international stakeholders for the survival of the species.

Hanitra Rakotojaona presented at the online [Jersey Overseas Aid](#) conference “*Shaping The Future of Conservation Livelihoods Funding Together*” in April 2022. She presented around her experience of running programmes in Madagascar.

Both these staff are female.

5 Monitoring and evaluation

The household survey (conducted in Y1 and Y3) created a solid foundation for the M&E of the project. This report provided information and references to better understand the target villages of the intervention and to assess progress in the implementation of certain activities. Thus, with the activity of supporting the implementation of Family Planning services within the reach of women in 9 intervention villages of Darwin, it was found that 65% of women in Ambondrobe have already had access to this service.

A need for additional M&E capacity of field staff was identified in 2021 and based on this, two training sessions were provided to field staff, including technicians, the first on the project's M&E system and the use of tracking forms (June 2021) and the second on the use and handling of tablet-based tracking sheets (December 2021). These trainings were aimed at the Site Coordinator, the Socio-organiser and the Agricultural Technician. The second training in December was attended by our new M&E Assistant Menabe, responsible for M&E activities for Menabe Antimena and Ambondrobe. The objective of these trainings was to collect monthly follow-up data from technicians for processing and monitoring progress against indicators.

Since these trainings, agricultural technicians have been responsible for data collection and monitoring sheets – upon return from the field, monitoring sheets are made available to the M&E team monthly (electronic version) with supporting documents (scan of attendance sheets, purchase invoice, distribution sheet of the main seeds and materials to FFS members).

The completion and access to these monitoring sheets allowed the project to have databases on achievements by area (number of groups created, number of members, list of training courses by group with their respective dates). From the 2nd year of the project, the data collection system became fluid with the technicians. The problem of collection during peak periods (agricultural season period, during which technicians had difficulty meeting the monthly deadline for the delivery of collection cards) was overcome thanks to the solution taken to submit the quarterly delivery of the cards.

With the data collected and processed, the Monitoring and Evaluation System became practical to respond in a timely manner to the information needs of technical partners including the DREDD, the DRAE and the services of the ORN (Regional Office of Nutrition). The information often requested by DRAE is the number of FFS groups, list of beneficiaries with the agricultural inputs they have received (seeds and agricultural equipment) and the productions obtained. For DREDD, she is interested in information on restored areas, restoration sites and the number of plants planted in order to be able to assume her mission of monitoring reforestation. As for the ORN, information on the number of FFS groups and members as well as the villages concerned is sufficient for the regional quarterly report related to the theme of combating food insecurity.

Still in the context of internal monitoring and evaluation, the supervisors of the technicians on site made unannounced or planned visits on site to assess the progress of the implementation, see the relevance of the actions in relation to the needs at the base.

We have also practiced adaptive management in response to partner M&E. Following the joint assessment mission with CIRAE on agricultural yield, CIRAE shared the results and proposed the introduction of the "ady gasy" biological control technique in June 2021, which allowed groundnut seedlings, sown from January 2022, to grow well, without foliar insects, promising good results for harvest.

Ecological Monitoring

In December 2021, the drone team conducted a field visit to the Ambondrobe site (Aboalimena and Ankaivo) to collect real data on the state of forest cover, identify and assess the state of forest cover to aid in forest protection and conservation, and use the use of drones to validate Landsat data with high-resolution images (5cm/pixel vs. 30m/pixel for satellite imagery). Three overflights over a total area of 33.19 ha were carried out.

In 2022, a drone overflight assessment was conducted to determine the rate of forest loss. Thus, the loss of forest for this year 2022 was 7.08% caused not only by fire but also by the transformation of forests into corn cultivation land (clearing or cutting trees), planting and especially the fire created by zebu thieves. The forest area in 2022 was therefore 3,122.88ha if in 2021 it was 3,360.71ha.

For marsh replanting, assessments were conducted and maps created, identifying priority areas for restoration using drone technology, guiding and assessing restoration efforts. Planned activity was reduced as the water levels within the restoration area remained too high during the planting season in Y3. The maps generated by this project will continue to be used to guide future planned restoration efforts within the marsh.

Our monthly and annual rere species surveys saw the result **indicator 0.3** exceeded, with the number of rere's nests (side-necked turtles) observed (256 nests from October to February 2022), the highest number found in 13 years of nest protection (158, 2011-12, 152, 2020-21). Photographs of these surveys are attached as Appendix 4 (Photo 01-03). To monitor this indicator, monthly monitoring surveys continued at Lake Ambondrobe and biannual surveys were completed in July 2021 and February 2022 across the Ramsar site. In July, basin herons were recorded in eight of the 12 wetlands visited, and in February 2022, they were observed on 11 satellite lakes. rere populations were monitored through nest monitoring and rere surveys via capture-recapture methods.

The count of waterbirds including herons has taken place at the beginning of each month in Ambondrobe since the year 2017. The standard method is used at each bird count with two observers (Durrell technicians) one of whom takes note taking and the other observes the birds around 5am by the lake in the same place. Monthly counts of pond herons continued to be conducted at Lake Ambondrobe with five to 270 individual pond herons identified each month. Semi-annual counts were completed in July 2021 and February 2022 across the Ambondrobe Ramsar site.

Rere: for the monitoring of side-necked turtles, 153 nests were measured and protected between October 2020 and January 2021. 1,882 babies hatched between December 2020 and March 2021. In Y2 (November 24 to December 15), with the 460 trap-days, 88 individuals were captured including 36 adults, 37 subadults and 16 juveniles. In Y3, 184 nests were observed and protected from October to March 2023. 76 of the 184 nests brought out 1,208 babies from rere.

6 Actions taken in response to Annual Report reviews

Responses to Y2 report feedback

Comment: The project also indicates that it intends to develop a reforestation strategy, referring to the framework species method. This should help the project significantly increase the range of species it propagates, and define the type of forest restored.

In order to improve seedling production and reforestation during the 2022 and 2023 reforestation season, the increase in seedling production in 72,000 and 10 numbers of native species was carried out.

The 10 species are: *Cordyla madagascariensi*, *Commiphora* sp, *Entada chrysostachys*, *Terminalia ruffovestita*, *Gyrocarpus americanus*, *Stereospermum nematocarpum*, *Dalbergia*.sp, *Colubrina* *Astrotrichilia asterotrica* , *Baudouinia fluggeriformis decipiens*,

Unfortunately the GDV cannot continue its activities because of insecurity.

The types of forest restored are: the watersheds of the Ambondrobe Lakes and the degraded forests in the reforestation areas defined in the PAG. The DEFRA-funded *Fitantanana maharitra ho lovainjafy* project will continue with this work and the development of formalised reforestation strategies across its landscapes.

Comment: The logical framework indicates that, as a result of progress over the past year, 276 beneficiary households are no longer using fertilizers or pesticides, but this is not commented on elsewhere in the report.

Members of FFS groups for 03 years (647households) are trained on the biological control method against harmful insects "ady gasy" and not to use phytosanitary products (chemical fertilizers, pesticides) according to the code of the Protected Area. But, this number (647) is still limited in the 09 fokontany bordering Lake Ambondrobe.

Comment: The project states (when considering support for the conventions) that its work protects populations of the critically endangered Madagascar fish eagle, but there is no mention of this species elsewhere in the report. Could this species be incorporated into the studies he undertakes?

In general, the Fish Eagle (Ankoay) is one of the conservation target species in the Harmonious Landscape Lake Forest Ambondrobe Complex. But, this species is counted for the monthly count of waterbirds carried out by the Ambondrobe team. In fact, three pairs of fish eagles are observed on the lakes during the life of the project and the vital dominance of these three pairs conformed to the extent of the lake even if generations ago;

Summary of activities: The activities related to school vegetable gardens are particularly noteworthy, with the involvement of the parents' association and the benefits that flow from them. The activities of outcomes 3 and 4 of the logical framework are incomplete; Summaries of activities should be included.

In early Year 1, school vegetable garden activities were funded by the U.S. Embassy's SSH project. Since the SSH project ended in September 2021, the Darwin project in year 2 continued these activities. The establishment of vegetable gardens took place at the level of 04 EPP and the vegetable garden of Aboalimena only managed to organize a school canteen in February 2022 with 76 beneficiary students including 38 boys and 28 girls.

The parents' associations at the level of the 04 EPP schools (Aboalimena, Belobaka, Ankaivo and Andimaky ampasy) declared that they would not continue the activities related to vegetable gardens.

Revitalizations of FRAM were made in June 2022 at FRAM EPP Aboalimena in the presence of 16 members including 14 women and at FRAM CEG Aboalimena in the presence of 28 members. Then, these two FRAM are supervised to the techniques of sowing vegetable crops and the biological fertilization of the soil as well as the spreading of seeds. From now on, the maintenance of vegetable gardens was not effective.

