

## Darwin Initiative Main Annual 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/> ).

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

**Submission Deadline: 30<sup>th</sup> April 2023**

### Darwin Initiative Project Information

|                                   |   |
|-----------------------------------|---|
| Project reference                 | 28-001  |
| Project title                     | Building wetland resilience in Madagascar; Community-based conservation of Lake Tseny |
| Country/ies                       | Madagascar  |
| Lead partner                      | Wildfowl & Wetlands Trust (WWT)   |
| Project partner(s)                | Madagasikara Voakajy (“Mavoa”)  |
| Darwin grant value                | £339,943.00   |
| Start/end dates of project        | 01 July 2021 to 30 June 2024  |
| Reporting period                  | Annual Report 1, Apr 2021 – Mar 2022  |
| Project Leader name               | Mark Grindley, Senior Project Manager, International                                  |
| Project website/blog/social media | n/a   |
| Report author(s) and date         | WWT: Mark Grindley, Harison Andriambelo<br>Mavoa: Jelot Hernandez                     |

### 1. Project summary

In the last 50 years, around 60% of Madagascar’s wetlands have been heavily degraded or completely destroyed. Those remaining are subject to array of pervasive threats from sedimentation, pollution, burning, invasive species and over-harvesting. Despite similar rates of species endemism as the country’s forests, and providing vital ecosystem services to millions of impoverished people, the wetlands of Madagascar receive little attention, with the National Ramsar Committee and relevant government departments under-resourced, and lacking a representative examples of best-practice wetland conservation management.

This project generates foundations for long-term resilient conservation management of just one of those important wetlands, Lake Tseny in Port-Bergé, Sofia Region. Lake Tseny is the most intact wetland within the Port Berge KBA, and home to at least eight Threatened species of fish and reptile, and 5,000 people, the majority of whom are dependent upon natural systems for drinking water, sanitation, timber, fuel, livelihoods and wellbeing.

The project is providing resilient ecosystem services and sustainable livelihood opportunities for these communities, securing healthy habitat for increasing populations of native biodiversity, and inspiring resilience planning for wetlands nationally. The tools and approaches adopted in this project will be showcased nationally.

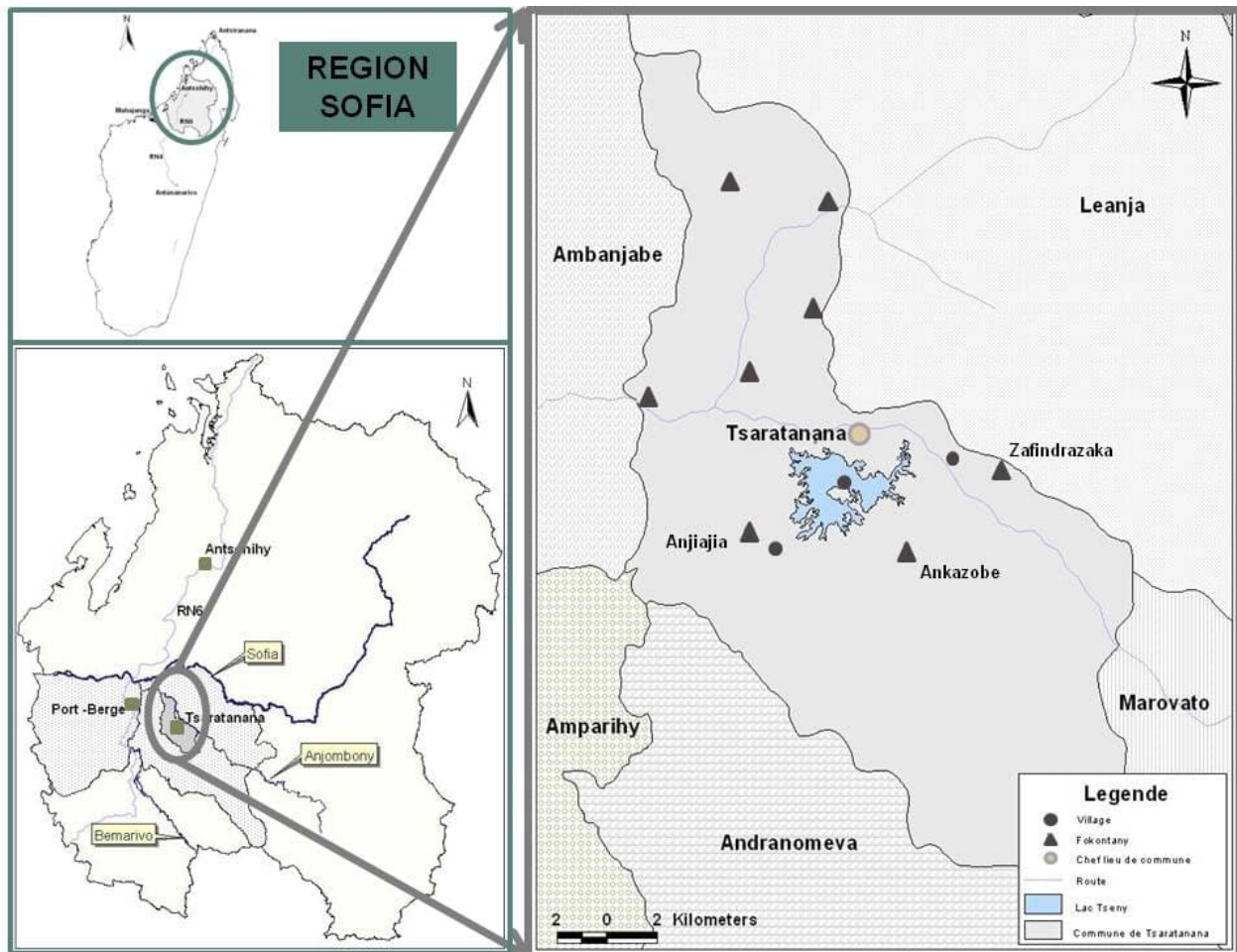


Figure 1. Location and site map

## 2. Project stakeholders/ partners

The project is being implemented by WWT in cooperation with three main institutional partners.

### Madagasikara Voakajy (Mavoa)

With years of relevant experience, Mavoa is leading on setting up local community groups and negotiating and putting in place formal management transfer agreements between them and the government, as well as providing capacity building for them. They will also manage the environmental education and awareness initiatives and the fishery enhancement work.

MAVOA is implementing these activities under a sub-grant agreement that was finalised with WWT as part of the project inception work during the reporting period. They prepare annual workplans with us, in consultation with the other partners, and we hold monthly coordination meetings with them at site level. Mavoa also sits on the project management steering committee, which meets quarterly to monitor progress.

### Durrell Wildlife Conservation Trust (DWCT)

DWCT has a small technical role, guiding species assessments, habitat requirements for ecological restoration, and biodiversity monitoring, with a particular focus on the Madagascar big-headed turtle. This is provided through one member of their technical staff, though their involvement during the first year of the project has been quite limited while the necessary baseline information is being collected.

As DWCT inputs are only for some staff time, they are operating under a simple Contract for Services directly to WWT, which was negotiated and signed during the project inception.

### Relevant Government departments (fisheries, forestry and environment, agriculture,)

WWT and Mavoia were already working with the relevant government departments in Sofia region, so we were readily able to consult with them during project design. During the inception, we agreed to formalise a mechanism for their engagement on project monitoring, steering and planning for joint activities, with the department of fisheries as the lead from their side. This resulted in a written *Accord de Collaboration*, outlining the implementation arrangements and responsibilities. Regular updates are provided to the regional authorities, and they have also participated in a number of project events, notably the signing of the local community resource management transfer (aka 'VOI') agreements in October 2022.

### Other partners

Since their formalisation in October 2022, the main local partner is now the four VOIs; three comprising cluster of villages that are located close to each other, primarily focussed on protection of their watershed forests, and one comprising most of the fishers from the villages around the lake. As the project progresses, these groups have become increasingly central to directing and implementing activities, primarily through annual and quarterly planning meetings.