The causes are:

- EPP-Aboalimena : the parents of students between the 02 fokontany (Aboalimena south and Aboalimena north) were in social conflict at the level of their society despite the intervention of Chief ZAP, the groups could not associate for the realization of the vegetable gardens.
- EPP-Ankaivo: following social conflict at the level of Head of lineage in Ankaivo and the villagers, most of the parents of students emigrated to Aboalimena and to the illegal village of Menahavo. Therefore, the Teacher is assigned to another village (Belobaka) and the school is closed, From now on, no vegetable garden activity is carried out.
- EPP-Belobaka: the parents' association could not continue due to insufficient water.
- EPP-Andimaky Ampasy: There was a conflict between the Director of the EPP and the Parents, and then the Principal was renamed Chief ZAP, so the conflict is starting to be difficult. As a result, the Ambondrobe team contacted Chef CISCO and DREN to solve these problems, The 02 Chefs are always busy.

As these parents' associations did not want to continue the vegetable garden activities, the Durrell Ambondrobe team recovered the kitchen utensils and entrusted them to the VOI presidents.

Training on good governance, delayed since the first year, was completed during this year. There are no variations from the original results that require explanation.

At the beginning of year 2 of the project (July), a consultant was recruited to carry out the training on good governance for 52 board members of the 04 VOI on the themes: associative life, role and responsibility and use of management tools. After the Socio-Organizer continued to monitor and build capacity. Also the DREDD team reinforced the training during the quarterly meetings of VOI and KMMFA.

During year 3 of the project, we also contacted the DREDD team to train 55 community leaders on good governance, the use of management tools, communication and conflict management as well as associative life.

Support for poverty reduction projects :

Payments to patrollers are indicated, as well as the maximum amount an individual can receive each month. This is a direct contribution to the finances of community members, but it is not clear how these payments will be made after the project is completed.

Currently, the number of patrol boats is 145. The new FMH project funded by DEFRA will ensure payments for these patrol boats until 2027.

Sustainability and legacy: The VSLA method should be self-sufficient and provide long-term financial tools, thus ensuring the legacy of this activity. Its community health programme trains volunteers, which should ensure the sustainability of this aspect of its work.

Given that the number of VSLA groups continues to increase by 03 groups in year 1 and 22 groups in year 3; the VSLA model is effective for efficient income management and has enabled groups to begin income-generating activities.

Sustainability and legacy: The project has made considerable efforts to involve community representatives wherever possible, to further support its legacy. In addition, the Durrell indicates its own commitment to the region, which is also expected to strengthen the sustainability of the project, although no further details on its commitment are provided.

At the beginning of the project, there was the involvement of stakeholders (Communities, STD, CTD, financial technical partners). During the project, close collaboration with these stakeholders took place (joint patrol with force, agricultural yield evaluation with DRAE, involvement of the fisheries service for the management of the Lakes and involvement of the CTD/STD in the validation of documents and the presentation of the results of the Darwin project activities at mid-term)

Early indicators of transformational change: Levels of participation in project activities, from habitat restoration and patrols to participation in CSA training and community health volunteers, are clear indicators of early success. The project did not address the issue of extending or adapting the methodology to another geographical area, but it could certainly be in SEHV-1369.

With the new FMH project, the extension has already been planned on 07 other villages of Ambondrobe with the same activities and adaptation of methodologies according to the contexts of these villages and the lessons learned from Darwin.

Project response to COVID-19: The project did not explicitly state whether any of its expected outcomes or impacts could contribute to the Covid-19 response or reduce the risk of future pandemics. It did not indicate whether it hoped to continue the new working methods it has been able to adopt over the past year, once the pandemic is over.

Once the pandemic was over, the team continued to use virtual meetings when needed. And, at the site level, the 1-meter space became a habit during indoor meetings.

7 Lessons learnt

For better conservation, participatory community monitoring supported by Durrell and DREDD is essential. Thus, the increase in the number of patrol boats from 76 to 114 helped reduce the number of tree felling from 48 in 2020 to 20 in 2021. In addition, the 33% increase in the number of patrollers (from 76 to 114) has greatly motivated them, with twice as many distances traveled compared to last year (from 1122.39 km in 2020 to 3137.89 km in 2021).

The realization of mixed patrols with force is essential because following the nine mixed patrols carried out at the Ambondrobe AP in October 2022, the number of pressures decreases to zero in the AP and to six pressures (cut) in the TGRN surfaces if more than 10 pressures have been identified before October.

The mobilization and training of 06 basic modules necessary on firefighting including the danger of fire in the protected area, the duty of citizens for firefighting, fire chemistry, fire behavior, fire fighting methods (preventive, at the time of fire, after fire) and the use of firefighting equipment (Fire bat, water bag...) villagers around the PA with the participation of 267 people in 07 villages led by the Durrell team in partnership with DREDD are one of the effective strategies to reduce burned areas, such is the case of the decrease in burned areas up to 50% in a period of two years (237.83 ha in 2022 against 462.17 ha in 2021).

Clear discussions on each partner's duties and expectations through written agreements/memoranda of understanding were successful. For example, DREDD, as part of the implementation of COAP, conducted awareness sessions on the law on lemur hunting and bushfire management. At the monthly meetings in Durrell, KMMFA was encouraged to implement the measures taken, including the destruction of the traps observed. As a result, the number of traps observed decreased (approx. 30 monthly March-July 2021, 3-4 monthly from December 2021).

The successful implementation of the new ACI technique with an FFS group in one village inspired other villagers to do the same. This is the reason for the increase in the number of FFS in the 08 intervention villages of Durrell, 13 FFS groups in Y1 and 33 FFS groups in Y3.

The creation of VSLA groups coinciding with the end of the lean season (April) is suggested to keep the performance of the group's savings and to ensure sharing in December, the beginning of the stage of the long season culture, during which members were able to use their shares (from sharing) to start these stages.

To revitalize a VOI, the mobilization of villagers to join is more effective through a group or an association for fear of losing their interest at the group level (FFS or VSLA for example). This makes it easier to make them aware of conservation and anti-pressure activities.

8 Risk Management

There has been an increase in bandit activity in the region over the last 6 months, which has seen Durrell staff involved in one incident of theft, although nobody was physically harmed. In response to this increased risk we have altered travel routes, re-issued guidance on convoy travel and spoken with gendarme and ministers about how they are tackling the situation.

One incident involved a staff member of one of our partners, who was attacked by two bandits after he decided to travel without a convoy against Durrell's advice. Upon hearing of the attack we informed immediately his employer and the gendarme. The documents and materials stolen by the bandits were recovered by the gendarme who followed up on the case.

We did not need make any significant adaptations to the project design to address these changes to risk – we reissued our standard advice to only travel by convoy at all times and we continue to monitor the situation.

We have also developed a flexible approach to continue providing support if the security situation deteriorates. During high-risk periods, the team limits travel to the most dangerous villages, relying instead on telephone communication to collect data and information on the ground (which is then validated when travel is allowed again). We have set up local remote monitoring and support structures, such as Lead Farmers, ACs (Community Health Volunteers) and soon VSLA (Village Agents), who can directly support Durrell if the team is unable to reach the sites. In addition, fokontany chiefs, VOI and KMMFA leaders can also support Durrell's activities. Since 2021, the CSAO (The Special Center for Operational Battlement) which is a gendarmerie service has been created in the village of Andimaky .

9 Sustainability and Legacy

Since the beginning of the project and at regular intervals (through monthly community meetings), the Darwin Project and its missions have been presented and discussed with the main project partners and local authorities at district, commune and fokontany levels.

We have continued to experience significant community interest in Darwin's activities, particularly those that have responded to the VSLA pilot groups, particularly for agricultural activities, for which we have received many applications for membership in FFS groups. FFS sites continue to serve as promotional sites for CSA approached for others who may be interested.

The VSLA model, which later in the process will include village agents, is designed to be self-sustaining in the long term and provide long-term financial tools to communities. All value chains that have been analyzed for market sales are locally appropriate options, and support for developing market linkages.

The project continues to train individuals as community health volunteers and has increased the number of CHWs. Although the contraceptive methods promoted by MSM are long-term (up to 5 years), women who have chosen these methods still need regular access to reproductive health support and access to health professionals to make decisions and changes based on their family choices. It is therefore important that these women have access to reproductive health beyond the duration of the project. Durrell is committed to Ambondrobe for the long term and our partnership with MSM continued during the project. Since the beginning of the project, we have involved representatives of local grassroots communities such as VOIs, patrollers, CHAs and local authorities (Chief of Fokontany) as widely as possible, including during introductions to project activities and verification of eligibility criteria during selection processes. So far, the project has made a great effort to build the capacity of these core structures to enable them to have the necessary skills to carry out their roles and responsibilities. Empowerment and capacity building of local communities is necessary for the sustainability and legacy of actions, and this continues to be a central objective of the project.