## 3. Project progress

### 3.1 Progress in carrying out project Activities

| Activity   | Progress    | Notes  |
|--|-------------|--|
| 1.1 Conduct community consultations for formalised community-based natural resource management transfer agreements                               | Complete    | All consultations completed by March 2022.   |
| 1.2 Management Plans developed and agreed by local government  | Complete    | The VOI plans (transfer agreements) were signed into effect October 2022.  |
| 1.3 Constitute membership of VOIs and support elections for leadership groups  | Complete    | As described in the previous progress report.  |
| 1.4 Conduct capacity assessments (resource management, administrative, legal, financial) of groups and develop VOI training plan                 | In progress | Will be completed October 2023   |
| 1.5 Facilitate a study tour to Lake Sofia to learn from similar successful ongoing schemes   | Complete    | The exchange visit was made in December 2022 for VOIs to learn about the CBSG process. Due to its success, another study tour is being considered. |
| 1.6 Develop VOI Business Plan to ensure sustainable financing of the associations, including equipment rental and community-based savings groups | In progress | A consultant specializing in inland fisheries is being recruited to do this work.  |
| 1.7 Deliver VOI training programme and provide ongoing support   | In progress | Will be completed by December 2023   |
| 1.8 Hold community fora 2 times per year in each community to ensure wider accountability  | In progress | Last one held in Oct 2022  |
| 1.9 Hold annual catchment management group meeting   | In progress | First will be in December 2023   |
| 1.10 Capacity assessment and legacy planning   | n/a         | Planned for project final year (by December 2023)  |

| Activity  | Progress                | Notes   |
|---|-------------------------|---|
| 2.1 Collect and analyse socio-economic data, including legal and illegal use of the fishery   | Complete                | Completed Feb 2022; report available.   |
| 2.2 Conduct fisheries assessment to map key nursery habitats, potential high-value no-take zones and priority restoration actions to inform Activity 1.2 and Output 3   | Complete                | Report available. To be complemented by additional fisheries needs assessment in May 2023.  |
| 2.3 Training from fisheries specialist and visit by representatives of other successful community fishery projects to share advice on best-practice and common mistakes | Planned                 | Exchange visit of fishery cooperative reps with lake Kinkony expected before end of 2023.   |
| 2.4 Value chain analysis and fishery business plan agreed alongside local fishers   | Planned                 | A consultant specializing in inland fisheries is being recruited to do this work.   |
| 2.5 Conduct feasibility study for restocking native species through cage farming  | Started                 | Initial consultations with fishers held; feasibility study was initiated in 2022 for above-ground breeding. Feasibility study will be completed in May 2023 |
| 2.6 Update and implement education and awareness programme, including dissemination of information on strict common standards for fishing control                       | In progress             | 9 target schools around the lake involved, following the school year; also World Wetland & World Env Days   |
| 2.7 Operate voluntary net exchange programme  | Delayed                 | Fisher survey shows only 27% agree currently. Budget constraints also major issue. Discussions underway on how to make the exchange workable.               |
| 2.8 Community fishery trust fund established and recommendations from the Business Plan implemented with associated training provided                                   | Started                 | Initial planning consultations complete. Establishment expected by Dec 2023.  |
| 2.9 Design and implement fish catch monitoring programme  | In progress             | Team established in 2022, now collecting data. New methodology was prepared by the district fisheries dept. Report due in 2023.                             |
| 2.10 Community fishery monitoring and patrols to strengthen compliance with regulatory mesh and fishing season and no-take zones  | In progress             | The Lake Surveillance Committee (14 people) are making awareness efforts but not yet patrolling. They have received training from DRPEB for patrols.        |
| 2.11 Annual review of fisher perceptions, scheme, management approval ratings, recommendations for the coming year (independent consultant)                             | Initial survey complete | We only have resources for two surveys, but feel that is sufficient. The baseline was completed in 2022 and the report is now available.                    |

| Activity   | Progress    | Notes  |
|--|-------------|--|
| 3.1 Consolidate all historical imagery and mapping of the lake and wider catchment to assess change over time  | In progress | The watershed has been delineated and aerial imagery from 1949 purchased. Ground truthing will take place in May 2023.             |
| 3.2 Conduct detailed annual habitat/vegetation assessments to generate baseline and monitor change over time   | In progress | The baseline mapping was reported previously, and used for VOI zonation. The second survey will be in May 2023.                    |
| 3.3 Conduct assessment of the habitat requirements of, and baselines for, Threatened species at the site   | Delayed     | Biodiversity survey completed in Dec 2022. The climate vulnerability assessment (2023), will evaluate requirements of key species. |
| 3.4 Develop, and agree with stakeholders, a habitat restoration plan, aligned to CBNRM Association Management plans (see Activity 1.2), and applied research | Planned     | This has had to await VOI formation and habitat mapping; due by July 2023.   |
| 3.5 Identify and formalise a local community monitoring team and train on monitoring protocols   | In progress | The Lake Surveillance Committee (14 people) was est. and trained in 2022. They are now collecting information.                     |
| 3.6 Undertake aquatic plant restoration alongside VOIs and local fisher groups   | Planned     | Expected by Dec 2023.  |
| 3.7 Establish community nursery for lakeside habitat restoration (including in local schools - see Activity 4.4)   | In progress | Nursery to be set up by early Aug 23 to provide saplings for 23/24 planting season.  |
| 3.8 Undertake lakeside habitat restoration alongside VOIs, including trials for harvestable crops in reforested patches                                      | Planned     | Lakeside habitat restoration with harvestable crops due to start 2023  |
| 4.1 Conduct a schools competition to develop a single unified project logo and slogan promoting 'healthy nature for healthy people'                          | Planned     | This is part of the ongoing schools programme; the competition for the design of logo and slogan is due in May 2023.               |
| 4.2 Develop a curriculum-linked environmental education programme for local schools, including field elements at the lake                                    | In progress | This activity is happening along the year, based on the school calendar.   |
| 4.3 Conduct teacher training events, with selected teachers nominated as teacher coaches to increase wider adoption of the materials                         | Planned     | As agreed with the Education Office at Regional and District levels, this is scheduled for July 2023.                              |
| 4.4 Develop and maintain school environmental ambassador schemes, including school plant   | In progress | This activity is happening along the year, based on the school calendar.   |

| Activity   | Progress        | Notes  |
|--|-----------------|--|
| nurseries and engaging local school children in restoration schemes  |                 |  |
| 4.5 Establish Community Information Points for project and VOI updates, environmental awareness campaigns, publication of project social safeguarding policy and Grievance Mechanisms  | Delayed         | The installation of the panels is scheduled for July 2023, and will be done by VOI oversight committees.                                   |
| 4.6 Develop and deliver targeted awareness campaigns to focus on importance of wetland ecosystem services, mitigation of key threats, and identification and value of Threatened species   | In progress     | We have education awareness campaigns for adults scheduled around key events such as World Environment Day.                                |
| 4.7 Mainstream project messaging into all activities   | Ongoing         | This was key to the creation of the VOIs and is a standard procedure.  |
| 5.1 Ramsar Management Effectiveness Tracking Tool workshop to gather baseline data on current stakeholder knowledge of ecological character, threats, and existing management capacity within the catchment                      | Complete        | The RMETT for Tseny is available; final report across 21 Ramsar sites is being prepared.   |
| 5.2 Climate Change Vulnerability Assessment (CCVA) to consolidate baseline information on current status of key species, habitats and livelihoods and associated potential impacts of climate change based on regional modelling | Underway        | Community consultation method revised in 2022 but survey delayed due to weather. Report preparation underway.                              |
| 5.3 Multi-Stakeholder Open Standards Conservation Planning process for the catchment to develop a Conceptual Model, providing a greater understanding of current threats and contributing factors                                | Underway        | The new VOI management transfer agreements already cover 90% of the catchment. Joint planning to address land use issues planned for 2023. |
| 5.4 Research programme developed and agreed with local government to interrogate the extent, severity and drivers of identified threats in the catchment   | Delayed         | Awaiting completion of 5.3, ie, by Aug 23. If not, will be conducted concurrently.   |
| 5.5 Climate change resilient threat mitigation strategies developed for the Lake Tseny catchment and approved by regional government   | Not yet started | Will follow from the CCVA (5.3)  |
| 5.6 Funding proposal developed for conservation action in the wider catchment  | Complete        | A project proposal was prepared by Mavoia and WWT and submitted to CEPF to address this.   |
| 5.7 Lake Tseny designated as a Ramsar Site through the Government of Madagascar  | Underway        | Biodiversity survey showed that the site qualifies. Community consultations now needed.  |
| 5.8 National Ramsar Committee and all Ramsar Site Managers in Madagascar trained in Climate Change Vulnerability Assessment (CCVA)   | Completed       | January 2023; report available.  |
| 5.9 Wetland training programme for all managers of important wetlands (in and outside of Ramsar Sites)   | Completed       | January and February 2023 events; reports available. New wetland   |

| Activity  | Progress | Notes   |
|---|----------|---|
| and Protected Areas) to fill knowledge gaps identified in the National Wetland Strategy |          | training project prepared by WWT and submitted for funding. |

### 3.2 Progress towards project Outputs

#### Output 1: Five sustainably financed CBNRM Associations are representing the breadth of local society and providing efficient, and legally recognised, management of natural resources in and around Lake Tseny

Under this Output, the project was able to support the communities around the lake to establish four local resource management groups. These “VOIs” – as they are known, based on their Malagasy acronym – subsequently applied for resource management rights from the Department of Environment and Sustainable Development (DREDD), as per the 1996 ‘local management renewable natural resources’ law. The new associations act to consolidate “two complementary systems: the traditional system which is based on respect for the Sojabe and Fathers, [and] the government authority which is elected and appointed including the Fokontany chief and his colleagues,” and are founded on local and indigenous knowledge

**Table 1.** Summary details for the new VOIs membership

| Zone                            | VOI Anjajia | VOI Ankazobe | VOI Zafindrazaka | VOI Tsaratanana* | TOTALS      |
|---------------------------------|-------------|--------------|------------------|------------------|-------------|
| Sub-villages                    | 2           | 0            | 2                | 2                | 6           |
| Households                      | 120         | 198          | 150              | 500              | 968         |
| Household size range            | 3 to 8      | 3 to 6       | 3 to 12          | 3 to 12          | n/a         |
| Ave Household                   | 4.34        | 5.05         | 3.29             | 3.60             | 3.94        |
| <b>Population</b>               | <b>521</b>  | <b>1000</b>  | <b>494</b>       | <b>1800</b>      | <b>3815</b> |
| <i>Of which, Male (over 18)</i> | 85          | 180          | 100              | 350              | 715         |
| <i>Female (Over 18)</i>         | 95          | 320          | 113              | 450              | 978         |
| <i>Under 18</i>                 | 341         | 500          | 281              | 1000             | 2122        |

Source: Management transfer documents for all VOIs, October 2022; figures are attributed to village leaders.

\* Focused primarily on the lake, and comprising mostly fisher-families.

**Table 2.** Summary details for the management zones of the new Lake Tseny VOIs [all figures are in hectares]

| Zone | VOI Anjajia | VOI Ankazobe | VOI Zafindrazaka | VOI Tsaratanana* | TOTALS |
|------|-------------|--------------|------------------|------------------|--------|
|------|-------------|--------------|------------------|------------------|--------|

| Focal habitat                        | Watershed to the SW of the lake | Watershed to the S of the lake | Watershed to the E of the lake | Lake, lake margins, some forest |                 |
|--------------------------------------|---------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------|
| Fully Protected                      | 106                             | 789                            | 292                            | 58.6 <sup>¥</sup>               | 1,245.6         |
| Traditional Rights                   | 2,179                           | 7213                           | 2474                           | 5                               | 11,871          |
| Tree Planting                        | 377                             | 5                              | 5                              | 260                             | 647             |
| Cattle grazing, agriculture, housing | 1,562                           | 2242                           | 1070                           | 2981                            | 7,855           |
| <b>TOTALS</b>                        | <b>4,224</b>                    | <b>10,249</b>                  | <b>3,841</b>                   | <b>3,300</b>                    | <b>21,618.6</b> |

Source: Management transfer documents for all VOIs, October 2022; mapping supported by Mavoia.

\* Matsabory area is divided into two categories: Fully protected area (49 ha), and Sustainable livelihood use area.

¥ Comprising two sub zones of 53.8 ha and 4.8 ha.

The rights are described in management transfer agreements that were jointly signed into force in a public ceremony in one of the lakeside villages in October 2022, attended by the VOI management committees, several hundred community members, representatives of the DREDD and regional department of Fisheries, and delegations from the project partners. Images of the transfer agreements are provided in Figure 2, and images of the signing events are provided in Annex 5.

The four VOI associations comprised 439 founder (adult) members at the time of our 2022 annual report, but this number had increased to 2,122 by the time the documents were signed into force, comprising 978 women, 715 men, with over 2000 additional under-eighteens covered by the agreements (Table 1); in total 3,815 people are now involved in sustainable resource management at the site. Collectively, these new community-based organisations now have formal, defined rights over in excess of 21,600 hectares, roughly half of which is managed through traditional, sustainable practices, and 17% is fully protected (Table 2).



Figure 2. Covers of the “Agreements to transfer management of natural resources to be released in the [Anjajia, Ankazobe, Tsaratanana and Zafindrazaka/Anjiamarina] areas”