Thus, some beneficiary members of the former FFS groups continued to practice the new CSA technique by expanding their cultivated areas with their own seeds without Durrell's support. They were proud to show the results of their own achievements in CSA technique.

For VSLA groups that completed cycle 1, they took the initiative to continue the implementation of their cycle 2 and Durrell's intervention became ad hoc (often for the practice of the rules of procedure, the keeping of notebooks for some). Indeed, the motivation of these groups lies in the fact that they are convinced of the effectiveness of this financial system and the acquisition of financial means resulting from sharing to cope with the lean season.

In another case, in the village of Aboalimena North, a group formed on its own (group called Tsikitsiky) by finding the success of the VSLA groups of Aboalimena South, and it was after that that it requested the support of the program in VSLA kit and training to make it operational.

Regarding VOI, capacity building on several occasions has enabled the VOI to develop their PTA with a small framework on the themes of the plan to be developed and the monitoring of their implementation.

10 Darwin Initiative identity

In general, for the visibility of the financial support of Darwin and the British government, we put the Darwin logo and UKaid on the attendance sheets of all Darwin activities (patrol, FFS, VSLA, various program meetings), on agricultural data sheets, on billboards of cultural spaces of FFS groups, on jerseys during the football competition, and also on the offices built for VOI and Fokontany. During various celebration ceremonies on different days (WME, WMD, JIF, WMW) and the traditional rite event (Loadrano: traditional fishing opening), flyers, tarpaulins and displays with logos were used, as well as the leaflets distributed at the time of the celebration.

During the speeches of local authorities, district level authorities and at the opening and/or closing of the meeting at the level of the commune and village capital, they always thanked the British government and the NGO Darwin for their financial support to grassroots communities (Examples: monthly meeting of local associations, patrollers, official opening of the completion of football, awareness meeting at the level of the FFS group and the women's association).

11 Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes <i>HANTANIRINASOA Lantotiana</i> [REDACTED]

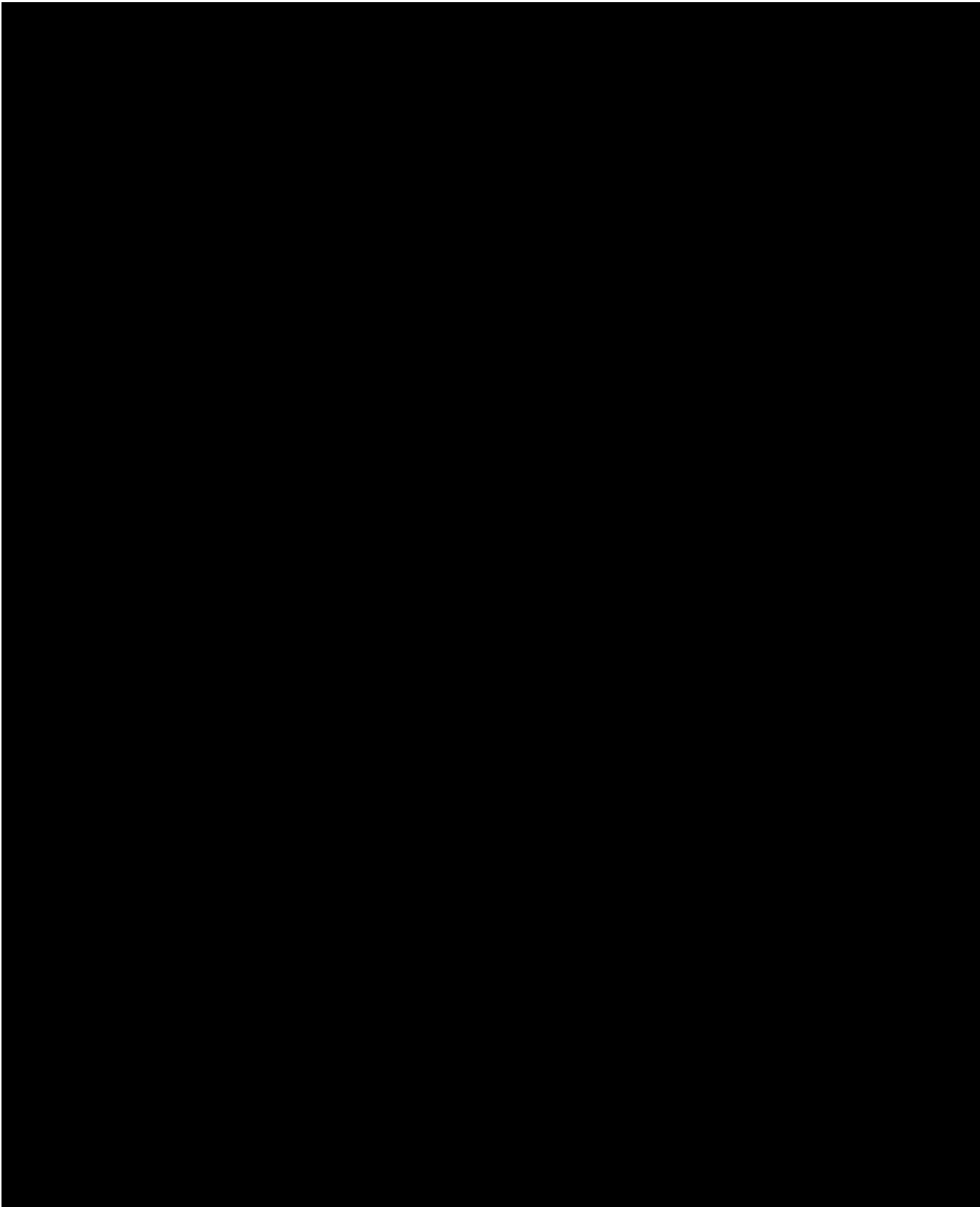
<p>Has the focal point attended any formal training in the last 12 months?</p>	<p>Yes</p> <p>April, 4th 2023 : Safeguarding awareness workshop</p> <ol style="list-style-type: none"> 1. Case studies and ongoing learning 2. Localised policies and procedures 3. Resources 4. Identification and reporting 5. Survivor care 6. Staff wellbeing <p>August 10th 2022 : Intro to Safeguarding</p> <ol style="list-style-type: none"> 1. Safeguarding definition 2. Staff safeguarding support mechanisms 3. Project reporting and investigation procedures that are victim/survivor focused <p>Project beneficiary complaints procedure</p>
<p>What proportion (and number) of project staff have received formal training on Safeguarding?</p>	<p>Past: 89.71% [and number: 96 people]</p> <p>Planned: 100% [and number: 107 people]</p>
<p>Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.</p> <p>We conducted a staff survey, the results of which identified two key challenges relating to safeguarding.</p> <ol style="list-style-type: none"> 1. Firstly we need to improve staff familiarisation with the safeguarding policy and associated processes. The policy has recently been translated into Malagasy and our focal point Lantotiana Hantanirinasoa will continue to visit the project site to provide briefings and answer questions. 2. The second challenge relates to reporting. Survey results demonstrated that some staff wouldn't feel confident reporting due to concerns around confidentiality and impact on both the reporter and accused. We will continue to encourage staff and share lessons learned to build confidence in the process. <p>Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.</p> <ul style="list-style-type: none"> - A safeguarding action plan has been developed based on the survey results. Lantotiana Hantanirinasoa along with other members of the Madagascar Senior Management Team and the Global Safety and Risk Manager will work through the actions over the next few months. - Implementation of grievance mechanisms will be reviewed. - Continuation of regular training conducted by Lantotiana Hantanirinasoa, including orientation on safeguarding policy and procedure. <p>Developing specific training materials for new starters and reviewing our induction process to ensure that safeguarding is covered in detail.</p>	