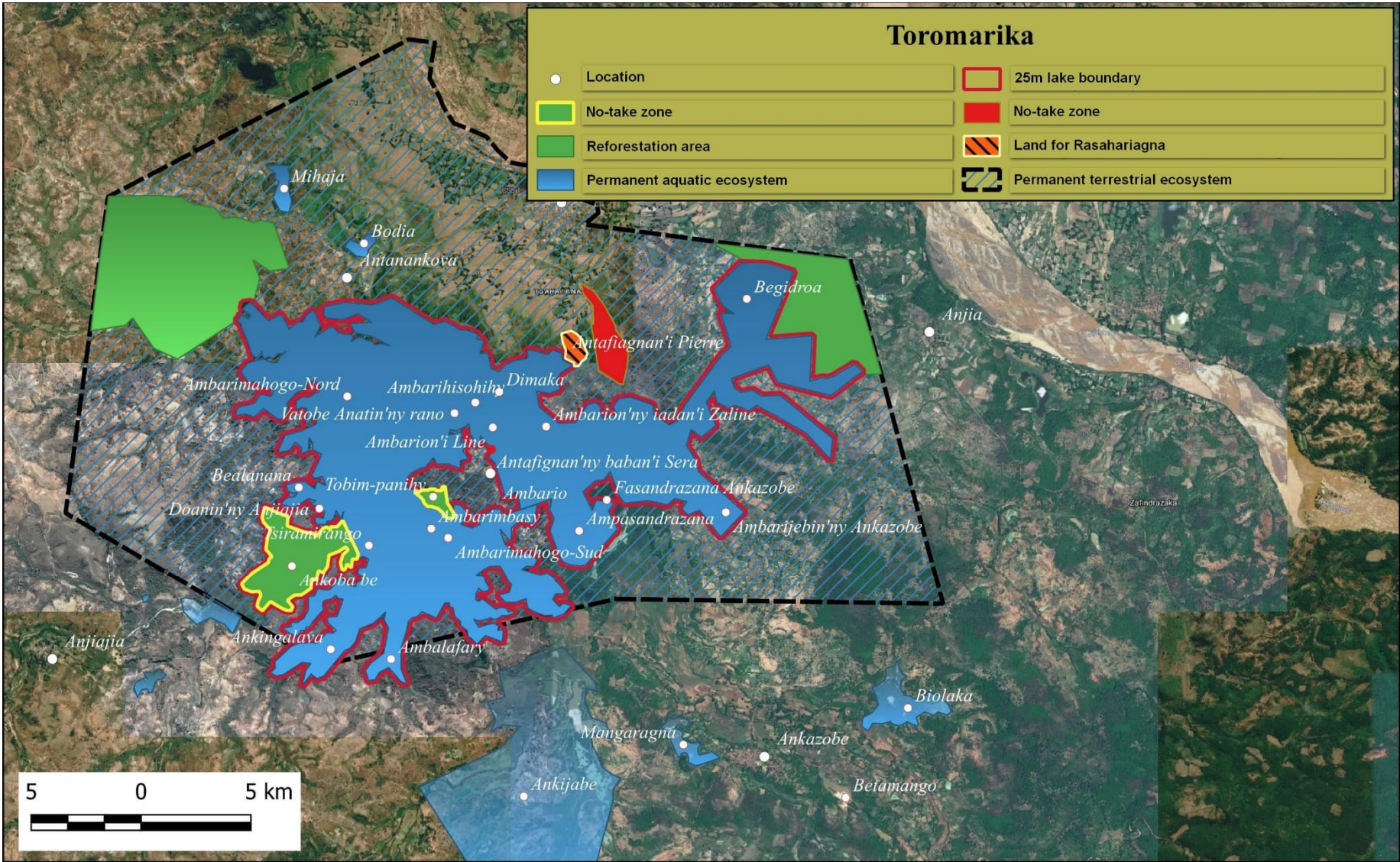


Figure 3. Map of Tsaratanana VOI, which is aimed at collective fisheries management

Source: Management transfer agreement (prepared by Mavoava)

## Output 2: Fishing regulations are in place and being followed by local and migrant fishers, which, alongside fish habitat restoration areas, is increasing the productivity of the fishery. Fishing communities have new knowledge on value chains and the potential to increase profitability

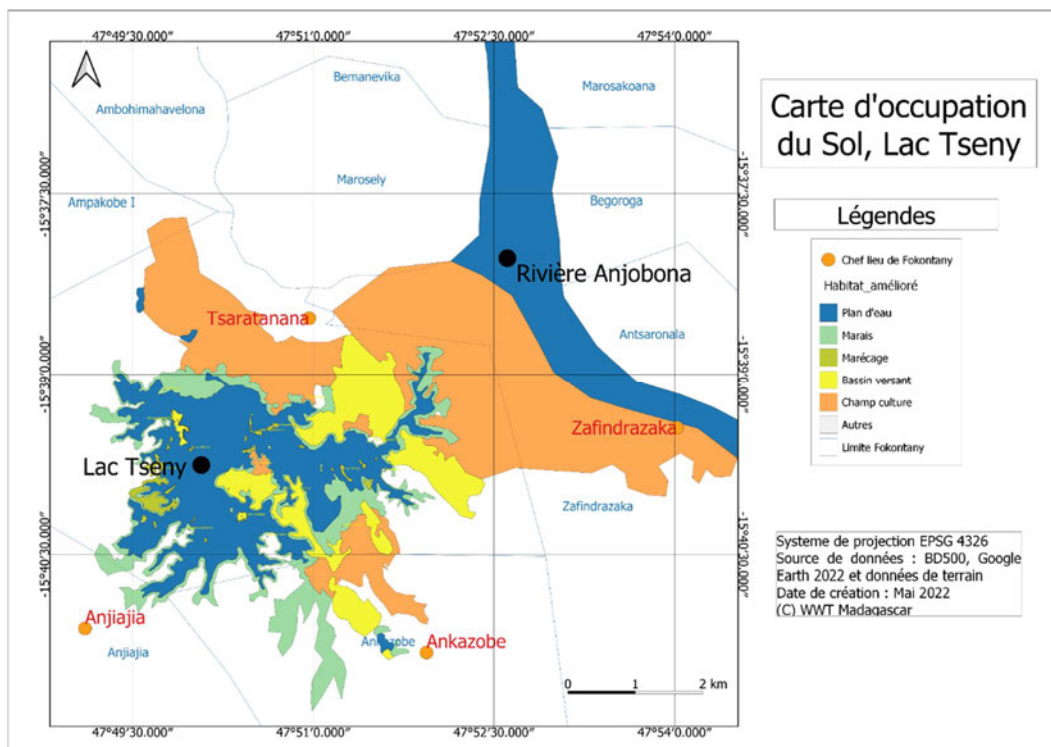
Three of the newly-formed VOIs manage land and watershed forests near the member communities, which protect their surface water supplies. The third VOI, Tsaratanana (known as “VOI TTN”), comprises fishers from multiple villages, and was established jointly by fishers from local communities to take sole responsibility for management of the lake and its fishery.

As with the other VOIs, TTN's objective is the sustainable management of natural resources and “harmonious and sustainable development of the [VOI] region”. However, the Tsaratanana group has specific ambitions and regulations for the lake fishery, and has established a no-take zone that protects known fish breeding areas and nurseries (see **Figure 3**). The protected zone prohibits all consumptive use, but allows “research and conservation activities such as inspection and monitoring”. It is the main site identified for rehabilitation of semi-submerged forest and marginal phragmites reed beds due to its importance as a nursery.

To monitor the impact of local management actions, Mavoia undertook a baseline survey of 173 fishers in an un-stratified sample, comprising 138 men and 35 women. They are mostly young, with fishers making up 35% of the 18-35 age group, and 45% of the fishers surveyed are members of cooperatives and have a fishing licence. Overall, 67% of the fishers questioned report that fish are becoming rare in the lake thanks to the use of very fine-meshed nets, but due to the project 48% of fishermen have already voluntarily accepted the exchange of unregulated fishing nets.

## Output 3: Quality and extent of aquatic and lakeside habitat increased

It was not possible to begin this activity until the management transfer agreements were signed into effect, in October 2022. However, the creation of the Tsaratanana VOI was specifically intended to identify important lakeside habitat for the lifecycles of endemic and commercially important fish, and creates two fully-protected ‘no take’ zones in the south-west of the lake that cover 58.6 ha, and will be managed for restoration of phragmites marsh and flooded forest.



**Figure 4.** Baseline land cover map of Lake Tseny

Between the four VOIs, there is also a combined total of 647 ha of reforestation land, mostly located to protect surface watercourses and therefore reduce sediment runoff into the lake. These will be targeted for support from the government's new reforestation programme, which launched in 2022 and which the project advocated for watershed protection and use of native species during consultations in the reporting period.

Surveys of lake biodiversity and vegetation were undertaken as part of a wide biological survey of the site in conjunction with the newly-formed VOIs (see below). The lake survey recorded 20 species of bird on the lake, two of which are endangered (Madagascar grebe *Tachybaptus pelzelinii* and Madagascar pond-heron *Ardeola idae*). The vegetation around the lake was confirmed to be quite degraded in structure, but retains a high diversity with 98 species of woody plant identified in diversity and density. This provides valuable information for the selection of species for use in assisted regeneration.

#### Output 4: Increased understanding of the importance of natural systems and biodiversity for livelihoods and wellbeing amongst different socio-economic groups using and living around the lake

Three socio-economic surveys were completed in the reporting period and have been fully written-up (see Figure 5);

- A socio-economic baseline survey of 706 households in five villages around Lake Tseny, which considered income generation, domestic water supplies and sanitation, domestic fuel, the state of Lake Tseny and its resources, pressures and threats, regulation of fishing and solutions for sustainable management of the lake
- A baseline survey of 173 fishers (138 men and 35 women) and 16 'fish collectors' (ie, traders) other natural resources, which collected data on spatial and temporal patterns in fishing practices, gear usage, prices and market chains, and perceptions of changes in fish abundance and lake productivity, and fisheries management regulations.

These extensive surveys provide a detailed baseline against which to measure the impacts of management interventions on the fishery and its profitability.

WWT has now developed a multi-disciplinary approach to fisheries research that we will use at the site early in the 2023/24 financial year; the intention is to engage local fishers in a productive discussion on protection of livelihoods and biodiversity, and to build a healthy balance between indigenous knowledge and the scientific method.



Figure 5. Covers of socio-economic and habitat baseline reports from 2022

**Output 5: Current and future wider threats are understood for the local Tseny catchment, with a conservation strategy developed to mitigate threats into the future, Tseny recognised as a Ramsar Site, and national conservation managers and government staff valuing and able to use tools to plan long-term resilient community-based wetland conservation projects**

We have now mapped the watershed and the multiple tributaries that feed the lake, and are preparing a land cover map covering the whole catchment. This will be the basis for late discussion on appropriate land use within the upland components of the VOI areas as an overall conservation strategy to help reduce pressure on the lake.

In order to prepare for any future Ramsar nomination, as well as to improve forest and habitat management, we undertook a biodiversity survey for the lake and its watershed forests undertaken by a mixed team of botanist, ornithologist and herpetologist, in conjunction with the VOIs. Results indicate the lake qualifies as a Ramsar site under at least seven out of nine criteria. The next step is to discuss the costs and benefits of Ramsar designation with the local communities, but WWT is working to develop sustainable financing for Ramsar sites in Madagascar which should help incentivise an application.

During this reporting period, we focused efforts at the national level at sharing several of our experiences on community wetland management and building a dialogue between site managers from both NGOs and government with three main activities:

- We held the inaugural Ramsar site managers annual meeting, where representatives of half of Madagascar’s Ramsar sites updated each other on recent work and we introduced the RMETT tool for monitoring management effectiveness. The participants agreed to make this an annual event, with a rotating chair and the main topic each year determined by consensus and based on the needs of the sponsoring organisation.
- Attendance at the public-facing World Wetland Day, where we had a dedicated stand to showcase project activities, and spoke to the minister of environment and sustainable development about our collaborative Darwin project at Lake Tseny.
- An introductory training in use of climate change vulnerability assessments for 25 managers from 11 organisations involved in management of freshwater Ramsar sites. The training also introduced the more participatory methodology that we were planning to pilot in Tseny in January 2023, but which had to be postponed due to heavy storms, and will now be conducted in May 2023.



**Figure 6.** Covers of reports from the 2022 biodiversity survey and 2023 RMETT and CCVA trainings

### 3.3 Progress towards the project Outcome

**Outcome:** Sustainable, representative, and legally recognised community-based management of Lake Tseny catchment results in improved ecosystem services for 5000 local people and enhanced habitat for threatened biodiversity, with techniques showcased nationally.

**Indicator 0.1:** 5000 people empowered to sustainably manage Lake Tseny through a legally endorsed 'Gelose' management transfer agreement by end of Y1

*Four Gelose management transfer agreements were signed off by the local applicants (VOIs) and authorised government bodies in*

**Indicator 0.2:** Like for like monthly income of fishers increases by 20% between Y1 and Y3.

*There is no interim figure for this indicator but the baseline data were collected in early 2022 and a re-survey is planned for project year three.*

**Indicator 0.3** Extent (# of ha) of aquatic vegetation and fringe Phragmites habitat increases by 10% by end of project. Reforestation plots increase forest extent by 5%.

*Aerial photography from 1949 has given us a good baseline of historic vegetation cover. We also have more recent satellite imagery, though due to travel restrictions and changes in staff, we were not able to field a drone survey in the reporting period; this is planned for May 2023.*

**Indicator 0.4** Experimental catch per unit effort of threatened fish species increases by 10% by end of project.

*Baseline data from log books from 2015-2018 is now in hand, and is being written up as a stand-alone report by Mavoia. A Fisheries Production Evaluation Committee was established by the regional fisheries department in 2022, and they simplified the data collection methodology.*

**Indicator 0.5** Long-term regional conservation strategy agreed by local communities and Tsaratanana District Government, starting to address threats throughout the local catchment by end of project.

*The management transfer agreements cover approximately 90% of the watershed, and are already being enthusiastically implemented by the local groups with the support of the project and local authorities. We will now focus more on helping the groups monitoring their impact.*

**Indicator 0.6** At least 40 National Ramsar Committee members, Ramsar Site managers, and Managers of Protected Areas containing important wetland habitat, understand how to use R-METT and VA tools, and VAs taking place in at least 2 other important wetlands.

*For reasons of bureaucracy, the national Ramsar committee is still yet to be formed. Nonetheless, we conducted R-METT evaluations in all 21 Ramsar sites in 2021, and shared the results with 23 representatives from 11 organisations who collectively manage half of the sites. We also prepared a modified climate VA methodology, and held a one-day training for 25 Ramsar site managers.*

### 3.4 Monitoring of assumptions

| Assumptions (by level)  | Comments   |
|---|--|
| <b>Outcome-level</b>  |  |
| The political situation within Madagascar remains stable and no restrictions are imposed on NGOs. | This assumption holds.   |
| Public health restrictions do not prevent project activities from taking place.                   | No restrictions have been imposed since the last report and the site remains open to national and international staff. |

| Assumptions (by level)  | Comments   |
|---|--|
| Project partnership with local government remains strong and all stakeholders remain supportive of management transfer to local communities.  | We have established a strong local government liaison and communication, and they are remain well engaged.   |
| Local community associations respect commitments to democratic processes and encourage participation of under-represented groups.   | This assumption appears to be holding, and the VOI committees were elected fairly by the communities.  |
| Local fishing communities maintain strong relationships with migrant fishers to agree equitable use and management models.  | There have been no major conflicts between local and migrant fishers since the project began.  |
| <b>Output-level</b>   |  |
| All sectors of society engage with management transfer process and support wider project initiatives, including community-based savings groups and equipment rental schemes, which have been designed to fill existing needs. | The management transfers were completed with no major grievances encountered and strong support from government agencies. The savings and rental activities are yet to be launched.  |
| Local government honour legal community rights to manage natural resources and do not interfere with democratic processes.  | Local government fully supported the management transfer agreements, and has sought to control illegal migrant fishers entering the lake.  |
| Local and migrant fishers are willing to engage in a long-term process to improve fisheries.  | Local fishers are generally supportive of improving fisheries management, but are not yet convinced of the need to replace their micro-mesh nets. Migrant fishers were operating with the complicity of a local government officer who has now been removed. |
| Local community association patrolling and enforcement can be done safely and efficiently at the lake.  | Patrolling is yet to commence, but the fisheries department backs the approach.  |
| There are no unforeseen barriers to standard restoration methods that work elsewhere locally.   | No unforeseen barriers have emerged to date.   |
| Community members from all villages and sectors of society engage with the project.   | Mavoa reports strong engagement across the local communities.  |
| Schools continue to support comprehensive programmes of environmental education provided by project staff.  | The schools have been very supportive of the project awareness interventions thus far.   |
| Good climate projection models are made available to the project.   | We have opted to use climate data from the World Bank Climate Knowledge Portal, which is free to use.  |
| A full programme of research on wider threats can be undertaken safely and effectively within the project period.   | The initial social-economic, fisheries and mapping surveys are now complete. Wider threats will be assessed using remote sensing and local consultations.  |
| National Ramsar Committee members remain engaged with the capacity building activities identified in the draft National Wetland Strategy.   | This remains the case. For example, the Ramsar site managers general meeting and CCVA training (both in early 2023) were both attended by the Ramsar focal point from the ministry of environment and sustainable development.                               |

### 3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

**Impact:** Lake Tseny catchment provides resilient ecosystem services and sustainable livelihood opportunities for communities, secure healthy habitat for increasing populations of native biodiversity, and inspires resilience planning for wetlands throughout Madagascar.