12 Finance and administration

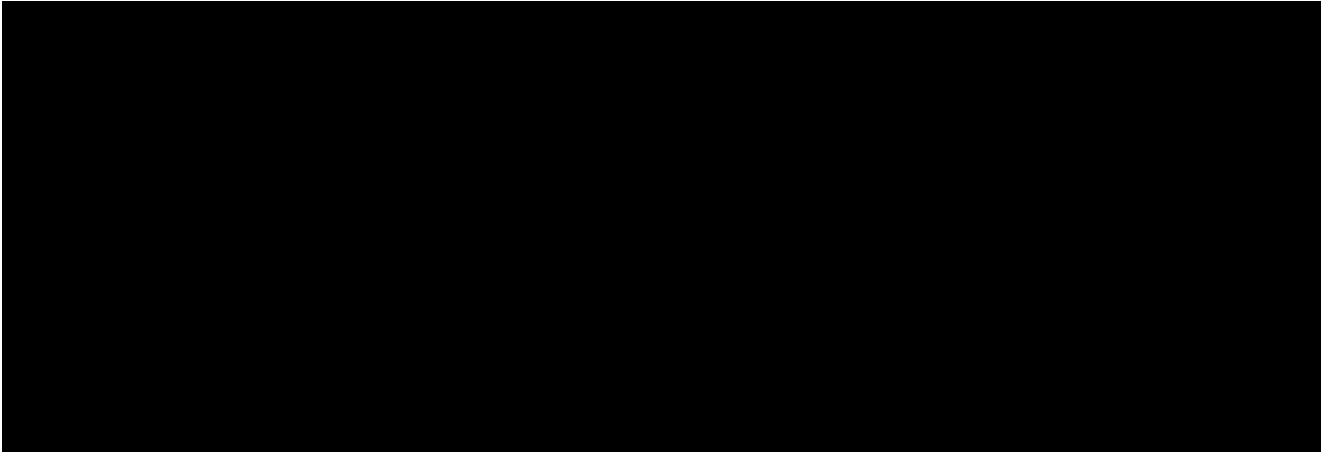
12.1 Project expenditure

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)	£11,279.00	£9,038.37	-20%	
TOTAL	111,722	111,726.49		

Staff employed (Name and position)	Cost (£)



12.2 Additional funds or in-kind contributions secured



12.3 Value for Money

The programme of support to Ambondrobe has shown value for money, showcasing the remarkable results that can be obtained through strategic investments in in situ conservation in critically endangered species – during this project, thanks to both monitoring and nest protection, there was the highest number of observed rere nests in the history of nest protection in Ambondrobe.

Thanks to satellite mapping, drone software and the knowledge of communities and our team, project adopted a comprehensive approach to prioritise the restoration of marsh and forest areas of high ecological significance, ensuring that investments were directed towards critical habitats and species such as the pond heron and the rere. This strategic focus allowed for targeted interventions with funds available.

Over this project period, over which an average of 49 patrols per month were completed, exceeding the intended 12 per month originally included in the project. For the original investment, this project was able to exceed four times the project's patrol target, and whilst the number of observed threats from patrols increased from baseline to endline by 46.8%, the number of patrols themselves increased fivefold. Therefore it is likely that the increased number of illegal incidents in the park is a result of increased presence, but the number of threats has not increased proportionately with patrol presence. We are optimistic therefore that patrols are able to pick up the majority of illegal activity from this investment.

Moreover, the project employed innovative and cost-effective conservation methods for M&E. By utilizing technologies such as SMART patrol software, drones, remote sensing and geospatial analysis, the project team efficiently monitored status of restored areas, threats and changes to the landscape, we were able to adaptively manage and respond to changes.

This project fostered collaborations and partnerships with local communities (VOIs, Fokotany), local government (DREDD), and other NGOs, and research institutions. These partnerships not only enabled knowledge sharing and capacity building but also, thanks to the ongoing work in the field of reproductive health, Durrell have secured additional resources to refurbish regional health clinics in Ambondrobe.,

The infrastructure and capital expenditure built and purchased under this project have contributed to its long term impact and sustainability of the project's investment. Thanks to this project, four fokotany offices in the Ambondrobe region are now built and furnished, not only as a hub for government administration, creating access and transparency, but as a community hub for gatherings, reproductive health clinics etc in the long term.