There is no measurable contribution to this level of project outcome yet. However, there are now four newly-formed community groups, currently comprising 3,815 households (about 80% of the local population), with legally mandated rights and responsibilities for sustainable use of the lake and its natural resources; we have baselines for landcover, socio-economy and biodiversity; and we have directly shared experience of planning tools with the managers of over half of the country's Ramsar sites.

## 4. Project support to the Conventions, Treaties or Agreements

**Aichi Targets.** Our main contribution thus far has been towards Aichi Targets 1, 2, 4, 6, 11, 14. We feel however that we have yet to make a meaningful or measurable contribution towards target 5 (loss of natural habitats), 12 (protection of threatened species), and 14 (restoration of ecosystems services).

**Ramsar Convention.** We have also made a contribution to Strategic Goal 1 (addressing the drivers of wetland loss and degradation), Strategic Goal 2 (effectively conserving and managing the Ramsar site network) – including by confirming that the site qualifies as a globally important wetland under at least seven out of nine Ramsar criteria – and Strategic Goal 3 (wisely using all wetlands).

**Global Goals for Sustainable Development.** The project has yet to show any impact on the SDGs related to poverty, hunger, human health or sanitation (numbers 1, 2, 3 and 6), but may have helped address gender inequality as the site (goal 5), and our engagement on fisheries management should contribute to goal 12 (responsible production), the climate vulnerability work clearly contributes to goal 13 (climate action), and establishment of use roles for terrestrial ecosystems (wetland and forest) supports goal 15 ('life on land').

## 5. Project support to poverty reduction

At this point it is too early to indicate a meaningful impact on local poverty. But it seems realistic to expect that the sustainable management of fisheries and reduction in vulnerability to climate change that the project is working towards should help reduce income and food poverty at the project site.

## 6. Gender equality and social inclusion

|  |   |
|--|---|
| Please quantify the proportion of women on the Project Board <sup>1</sup> .        | <b>29%</b><br>The two project NGO partners (WWT and Mavoia) are represented on the Project Steering Group by two senior managers, one female and one male. The two executive officers from each on the PSG is male. The main government representative providing project oversight is female. Overall 2/7 |
| Please quantify the proportion of project partners that are led by women, or which | <b>100%</b>   |

<sup>1</sup> 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.

|   |   |
|---|---|
| have a senior leadership team consisting of at least 50% women <sup>2</sup> . | Both project partners (Mavoa and MEDD Ramsar Focal Point) are led by women. |
|---|---|

VOI formation took a proactive approach to engaging women, including by explicitly promoting equal participation, surveying and consulting men and women separately so that their different attitudes and needs could be considered, and choosing appropriate meeting times and formats.

As a result, our baseline socio-economic data on households and fishers is gender-disaggregated, and our revised climate vulnerability assessment methodology makes explicit the need to separate and reconcile the different societal roles and potential impacts of climate change on women and men.

As so far, the overall number of adult (ie, over 16) women and men represented in the VOIs is 978 and 715 respectively, representing a female to male ratio of approximately 4:3; see Table 1. (Gender-disaggregated figures for under 16s are currently not collected.) However, customary gender imbalances persist in the make-up of the VOI management committees, which are almost exclusively male.

## 7. Monitoring and evaluation

Project monitoring systems were agreed and put in place during the project inception period and rely on regular, structured meetings to report on and review progress against the detailed indicators identified in the project log frame. We have slightly revised the higher-level monitoring outlined in the last progress report to take account of the workloads of senior staff:

- Monthly Project Management Team meetings; these primarily focus on coordination, logistics and budgeting, and monitoring the project at the level of activities.
- Project Steering Group (PSG) meetings; these are held to coincide with Darwin reporting, and bring together senior managers from the partners to review progress at the Output level against the Output indicators.

In the longer-term we see these processes as an essential component of the lake management, and it is therefore considered particularly important to make them work as a key aspect of project sustainability. We may therefore have to modify meeting membership, structure and timing further so they can best deliver for the long-term interests of the site.

## 8. Lessons learnt

Several additional lessons have been learned from project delivery in the past 12 months:

- Field work that is planned for late in the calendar year is at particular risk of disruption due to weather, seemingly as a result of climate change.
- Adequate consultations in remote rural areas can be time consuming, especially when additional meetings are required to avoid confusion and allay concerns.
- Reversing deep-rooted ideas of gender roles will not be easy, and could jeopardise the project if pushed on communities; we will consider developing a gender policy for conservation as this problem is not confined to this project

## 9. Actions taken in response to previous reviews (if applicable)

There were no outstanding actions required from previous reviews.

<sup>2</sup> 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.



## 10. Risk Management

- No new risks have arisen in the last 12 months that were not previously accounted for.
- The project has made no significant adaptations to the project design to address changes to risk.
- Potential risks are captured in the project Environmental and Social Management System.

## 11. Other comments on progress not covered elsewhere

When the project was originally conceived we proposed to implement the climate change vulnerability assessment methodology developed in 1999 by IUCN for a project in Southeast Asia (Wyatt, A., Scott, A., and R. Glemet. (2020) A Methodology for Rapid Assessment of Climate Change Vulnerability and Adaptation Planning at Ramsar Sites. Bangkok, Thailand). However, having tested this methodology in Myanmar and one other site in Madagascar, we felt the community engagement aspect was very weak and that opportunities were therefore being missed to engage meaningfully with local people on the impacts and potential mitigation methods related to climate change. WWT sociologists in UK and Madagascar therefore collaborated on developing a revised approach that is much more participatory and hopefully empowering, and while ironically some unseasonal weather meant its conduct had to be postponed to May 2023, we feel this was a worthwhile and important revision.

## 12. Sustainability and legacy

The sustainability of management of Lake Tseny as well as of wetland conservation in Madagascar more generally are central to the missions of both WWT and Mavoia, and are at the core of the project. We are therefore pleased to report that good progress has been made. Firstly, the project has generated increased interest and capacity among other Ramsar sites managers in Madagascar through two national events led by WWT;

- i) A Ramsar site managers meeting, co-chaired by the Ramsar Focal Point and WWT, where we shared the RMETT results and other highlights of the project. The 23 participants from 11 organisations involved in wetland management agreed to make it an annual event.
- ii) Climate change vulnerability assessment training, held shortly after the above meeting and attended by largely the same individuals and organisations

Secondly, we have now helped empower four local community groups to gain formal transfer of management rights under the 1996 Gelose law, the objective of which is “to enable the effective participation of rural populations in the sustainable conservation of renewable natural resources”, and they now have legal rights to manage and use the lake and its resources (including in the catchment forests) sustainably.

Thirdly, based on our experiences with the Darwin project and elsewhere, WWT is working with Mavoia and other partners to establish a sustainable financing mechanism for VOIs in Madagascar. With some initial support, such as that provided by this project, VOIs are proving they are already able to fund their own operations (such as patrolling or regular gatherings). But in the longer-term they will struggle to access funds for larger actions they might identify in their annual plans, such as developing climate-smart agriculture, undertaking further habitat restoration, hiring technical advisors or purchasing equipment. Traditionally, such community groups would depend on outside agencies for such support. But with the capacity and legal mandate that projects such as this can give to VOIs, we think they could subsequently apply for their own funding – if there was a suitable mechanism for them to do so. So we developed a pilot project to test this idea, and it was recently submitted to a donor. If successful, the Tseny VOIs could be the first recipients of small grants for local community wetland managers.

### 13. Darwin Imitative identity

We have ensured strong visibility of the Darwin Initiative in all project activities, including the two national events mentioned above. We also represented the project at World Wetland Day, where the WWT booth was visited by the Minister of Environment, and we were pleased to brief her on the project and its current and expected impacts. The Darwin Initiative is currently the only source of funding for this globally important wetland, and all conservation activities of Mavoia and WWT at the site are customarily referred to as under the 'Darwin Project', so we feel that the visibility of UK Government support is clear to the local stakeholders as well as regional government staff such as fisheries, forestry or education officers who have been involved in or come across the project during its implementation. We also contributed to the March issue of the Darwin Initiative Newsletter – and may indeed have given it its title!

### 14. Safeguarding

|  |   |
|--|---|
| Has your Safeguarding Policy been updated in the past 12 months?   | Yes   |
| Have any concerns been investigated in the past 12 months  | No  |
| Does your project have a Safeguarding focal point?   | Yes<br>Harison Andriambelo, Country Coordinator   |
| Has the focal point attended any formal training in the last 12 months?  | Yes<br>Health and Safety Essentials, Risk Assessment, Safeguarding Vulnerable Persons, Mental Health Awareness for Managers, ESMS |
| What proportion (and number) of project staff have received formal training on Safeguarding?   | WWT staff:<br>Past: 5 (62%)<br>Planned: 3 (38%)   |
| Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.<br><br>We have fortunately not experienced any safeguarding issues on this project. Further, no formal grievances have been registered through our established mechanism.   |   |
| Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.<br><br>Further training is planned for the whole of the WWT Madagascar team, which is being put together by the WWT Head of Safety Management, Ms Adele Masztalerz, and the WWT Senior Project Manager responsible for this project, Mr Mark Grindley. |   |

## 15. Project expenditure

Table 3. Project expenditure during the reporting period (1 April 2022 – 31 March 2023)

| Project spend (indicative) since last Annual Report | 2022/23 Grant (£)  | 2022/23 Total 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)                           |                    |                                |            |   |
| Monitoring & Evaluation*                            |                    |                                |            |   |
| Others  |                    |                                |            |   |
| <b>TOTAL</b>  | <b>£109,474.00</b> | <b>£109,462.45</b>             |            |   |

\* This line was not required in the budget template when the original project was prepared.

Table 4. Project mobilising of matched funding during the reporting period (1 April 2022 – 31 March 2023)

|   | Matched funding secured to date | Total matched funding expected by end of project |
|---|---------------------------------|--|
| Matched funding leveraged by the partners to deliver the project.   |                                 |  |
| Total additional finance mobilised by new activities building on evidence, best practices and project (£) |                                 |  |

## 16. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes

We have no additional outstanding achievements to report beyond those that have already been mentioned.

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section.

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2022-2023

| Project summary   | SMART Indicators   | Progress and Achievements<br>April 2022 - March 2023   | Actions required/planned for next period  |
|---|--|--|---|
| <p><b>Impact</b></p> <p>Lake Tseny catchment provides resilient ecosystem services and sustainable livelihood opportunities for communities, secure healthy habitat for increasing populations of native biodiversity, and inspires resilience planning for wetlands throughout Madagascar.</p> |  | <p>Lessons from Tseny are already being shared with other wetlands in Madagascar, hopefully inspiring them. And work with local communities so far has put in place a strong foundation for improved management for both biodiversity and livelihoods.</p> |   |
| <p><b>Outcome</b></p> <p>Sustainable, representative, and legally recognised community-based management of Lake Tseny catchment results in improved ecosystem services for 5000 local people and enhanced habitat for threatened biodiversity, with techniques showcased nationally.</p>        | <p>0.1 5000 people empowered to sustainably manage Lake Tseny through a legally endorsed 'Gelose' management transfer agreement by end of Y1</p> <p>0.2 Like for like monthly income of fishers increases by 20% between Y1 and Y3.</p> <p>0.3 Extent (# of ha) of aquatic vegetation and fringe Phragmites habitat increases by 10% by end of project. Reforestation plots increase forest extent by 5%.</p> <p>0.4 Experimental catch per unit effort of threatened fish species increases by 10% by end of project.</p> <p>0.5 Long-term regional conservation strategy agreed by local communities and Tsaratanana District Government, starting to address threats throughout the local catchment by end of project</p> | <p>0.1 3815 people are now involved in legally-recognised sustainable resource management through four management transfer agreements.</p> <p>0.2 Not yet due</p> <p>0.3 Not yet due</p> <p>0.4 Not yet due</p> <p>0.5 Not yet due</p>                     | <p>Completion of habitat restoration planning and launch of pilot/research activities.</p> <p>Participatory fish catch monitoring put in place and baseline established.</p> <p>Initial conservation priorities for the catchment defined and consulted.</p> <p>Climate vulnerability assessment completed for Lake Tseny with participation of regional government partners.</p> |

|   |  |  |  |
|---|--|--|--|
|   | 0.6 At least 40 National Ramsar Committee members, Ramsar Site managers, and Managers of Protected Areas containing important wetland habitat, understand how to use R-METT and VA tools, and VAs taking place at at least 2 other important wetlands.   | 0.6 Around 30 wetland conservation professionals have so far been introduced to RMETT or trained in CCVA methods   |  |
| <p><b>Output 1.</b></p> <p>Five sustainably financed community institutions (VOIs) are representing the breadth of local society and providing efficient, and legally recognised, management of natural resources in and around Lake Tseny.</p> | <p>1.1 800 households, with proportional representation of all sectors of society (e.g. gender, socio-economic group, professional group, belief system) have been engaged in management transfer consultations and management group elections in Y1, with women representing at least 50% of membership.</p> <p>1.2 Community-based natural resource management plans agreed for three lake-side associations for coordinated and zoned management of Lake Tseny, and signed off by local and district government by end of Y1</p> <p>1.3 Community-based natural resource management plans agreed for two forest associations to coordinate and zone management of the surrounding forest fragment. Signed off by local and district government by end of Y2</p> <p>1.4 Community-based savings groups in place, generating sufficient revenue to cover operations for all community associations by end of Y3</p> <p>1.5 Final project assessment of community assessment of natural resources is rates 'good' or better by 75% of all sectors of society</p> | <p>1.1 968 households are represented in the management transfer agreements. Of the adult members of the new VOIs, 978 are women and 715 men.</p> <p>1.2 Natural resource management plans for one new lakeside association (VOI) comprising fisheries from several villages was signed off by local and district authorities in October 2022.</p> <p>1.3 Natural resource management plans for three new forest associations (VOIs) were signed off by local and district authorities in October 2022.</p> <p>1.4 No new groups formed yet, but initial consultations were held and planning is well underway.</p> <p>1.5 No yet due.</p> |  |

|  |  |  |
|--|--|--|
| 1.1 Conduct community consultations for formalised community-based natural resource management transfer agreements   | Completed  | n/a  |
| 1.2 Management Plans developed and agreed by local government  | Completed  | n/a  |
| 1.3 Constitute membership of VOIs and support elections for leadership groups  | Completed  | n/a  |
| 1.4 Conduct capacity assessments (resource management, administrative, legal, financial) of groups and develop VOI training plan   | Not planned during the reporting period.   | Complete capacity assessment; Undertake study tour (Activity 1.5); Periodic meetings for programming activities (General Assembly (GA) and Management Committee (MC)); Distribution of responsibilities of VOI members.  |
| 1.5 Facilitate a study tour to Lake Sofia to learn from similar successful ongoing schemes   | The exchange visit was made in December 2022 for VOIs to learn about the CBSG process.   | A second exchange visit of the fishermen's cooperative is planned.   |
| 1.6 Develop VOI Business Plan to ensure sustainable financing of the associations, including equipment rental and community-based savings groups   | Agreement reached with the VOIs on the business plan; Terms of Reference for the planning prepared   | A consultant specializing in inland fisheries is being recruited to do this work.  |
| 1.7 Deliver VOI training programme and provide ongoing support   | Needs have been defined and initial training delivered   | To be completed by December 2023   |
| 1.8 Hold community fora 2 times per year in each community to ensure wider accountability  | First one held in Oct 2022 (following management transfer signing)   | Up to two further community for a meetings planned   |
| 1.9 Hold annual catchment management group meeting   | Nothing planned during this reporting period   | Catchment management group may not be required as the four VOIs cover around 90% of the catchment  |
| 1.10 Capacity assessment and legacy planning   | Nothing planned during this reporting period   | Planned for project final year (by December 2023)  |
| <p><b>Output 2.</b></p> <p>Fishing regulations are in place and being followed by local and migrant fishers, which, alongside fish habitat restoration areas, is increasing the productivity of the fishery. Fishing communities have new knowledge on value chains and the potential to increase profitability.</p> | <p>2.1. Net exchange programme ensuring &lt;5% of users of the fishery are not abiding by legal mesh-size regulations in Y2</p> <p>2.2. Community-association patrol reports showing that at least 90% of fishing activity abides by local</p> | <p>2.1 46/173 of the fishermen surveyed accept the exchange of nets voluntarily according to the survey in 2022 We need a consultation meeting for the identification of regulated and suitable nets for Lake Tseny We may buy the raw materials and the fishermen make the nets. Then, it will require the validation of the DRPEB. We also have to see what we can do with the available budget.</p> <p>2.2 The Lake Surveillance Committee (14 people) are making awareness efforts but not yet patrolling. They have received training from DRPEB for patrols. DREDD and DIRPEB will return the document to the VOIs before the end of April</p> |