13 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

N/A

Annex 1 Project’s original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: Improved community well-being and protected area management is ensuring Ambondrobe’s dry forest and wetlands are protected providing vital ecosystem service; improved ecological resilience and havens for threatened species.</p> <p>(Max 30 words)</p>			
<p>Outcome:</p> <p>(Max 30 words)</p> <p>The wellbeing of c.6400 people in 1000 households across 9 fokontany is enhanced and negative impacts on natural environment decreased in Ambondrobe by 2023.</p>	<p>0.1 Area of dry forest by end Yr3 is at least 5,300Ha (current area 5,467Ha) representing a decrease in deforestation rate from current 2.1% to less than 1%</p> <p>0.2 Improve area of quality marsh within 50Hectares by 60% from 2020 baseline.</p> <p>0.3 Populations of threatened Madagascar Pond Heron and Madagascar side-necked turtle at least same in 2022/23 compared with 2020 baseline</p> <p>0.4 Subjective well-being indicators (Global Person Generated Index; % households who are satisfied with life; % who feel their actions are worthwhile; % who felt anxious yesterday; % who felt happy yesterday) improved by end Yr3</p> <p>0.5 Measures of food insecurity (assessed via Household Food Insecurity Access; Months of Adequate Household Food Provisioning and the Food Consumption Score Nutritional</p>	<p>0.1 Global Forest cover data; satellite imagery; ground-truthing; drone footage</p> <p>0.2 Satellite imagery; drone footage; ground-truthing</p> <p>0.3 Annual population surveys in 2020 and 2022/23</p> <p>0.4 Household surveys in Yr1 and Yr3</p> <p>0.5 Household surveys in Yr1 and Yr3</p> <p>0.6 Household surveys in Yr1 and Yr3; MSM visit reports; CPR data.</p> <p>0.7 Household surveys in Yr1 and Yr3</p> <p>0.8 Household surveys in Yr1 and Yr3</p>	<p>No significant reduction in current level of political stability.</p> <p>Landsat etc. continue to offer imagery for free and it is readily available to us.</p> <p>Safety of field staff and local communities is maintained – no serious threats or incidents to staff and villagers.</p> <p>Engagement from local communities towards the goals of the PA and rural development activities does not decrease negatively impacting recruitment of community staffing.</p> <p>Experimental testing of novel indicator to test financial resilience in the household survey is in line with our assumptions.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>Quality Analysis scales) in intervention villages improved by end Yr3</p> <p>0.6 By project-end, 100% of women aged 15-49 in nine villages are aware of long-term family planning methods and how to access reproductive healthcare services.</p> <p>0.7 The proportion of households who believe they have the power to influence decision making in their communities has increased by end Yr3</p> <p>0.8 Improved economic independence and resilience (% of households using VSLAs to manage their savings and value of savings) has increased by end Yr3.</p>		
<p>Outputs:</p> <p>1. Improved community engagement reduces negative impacts on and is actively restoring lake and forest habitat by 2023.</p>	<p>1.1 In each year of the project, 12 patrols per month are undertaken across 1440Ha forest and lake within Ambondrobe PA</p> <p>1.2 4 village patrol groups trained in use of smartphone devices and SMART/ Cybertracker patrolling software by end Yr1.</p> <p>1.3 10Ha phragmites marsh replanted each year to improve quality of 50ha marsh area by 60% by Y3; total 30Ha restored by Yr3.</p>	<p>1.1 Monthly SMART patroller reports</p> <p>1.2 Training attendance records; training reports</p> <p>1.3 Photographs; planting reports</p> <p>1.4 Photographs; reports</p> <p>1.5 Nursery reports</p> <p>1.6 Planting records; photographs</p>	<p>No significant reduction in current level of political stability</p> <p>Safety of field staff and local communities is maintained – no serious threats or incidents to staff and villagers</p> <p>Engagement from local communities towards the goals of the PA does not decrease negatively impacting recruitment of community staffing.</p> <p>Environmental conditions do not change so that they negatively impact reforestation activities e.g., increased</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>1.4 5Ha invasive water hyacinth removed from lake each year.</p> <p>1.5 Maintain current levels of sapling production across four community nurseries to enable 20Ha reforestation per year; 60Ha total.</p> <p>1.6 20Ha replanted Yr1; 20Ha replanted Yr2; 20Ha replanted Yr3</p>		cyclone activity, lack of rains/prolonged drought.
<p>2. Provision of Climate Smart Agriculture training through Farmer Field Schools leads to increased crop yields, improving income generation and food security for over 350 households whilst reducing harmful environmental impacts by 2023.</p>	<p>2.1 Agricultural productivity, soil quality, chemical inputs and crop varieties have been assessed for all 9 fokontany by end of 2020.</p> <p>2.2 160 farmers trained via Farmer Field Schools (FFS) in Yr2 and Yr3 (320 total) (>30% female participation)</p> <p>2.3 Farmers adopt improved agricultural techniques and are cultivating climate resistant crops and highly nutritional crop varieties on a greater proportion of their land.</p> <p>2.4 Cropland managed using chemical pesticides and fertilizers has decreased from Y1 to Yr3.</p> <p>2.5 Agricultural yields and income for famers growing new crops has increased from Y1 to Y3.</p>	<p>2.1 Agricultural surveys</p> <p>2.2 FFS attendance records (aggregated by gender); training reports.</p> <p>2.3 Annual agricultural surveys; household surveys</p> <p>2.4 Annual agricultural surveys; household survey results</p> <p>2.5 Annual agricultural surveys; household survey results</p> <p>2.6 Community surveys; reports from school Parents' Associations; annual agricultural surveys.</p>	<p>Environmental conditions change to negatively impact growing seasons and crop productivity e.g., increased cyclone activity, lack of rains/prolonged drought.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	2.6 Vegetable gardens established at 4 primary schools and 1 secondary school by end Yr2 and producing crops by end Yr3.		
<p>3. Sustainable financial tools and market-based opportunities are developed for 9 fokontany and reach at least 270 individual members (60% of which are women) by 2023.</p>	<p>3.1 By end 2020 feasibility of implementing a VSLA in each village is established through expert advice and interviews.</p> <p>3.2 By Yr2 end, 3 pilot VSLA with over 60% female participation will have completed one full cycle with progress assessed by membership and value of savings.</p> <p>3.3 By end Yr3 VSLAs operational in all 9 fokontany accounting for approx. 10% of adult population in each village, of whom 60% are women.</p> <p>3.4 12 members from the 4 local Women's Associations attend regional fair in Morondava each year of project.</p> <p>3.5 Market value chains for local products and services identified by end Yr2.</p>	<p>3.1 Results of workshop; household savings survey; villagers' testimonies; final report</p> <p>3.2 VSLA documents and annual report</p> <p>3.3 VSLA documents and annual reports</p> <p>3.4 List of participating members in regional fair</p> <p>3.5 Socio-economist report</p>	<p>Feasibility study shows not feasible due to insecurity reasons – keeping cash in a centralized and known location is not safe.</p> <p>Savers cannot be engaged in the schemes and therefore the schemes are not viable.</p> <p>Community members default on the commitments to the VSLA during the process. To prevent this, a verbal agreement is established between members and unanimous agreement is needed regarding the amount members must pay in each month.</p> <p>Theft of project savings occurs during implementation.</p>
<p>4. 1000 households across 9 fokontany in Ambondrobe have access to reproductive health support by 2023 to make choices concerning family planning and household wellbeing.</p>	<p>4.1 By end Yr1, MSM community health workers have established contact and organized initial workshops in the 2</p>	<p>4.1 Meeting and attendance records; feedback interviews with communities</p>	<p>Community members do not react negatively to reproductive health interventions.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>communes reaching people in 9 fokontany.</p> <p>4.2 By end Yr2, active reproductive health programs are operational in the 2 communes reaching people in 9 fokontany.</p> <p>4.3 By end Yr2, a Community Health Volunteer Training Program (CHV) has been launched, with the first volunteers promoted by communities in Yr2 and trained in Yr3.</p> <p>4.4 100% of adults in 9 fokontany have access to regular (quarterly) reproductive health clinics by end Yr3; all women aged 15-49 are aware of contraceptive choices and where to access them.</p>	<p>4.2 Reports provided by MSM summarizing actions, community reception and contraceptive prevalence rate (CPR).</p> <p>4.3 Workshop attendance records; CHV identification, CHV attendance records</p> <p>4.4 Reproductive health indicators e.g., CPR, ASC training records, household survey results, MSM visit records.</p>	<p>Financial or other circumstances do not force MSM to pull out of the project partnership during project implementation.</p>
<p>5. Local governance capacity and community cohesion is increased across 4 local associations (approximately xx community members) through the provision of capacity building, improved local association infrastructure and social events.</p>	<p>5.1 By end Yr1, a good governance training curriculum, focused on community leaders, has been developed through the evaluation of 4 local associations and their primary needs.</p> <p>5.2 By end Yr2, training programme delivered, and impact assessed in Yr3.</p> <p>5.3 By end Yr2, 4 administration offices have been built and have information</p>	<p>5.1 Evaluation reports; training curriculum printed.</p> <p>5.2 Course attendance; post-training assessments</p> <p>5.3 Photographs of fokontany offices and noticeboards in use.</p> <p>5.4 Household surveys Y1 and Y3</p>	<p>No significant reduction in current level of political stability</p> <p>Safety of field staff and local communities is maintained – no serious threats or incidents to staff and villagers.</p> <p>Willingness to engage from local associations and fokontany chiefs.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>boards showing Protected Area regulations, patrol updates etc. in words and images.</p> <p>5.4 % of households participating in local associations has increased at end Y3 cf. Yr1.</p> <p>5.5 Number of decisions supporting development and environment at the local, commune and regional level has increased at end Y3 cf. Yr1.</p> <p>5.6 180 people from the 9 fokontany engaged in annual football competitions each year.</p>	<p>5.5. Meeting minutes: records of bylaws passed.</p> <p>5.6 Participation records; photos; football competition results.</p>	<p>The government contributes towards office building costs.</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p>			

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements July 2020 - March 2023
<p>Impact</p> <p>Improved community well-being and protected area management is ensuring Ambondrobe's dry forest and wetlands are protected providing vital ecosystem services; improved ecological resilience and havens for threatened species.</p>		<p>I) The highest number of rere nests was recorded in over 13 years of surveys (256 nests between October 2021 and February 2022 compared with 158 in 2011-12 and 152 in 2020-21)</p> <p>II) 276 beneficiary households around Lake Ambondrobe no longer use chemical inputs (fertilizers and pesticides). This has been replaced by companion planting and compost production.</p> <p>III) There was significant reduction of threat level in the Ambondrobe zone covered by patrols (inside PA and the 4 NRMT zones)</p> <p>(IV) 49% increase in the number of women aged 15-49 years now aware of and have access to long-term family planning methods in our intervention villages.</p> <p>(V) In total, 129.4 ha were reforested using 131,360 seedlings cultivated in project nurseries. 41.17 ha of marsh was restored through replanting and invasive species removal.</p> <p>(VI) 647 farmers engaged through 34 FFS groups, created over the project period with 37% female participation, used improved agricultural techniques to cultivate 266.1 ha of climate resistant and highly nutritional crop varieties, increasing the number of months households had adequate food provisioning thereby improving food security.</p> <p>(VII) VSLAs are now being used effectively as a sustainable financial tool in all 9 fokontany, improving financial security of 12.39% of the population (65% of whom are women) within these communities.</p>
<p>Outcome The wellbeing of c.6400 people in 1000 households across 9 fokontany is enhanced and negative impacts on natural environment decreased in Ambondrobe by 2023.</p>	<p>0.1 Area of dry forest by end Yr3 is at least 5,300Ha (current area 5,467Ha) representing a decrease in deforestation rate from current 2.1% to less than 1%</p> <p>0.2 Improve area of quality marsh within 50Hectares by 60% from 2020 baseline</p>	<p>Baseline data on forests and marshes have been verified from 2021 through an annual drone survey which has been used to assess forest cover. 5300 was the total area including the PA and 4 Natural Resource Management Transfers. The loss of forest for the year 2022 was 7.08%, caused not only by fire but also by the transformation of forests into corn cultivation land (clearing or cutting trees), planting and fire created by the Zebu Thieves. The forest area in 2022 was therefore 3,122.88 ha (2021 it was 3,360.71 ha). However, efforts to reduce burned areas in the Protected Area by 50% are effective with 237.83 ha in 2022 against 462.17 ha in 2021.</p> <p>In total, 27.14 ha of marsh was replanted, improving the quality of the 50 ha of marsh habitat that was surveyed in 2020 to create the baseline, by 54%. Assessments were conducted and maps created, identifying priority areas for restoration using drone technology, guiding and assessing restoration efforts.</p>

		Planned activity was reduced as the water levels within the restoration area remained too high during the planting season in Y3. The maps generated by this project will continue to be used to guide future planned restoration efforts within the marsh.
0.3 Populations of threatened Madagascar Pond Heron and Madagascar side-necked turtle at least same in 2022/23 compared with 2020 baseline		<p>Madagascar Pond Heron Monthly population counts of Madagascar pond heron were conducted throughout the project and the results were compared with the 2020 baseline established in Y1. In Y2, the average number of individual birds recorded per month dropped from 117 to 70. This then increased to 294 in Y3. This significant increase is thought to be due to high water levels flooding nests in early 2023 forcing more birds to settle on tree branches and fly over the lakes, making them more visible for counting. We do believe, however, that the population remains stable.</p> <p>Rere The number of nests detected and protected during the project period varied. A baseline of 153 nests was recorded in Y1. This increased to 256 nests in Y2 and then decreased to 184 nests in Y3. This figure is still higher than the baseline and when looking at the long-term data set, the number of nests detected and protected is still increasing (158 nests recorded in 2011-12).</p>
0.4 Subjective well-being indicators (Global Person Generated Index; % households who are satisfied with life; % who feel their actions are worthwhile; % who felt anxious yesterday; % who felt happy yesterday) improved by end Yr3		<p>On average, the score of the Global Person Generated Index increased from 44 to 61 between the two survey periods in Y1 and Y3. Households enjoyed their standard of living with the score above average (61) as 100 was the highest score.</p> <p>The data shows the following: 35% of households reported they were satisfied with their lives compared to 23% in Y1; 49% of those who think their actions are useful compared with 19.5% in Y1; 29% of people felt anxious yesterday compared with 18% in Y1; 45% of people felt happy yesterday compared to 23% in Y1.</p>
0.5 Measures of food insecurity (assessed via Household Food Insecurity Access; Months of Adequate Household Food Provisioning and the Food Consumption Score Nutritional Quality Analysis scales) in intervention villages improved by end Yr3		Measures of food insecurity in intervention villages have improved. In Y1 households reported that they had 9.74 months of adequate household food provisioning. By Y3 this increased to 10.04 out of 12 months. The food consumption score still remains within the acceptable level reported as 50.79 in Y3 compared with 52.05 in Y1. (Score classification: score of 0 -21 considered low, 21.5 -35 borderline and 36+ acceptable).
0.6 By project-end, 100% of women aged 15-49 in nine villages are aware of long-term family planning methods and how to access reproductive healthcare services		At the end of the project, 81.70% of women aged 15-49 years were aware of long-term family planning methods, while only 32.44% had known about these methods at the beginning of the project. In addition, 65.50% of households interviewed know about access to the service providing long-term family planning methods compared to 61.10% in the baseline survey.

	<p>0.7 The proportion of households who believe they have the power to influence decision making in their communities has increased by end Yr3</p>	<p>Data from both household surveys showed a significant increase in the proportion of households that believe they have the power to influence decision-making in their communities as 71% in Y3 compared to a baseline of 66% in Y1.</p>
	<p>0.8 Improved economic independence and resilience (% of households using VSLAs to manage their savings and value of savings) has increased by end Yr3</p>	<p>Results from the household survey showed an increase of 30% of households using VSLAs to manage their savings by end Y3 demonstrating improved economic independence.</p>
<p>Output 1. Improved community engagement reduces negative impacts on and is actively restoring lake and forest habitat by 2023.</p>	<p>1.1 In each year of the project, 12 patrols per month are undertaken across 1440Ha forest and lake within Ambondrobe PA.</p>	<p>[REDACTED]</p>
	<p>1.2 4 village patrol groups (28 patrollers) trained in use of smartphone devices a SMART/Cybertracker patrolling software by end Yr1.</p>	<p>[REDACTED]</p>
	<p>1.3 10Ha phragmites marsh replanted each year to improve quality of 50ha</p>	<p>A total of 27.14 ha of marsh was replanted with <i>Phragmites</i>. Y1: 8.14 ha of marshes were restored.</p>

marsh area by 60% by Y3; total 30Ha restored by Yr3.		Y2: 11 ha of marsh was planted with <i>Phragmites communis</i> (Bararata) and <i>Tipha monguistifolia</i> (Vondro). 180 people participated in this activity, 20% of whom were women.
		Y3: 8 ha were restored with the participation of 51 people. Evidence: Section 3.1; Appendix 4 Photographs (Photo 7)
1.4 5Ha invasive water hyacinth removed from lake each year		In total, 14 Ha of the lake was cleared of invasive water hyacinth Y1: 3 ha of lake were cleared of water hyacinth.
		Y2: 8 ha of the lake were cleared of water hyacinth. Y3: 3 ha of the lake were cleared of water hyacinth. Evidence provided: Section 3.1; Appendix 4 Photographs (Photo 8-9)
1.5 Maintain current levels of sapling production across four community nurseries to enable 20Ha reforestation per year; 60Ha total		Y1: 44,000 native plants (<i>Cordyla madagascariensis</i> , <i>Albizzia lebeck</i> , <i>Commiphora sp.</i>) were produced in nurseries in Aboalimena, Ankaivo and Belobaka. Y2: 34,200 plants (<i>Cordyla madagascariensis</i> , <i>Albizzia lebeck</i> , <i>Commiphora sp.</i>) were produced by nurseries between August 2021 and March 2022. Three trained nursery members, 47 community members and 2 Durrell staff members were trained in running the three nurseries (Aboalimena, Ankaivo, Belobaka). Y3: 54,960 plants of ten species (<i>Cordyla madagascariensis</i> , <i>Commiphora sp.</i> , <i>Entada chrysostachys</i> , <i>Terminalia ruffovestita</i> , <i>Gyrocarpus americanus</i> , <i>Stereospermum nematocarpum</i> , <i>Dalbergia</i> , <i>Colubrina decipiens</i> , <i>Astrotrichilia asterotrica</i> , <i>Baudouinia fluggeriformis</i>) were produced by the six nurseries (four in Ankaivo; one in Aboalimena one in Belobaka) Evidence: Appendix 4 Photographs (Photo 4)
1.6 20Ha replanted Yr1; 20Ha replanted Yr2; 20Ha replanted Yr3		In total, 129.4 ha were reforested with 131,360 seedlings exceeding our target of 60 ha. Y1: 36 Ha were reforested with 44,200 seedlings of native species in the fokontany of Aboalimena, Belobaka, Andimaky and Ankaivo. Y2: 46 Ha were reforested with 34,200 native species of saplings (<i>Cordyla madagascariensis</i> , <i>Albizzia lebeck</i> , <i>Commiphora sp.</i>). Y3: 47.4 ha reforested with 54,960 seedlings. Evidence: Appendix 4 Photographs (Photo 5-6; 10-11); Appendix 1

Activity 1.1 "Undertake community patrols 3-days per week from the 4 local associations in Ambondrobe to record incidences of illegal activity all year. Throughout project"	
Activity 1.2, Monthly evaluation of community patrols to feedback and improve performance. Throughout project	
Activity 1.3. Processing and analysis of data by Durrell's data team in Tana. Ongoing throughout project	
Activity 1.4. Production of and dissemination of SMART reports to wider Durrell team, Government and law enforcement agencies. Throughout project	<p>We set up a server at the Antananarivo office in 2023 to facilitate backups of SMART reports. We are trying to deploy SMART Connect, a real-time cloud-based system for patrols where verified users (law enforcement, government) will be able to access SMART data. However, in Ambondrobe, the main challenge to this is the lack of network coverage (currently 2G).</p> <p>SMART reports were disseminated monthly in Y2 and Y3 to Partner Institutions (District, DREDD and CEF, DirPEB and CirPEB).</p>
Activity 1.5. Train local community patrollers in use of SMART/Cybertracker software in Yr1. Undertake refresher training in Yrs2 and 3.	<p>In Y2, refresher training for 80 patrollers on the use of smartphones and the OSM tracking app to improve the quality of patrol data was completed on 21 October 2021. Additional training for the 114 patrollers on SMART data entry was completed on March 22, 2022. Then, 16 new patrollers from Moravagno benefited from training on SMART Mobile in December 2022.</p>
Activity 1.6. Plant 10Ha phragmites reed each year (August)	<p>Planting of phragmites reed took place every year as planned and a total of 27.14 ha of marsh was replanted.</p>
Activity 1.7. Undertake water hyacinth clearance annually (November)	<p>Water hyacinth clearance activities took place every year as planned and in total 14 ha of lake were cleared of the invasive species.</p>
Activity 1.8. Undertake weekly nursery maintenance.	<p>Three nurserymen were trained to maintain the three nurseries per week (Aboalimena, Belobaka and Ankaivo) for the first two years. And, in Y3, six nurserymen were trained and supported by the technician (four in Ankaivo, one in Belobaka and one in Aboalimena)</p>
Activity 1.9. Undertake annual tree planting (February)	<p>Tree planting activities took place every year as planned with the help from over 400 VOI members. In total 133,360 seedlings were planted reforesting an area of 129.4ha.</p>

Activity 1.10. Monitor planted areas & hyacinth regeneration.	Durrell patrol boats and field staff conduct monthly surveillance missions to record the presence of water hyacinth. An assessment of the survival rate of planted trees was conducted in June 2021 and July 2022 by DREDD.	
Output 2. Provision of Climate Smart Agriculture training through Farmer Field Schools leads to increased crop yields, improving income generation and food security for over 300 households whilst reducing harmful environmental impacts by 2023.	2.1 Agricultural productivity, chemical inputs and crop varieties have been assessed for all 9 fokontany by end of 2020.	By the end of 2020, GSDM had assessed all nine focal Fokontanys. Evidence: Appendix 7 Baseline Report
	2.2 160 farmers trained via Farmer Field Schools (FFS) in Yr2 and Yr3 (320 total) (>30% female participation)	A total of 647 farmers were engaged and 34 FFS groups created over the project period with 37% female participation (see Table 7). Y1: 276 FFS members; 14 FFS groups (32% women) Y2: 215 famers; 11 FFS groups (44% female) Y3: 178 farmers; 9 FFS groups (35% female) Non-member beneficiaries: 802 Total farmers trained = 1449 Evidence: Appendix 4 Photographs (Photo 14); Appendix 6 Record of seeds and materials distributed to FFS
	2.3 Farmers adopt improved agricultural techniques and are cultivating climate resistant crops and highly nutritional crop varieties on a greater proportion of their land	Total area under cultivation reached 274.1 ha by Y3 Y1: 110.4 ha cultivated with staple crops and high nutritional value crops using CSA and agroecology techniques. Y2: the total area under seasonal and off-season crops was 91.25 ha, of which 72.5 ha for seasonal crops and 18.75 ha for off-season crops. Y3: the total area cultivated with seasonal crops was 72.45 ha Evidence: Appendix 4 Photographs (Photo 15-16)
	2.4 Cropland managed using chemical pesticides and fertilizers has decreased from Y1 to Yr3	Data collected during the survey in Y3 showed a considerable decrease in the proportion of people who continue to use chemical fertilizers from 50% to 0%, although 10% are still using pesticides to control insect pests. Evidence: Appendix 7 Baseline Report
	2.5 Agricultural yields and income for famers growing new crops has increased from Y1 to Y3.	Crop yield assessments showed higher average yields for the majority of crops growing in areas under CSA cultivation than regional averages in both the 2021 and 2022 growing season (see Table 8 and Table 9). Evidence: Appendix 7 Baseline Report
	2.6 Vegetable gardens established at 4 primary schools and 1 secondary school	School gardens were created in four primary schools covering a total of 6ha and the first harvest took place in Y2, with yields which were comparable to regional

	by end Yr2 and producing crops by end Yr3	averages. The provision of agricultural inputs and training directly benefited 90 households in four villages, with indirect beneficiaries from another 130 households in all villages. The first successful school canteen project benefited 110 students. No harvest was collected in Y3. Evidence: Appendix 4 Photographs (17-19); Appendix 11 Final report on market gardens
Activity 2.1. Recruit Ambondrobe Agricultural technician		An agricultural technician was recruited in Y1.
Activity 2.2. GSDM train Durrell staff in climate smart techniques including suitable crop options. September–November (Yr1)		Five Durrell staff members completed training delivered by GSDM partners in Y1
Activity 2.3. Develop Ambondrobe work plan with support from GSDM. September–November (Yr1)		A work plan was developed with the support of GSDM in Y1.
Activity 2.4. Identify, create and structure FFS groups in each association. September– November (annually)		During the three years of intervention in Ambondrobe, 34 FFS groups were created and structured with 647 members (including 238 women). New groups were created and members engaged each year as planned.
Activity 2.5. Train and support FFS groups in techniques. November – end project		FFS members were provided with training every year as planned with 647 receiving training in total. The agricultural technician delivered training and support to FFS members in relation to the CSA technique directly on each FFS member's plots.
Activity 2.6. Implementation of agricultural techniques. December – end project		The total area cultivated using the CSA techniques delivered through training were assessed and amounted to 266.1 ha in total.
Activity 2.7. Establish school vegetable gardens. September– November (annually)		School gardens we established in Y1 and cultivated in Y2. A lack of engagement meant no school gardens were cultivated in Y3.
Activity 2.8. Annual agricultural surveys (October)		Crop yield assessments were undertaken during an annual agriculture evaluation session with CIRAE at FFS sites annually as planned.
Output 3. Sustainable financial tools and market-based opportunities are developed for 9 fokontany and reach at least 270 individual members (60% of whicare women) by 2023.	3.1 By end 2020 feasibility of implementing a VSLA in each village is established through expert advice and interviews	A feasibility study was carried out by Durrell's Agro-Economist Coordinator in Antananarivo to tailor the VSLA approach to Ambondrobe site prior to implementation in Y1.
	3.2 By Yr2 end, 3 pilot VSLA with over 60% female participation will have completed one full cycle with progress assessed by membership and value of savings	3 VSLA groups of 63 members including 30 women (47.61%) were established in Y1 and completed a full cycle. Membership and savings were tracked with the following results: Belobaka group was able to complete the full cycle with a female participation of 31.57% and generated 1,815,000 Ar for sharing. Ambatomanjaka group had 38.88% female participation and generated 529,000 Ar for sharing.

		Ankaivo group had 65.38% female participation and generated 791,000 Ar for sharing. Evidence: Appendix 3 VSLA Sample Accounting Sheet
	3.3 By end Yr3 VSLAs operational in all 9 fokontany accounting for approx. 10% of adult population in each village, of whom 60% are women	Out of 3551 members of the nine fokontany, 440 VSLA members were targeted, equating to 12.39% of the population. Of these 440 members, 289 are women exceeding our target of 60%. Y1: 3 VSLA groups in two villages with a total of 63 members including 30 women in Ankaivo and Belobaka Y2: 7 VSLA groups in four villages with a total of 127 members including 95 women in Aboalimena Sud, Aboalimena Avaratra, Ampanarena, Ankilizato Y3: 13 VSLA groups in eight villages with a total of 262 members including 170 women (65%) in Aboalimena Sud, Aboalimena Avaratra, Ampanarena, Ankilizato. Evidence: Appendix 4 Photographs (Photo 20-21)
	3.4 12 members from the 4 local Women's Associations attend regional fair in Morondava each year of project.	14 members of three local associations (FFS, VSLA, Ankaivo Women's Association) participated in the regional fair in Morondava in Y1 (12 participants) and Y2 (two women). No fair took place in Y3.
	3.5 Market value chains for local products and services identified by end Yr2	Market value chains for local products and services to improve community incomes and sustainable use of natural resources were identified in Y2. This was followed by sensitisation activities conducted in three villages. A cooperative was then formed in one village comprising of 18 members and is now going through the process of formalisation and training on governance. Evidence: Appendix 12 Value Chain Analysis Report
Activity 3.1. Recruit Ambondrobe Social Coordinator to lead process.		The recruitment of this position was secured in Y2.
Activity 3.2. Assess the feasibility of establishing VSLA's in Ambondrobe		A feasibility analysis relating to the establishment of the VSLA approach was undertaken in Y1.
Activity 3.3. If feasible, train Ambondrobe staff in VSLA process		Four Durrell staff members were trained on VSLA modules across Y1 and Y2.
Activity 3.4. Establish pilot VSLA groups and train members in VSLA process.		3 VSLA pilot groups were created and 64 VSLA members were trained on eight VSLA modules in Y1.
Activity 3.5. Monthly meetings with VSLA groups to track progress through the full cycle		VSLA groups participated in monthly meetings of local associations organized at the VOI level. Additional quarterly meetings were held between VSLA groups of the same fokontany to share experiences and offer support facilitated by the social organizer of Durrell.

Activity 3.6. Roll out VSLA to all other fokontany.	The VSLA model was deployed in four new villages in Y2 (Aboalimena North, Aboalimena South, Ampanarena, Ankilizato) and an additional four new villages (Ankirijy, Ambaravarantany, Andimaky, Bevaho) in Y3.
Activity 3.7. Take members of the Women's associations to annual regional fair in Morondava	Members of local women's associations attended the annual regional fair in Y1 and Y2.
Activity 3.8. Research and identify market value chains for locally produced products	Market value chains for local products and services to improve community incomes and sustainable use of natural resources were identified through a study in Y2, carried out by the Durrell Agri-economist and with the support of an intern.
Output 4. All households across 9 fokontany in Ambondrobe have access to reproductive health support by 2023 to make choices concerning family planning and household wellbeing.	4.1 By end Yr1, MSM community health workers have established contact and organized initial workshops in the 2 communes reaching people in 9 fokontany Evidence: Appendix 8 Mission report MSM; Appendix 4 Photographs (Photo 25)
	4.2 By end Yr2, active reproductive health programs are operational in the 2 communes reaching people in 9 fokontany Evidence: Appendix 8 Mission report MSM; Appendix 4 Photographs (Photo 24)
	4.3 By end Yr2, a Community Health Volunteer Training Program (CHV) has been launched, with the first volunteers promoted by communities in Yr2 and trained in Yr3 Evidence: Appendix 4 Photographs (Photo 22-23)
	4.4 100% of females aged 15-49 in 9 fokontany have access to regular (quarterly) reproductive health clinics by end Yr3; all women aged 15-49 are aware of contraceptive choices and where to access them All households can now access FP services, which operate on a quarterly basis, with four visits conducted in each fokontany annually. By the end of Year 3, 693 women had benefited from these services.
Activity 4.1. Develop an operational plan with MSM.	An operational plan was developed jointly with MSM in Y1 and implemented in Y2 and Y3.
Activity 4.2. Organise community information meetings on reproductive health in each fokontany	Two preliminary meetings were organized by Durrell in each fokontany prior to the first MSM visit which occurred in March 2021. Regular quarterly information and awareness meetings were maintained by MSM and community workers in Y2 and Y3. This gives a total of 99 community meetings across the three years.

Activity 4.3. Collect baseline information and health assessment.		Baseline information and health assessment were undertaken in the global baseline studies in December 2020.
Activity 4.4. Appoint community health workers and carry out reproductive health clinics.		By the end of the project a total of 18 Community Health Workers had been recruited and trained.
Activity 4.5. Community Health Volunteer Training Program developed and launched.		Training was delivered to all Community Health Workers every six months throughout the project on
Activity 4.6. Collate monthly reports from MSM.		Eight quarterly reports were collected from June 2021 to March 2023
Output 5. Local governance capacity and community cohesion is increased across 4 local associations (193 community members) through the provision of capacity building, improved local association infrastructure and social events.	5.1 By end Yr1, a good governance training curriculum, focused on community leaders, has been developed through the evaluation of 4 local associations and their primary needs.	<p>An evaluation of the 4 local associations was undertaken in Y1 to identify the competencies and skills needed to enhance the association's capacity in good governance and in managing the natural resources around the protected area. Based on this competencies assessment, a training program focused on community leaders was developed.</p> <p>Evidence: Appendix 2 Training needs assessment; Appendix 9 sample minutes of VOI monthly meeting</p>
	5.2 By end Yr2, training programme delivered and impact assessed in Yr3	<p>Y2 training delivered to 45 community leaders. In Y3 the training program was delivered to 55 leaders of the 4 VOIs who received training in nine modules under four themes: planning, associative life, communication and good governance. Impact was assessed through pre- and post-training questionnaires. Total: 100 community leaders received training.</p> <p>Summary of trainings delivered:</p> <ul style="list-style-type: none"> • 47 members of the 04 VOI trained on nursery maintenance (setting up nurseries, seed treatment, planting methods and plant maintenance), training conducted by Graine de Vie. • 45 members of the four VOIs whose skills and abilities are strengthened from 12 to 31 July 2021 on the nine modules (<i>planning, associative management, implementation and monitoring of a business plan, management of financial resources, effective communication and good working relationship with stakeholders, organization and animation of meetings at local/regional level, interpersonal conflict resolution, effective decision-making, and engagement</i>). • 55 members of the three VOI trained on the 3 modules with DREDD Menabe from 18 to 25 November 2022 so that they can put into practice their role and responsibilities in the operation of the TGRN and the implementation of conservation activities.

	5.3 By end Yr2, 4 administration offices have been built and have information boards showing Protected Area regulations, patrol updates etc. in words and images.	Two administrative offices were completed at the end of Y2 and two more completed at the beginning of Y3. Evidence: Appendix 10 Office construction agreement; Appendix 4 Photographs (Photo 26-27)
	5.4 % of households participating in local associations has increased at end Y3 cf. Yr1.	In the Y3 survey, 56% of households declared that they had participated in local associations which shows a decrease from the Y1 baseline which was 67%. The baseline and endline did not survey the same households. Evidence : Y3 survey (report will follow)
	5.5 Number of decisions supporting development and environment at the local, commune and regional level has increased at end Y3 cf. Yr1.	Development and the environment at local, communal and regional levels have been supported by documents such as PAG (PA Development and Management Plan), PGESS (Environmental Management Plan for Social Safeguarding) and Dinan'i Menabe. The updating and validation of the PAG (PA Development and Management Plan) and the PGESS (Environmental Management Plan for Social Safeguarding) in Y3 and the acceptance of the communities of Dinan'i Menabe in Y2 showed the increase in the number of decisions on development and environment at the local level, communal and regional.
	5.6 180 people from the 9 fokontany engaged in annual football competitions each year.	Total of 918 community members engaged in football competitions. Y1: The football tournament was not possible due to COVID-19 restrictions Y2: 450 community members engaged including 150 players, 300 spectators Y3: 468 people from the nine fokontany including 168 players and about 300 spectators
Activity 5.1. Evaluation of four local associations and assessment of needs undertaken		An evaluation of competencies/skills was undertaken for the 4 local associations.
Activity 5.2. Develop training curriculum based on evaluation and needs assessment		A training program focused on community leaders and based on the results of the competencies assessment was developed.
Activity 5.3. Deliver training programme to community leaders		Two training programs were conducted in collaboration with DREDD, one in October 2021 and the other in December 2022, which reached 55 community leaders. The first training was focused on awareness-raising techniques and the use of the specifications, associative management and the second training on the strengthening of the role and responsibility of office members and the application

	of dina as well as the use of different management tools and the roles and responsibilities of VOI office members.
Activity 5.4. Undertake an assessment of impact of training programme	Pre and post-training surveys were undertaken with all training participants. Quarterly meetings with VOI members are also used as an opportunity for DREDD and the Durrell team to identify issues faced by VOIs or their needs for support in implementing their annual work plans. During these meetings, there was always a capacity building session for these VOI members brought by DREDD and the Durrell team.
Activity 5.5. Establish agreements and protocols with communities for construction of association offices	All agreements were signed and the construction of the offices successfully completed.
Activity 5.6. Identify contractor to construct offices	Contractor identified in November 2021 and contracts issued.
Activity 5.7. Procure materials and construct offices and noticeboards	100% of material purchases were made and the offices constructed. The billboards are currently being finalised.
Activity 5.8. Monthly meetings with local associations	Monthly meetings were conducted with VOIs alongside other local associations (including FFS, VSLA and others), allowing them to pass on information, to raise awareness (on the roles and responsibilities and contribution of the beneficiaries), knowledge exchange and problem solving as well as collective decision making. They were also used as an opportunity to deliver capacity development activities.
Activity 5.9. Organise and hold annual football competition	Two football competitions were held in the presence of local authorities and the community of the five fokontany; three from the Rural Municipality of Aboalimena and two from the Rural Municipality of Andimaky Manambolo. The number of jerseys distributed was 154.

Annex 3 Standard Indicators

The Biodiversity Challenge Funds (BCFs) use high quality and accessible Monitoring, Evaluation and Learning (MEL) to enable scaling, replication and increase the impact of the funds and the projects we support.

By asking project teams to align indicators with the Darwin Initiative Standard Indicators, we aim to increase our contribution to the global evidence base for activities that support biodiversity conservation, poverty reduction and capability & capacity.

The tables below are provided to assist project teams in reporting against Standard Indicators. Please report against the Standard Indicators that you have selected specifically for your project in Table 1 below. Refer to the Standard Indicator Guidance & Menu available on the [Darwin Initiative](#) website for guidance on how to select indicators, as well as how to disaggregate reporting within your chosen indicators.

We recognise that our menu cannot cover all the potential monitoring needs for all projects – where necessary you can select indicators from other sources or develop your own. See our BCF MEL guidance on best practices for selecting and developing indicators.

Cod e No.	Description	Gender of persons (if applicable)	Nationality of persons (if applicable)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total expected during the project
7	Number of training materials (i.e. different types - not the volume - of material produced) to be produced for use by the host country			3				13
20	Estimated value (£) of physical assets to be handed over to host country(ies)			5 508	12 450			16 410
21	Number of permanent teaching/training/research facilities, structures or organizations to be established and continued after Darwin funding ends			17	11			53
22	Number of parcels of land and permanent sites to be established during the project and continued after Darwin funding ends			14	14			28
23	Value of resources from other sources (i.e. in addition to Darwin funding) for project work							

In addition to reporting any information on publications under relevant standard indicators, in Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark with an asterisk (*) all publications and other material that you have included with this report.

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

14 Checklist for submission

	Check
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 10)?	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 10)?	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	