|   |   |   |
|---|---|---|
|   | <p>regulations, including respect of no take zones in Y2</p> <p>2.3 Zones are allocated for nursery habitat have conservation strategies, and 8 ha restored by end of project.</p> <p>2.4 80% of both male and female fishers report perceived increase in productivity and desire to continue following local regulations by end of Y3.</p> <p>2.5 Fish catch per unit effort increases by 15% by the end of Y3</p> <p>2.6 Value Chain Analysis published for the fishery in local language by end of Y2.</p> <p>2.7 A feasibility study is published for restocking native species through cage farming at Lake Tseny by and of project by end of project.</p> <p>2.8 60% of both male and female fishers receive technical support for the valuation and market research of the Lake Tseny fishery by the end of Y3.</p> | <p>2023. According to the CC, there is an obligation of monthly patrol and reporting at the DRPEB and DREDD level by the VOIs.</p> <p>2.3 The restoration plan should be completed first. This plan must contain the conservation strategies for the restoration sites.</p> <p>2.4 Fisheries Production Evaluation Committee (12 for the 4 VOIs) was established by DRPEB in 2022. A methodology (with outline and simplified formula) was developed by DRPEB. This includes informal surveys of fishermen. A report will be established all ??? A survey will be carried out towards the end of the project to assess the improvement in productivity.</p> <p>2.5 Logbook 2015-2018 is available from MV for the initial situation ie, preliminary draft. A Fisheries Production Evaluation Committee (12 for the 4 VOIs) was established by DRPEB in 2022. A methodology (with outline and simplified formula) was developed by DRPEB. This includes informal surveys of fishermen. A report will be established all ??? A survey will be carried out towards the end of the project to assess the improvement in productivity.</p> <p>2.6 A consultant specializing in inland fisheries will be recruited to do this work.</p> <p>2.7 An initial consultation was made with the fishing communities. Free-range farming is more advantageous compared to cage farming. This, in relation to the cost, local consultation efforts, infrastructure monitoring... The feasibility study was initiated in 2022 for above-ground breeding, including the identification of land.</p> <p>2.8 Consultant: seeks a credit institution (Ex: CECAM) and facilitates the partnership; draws up the business plan document Technical support for fishermen on the partnership and search for potential customers (Consultant and NGOs) See 1.4 CBSG also for financial support (precautions must be taken to prevent VOIs from seeking individual profits)</p> |
| 2.1 Collect and analyse socio-economic data, including legal and illegal use of the fishery   |   | Completed n/a   |
| 2.2 Conduct fisheries assessment to map key nursery habitats, potential high-value no-take zones and priority restoration actions to inform Activity 1.2 and Output 3 |   | Completed n/a   |

|  |  |  |
|--|--|--|
| 2.3 Training from fisheries specialist and visit by representatives of other successful community fishery projects to share key advice on best-practice and common mistakes to avoid | Nothing significant undertaken   | Exchange visit of fishery cooperative reps with lake Kinkony expected before end of 2023.  |
| 2.4 Value chain analysis and fishery business plan agreed alongside local fishers  | Nothing significant undertaken. A consultant specializing in inland fisheries is being recruited.  | Value chain analysis will be complete.   |
| 2.5 Conduct feasibility study for restocking native species through cage farming   | Planned during the reporting period but delayed as weather meant the WWT fisheries expert had to change their travel plans.  | Site visit from WWT fish expert planned for May 2023.  |
| 2.6 Update and implement education and awareness programme, including dissemination of information on strict common standards for fishing control                                    | Nine target schools around the lake involved, following the school year; also World Wetland & World Env Days   | Continue as agreed with the education stakeholders.  |
| 2.7 Operate voluntary net exchange programme   | Fisher survey shows only 27% agree currently. Budget constraints also major issue, as funds are insufficient to replace all nets.  | Further discussions on how to make the exchange workable, eg, targeting the poorest fishers.   |
| 2.8 Community fishery trust fund established and recommendations from the Business Plan implemented with associated training provided  | Initial planning and consultations undertaken.   | Planning complete. Establishment expected by Dec 2023.   |
| 2.9 Design and implement fish catch monitoring programme   | Team established in 2022, now collecting data. New methodology was prepared by the district fisheries dept.  | Report to regional fisheries office due in 2023.   |
| 2.10 Community fishery monitoring and patrols to strengthen compliance with regulatory mesh and fishing season and no-take zones   | The Lake Surveillance Committee (14 people) are making awareness efforts but not yet patrolling. They have received training from DRPEB for patrols.   | Patrolling will be launched and reporting regularly to the lake management committee.  |
| 2.11 Annual review of fisher perceptions, scheme, management approval ratings, recommendations for the coming year (independent consultant)  | Complete   | We only have resources for two surveys, but feel that is sufficient. The baseline was completed in 2022 and the report is now available. |
| <b>Output 3.</b><br>Quality and extent of aquatic and lakeside habitat increased.  | 3.1 Open water aquatic vegetation increases by 10% by end of Y3.<br><br>3.2 80% survival rate of planted peripheral habitat (inc. Phragmites spp, Tamarindus indica, Pourpartia sylvatica) at end of project | 3.1 Not yet due.<br><br>3.2 not yet due.   |



|   |   |  |  |
|---|---|--|--|
|   | 3.3 Percentage of key habitat for threatened species rated 'good' by expert working group increases by 25% by end of project.   | 3.3 Not yet due.   |  |
|   | 3.4 Zero habitat loss in Y3 of project.   | 3.4 Not yet due.   |  |
| 3.1 Consolidate all historical imagery and mapping of the lake and wider catchment to assess change over time   |   | Partially complete; vegetation mapping requires ground-truthing  | WWT drone pilot will undertake vegetation mapping/ground truthing in May 2023.                 |
| 3.2 Conduct detailed annual habitat/vegetation assessments to generate baseline and monitor change over time  |   | Complete.  | n/a  |
| 3.3 Conduct assessment of the habitat requirements of, and baselines for, Threatened species at the site  |   | Threatened species identified  | Complete literature review, incorporating findings from Activity 3.2.                          |
| 3.4 Develop, and agree with stakeholders, a habitat restoration plan, aligned to CBNRM Association Management plans (see Activity 1.2), and applied research programme to monitor efficacy                |   | Initial habitat mapping nearly complete. Botanical survey conducted on lakeside habitat.                                 | This has had to await VOI formation and habitat mapping; due by July 2023.                     |
| 3.5 Identify and formalise a local community monitoring team and train on monitoring protocols  |   | The Lake Surveillance Committee (14 people) was est. and trained in 2022. They are now collecting information.           | Continue to support the monitoring; Report will be submitted to local fisheries dept. in 2023. |
| 3.6 Undertake aquatic plant restoration alongside VOIs and local fisher groups  |   | Planning with the VOIs undertaken  | Expected by Dec 2023.  |
| 3.7 Establish community nursery for lakeside habitat restoration (including in local schools - see Activity 4.4)  |   | Planning with the VOIs undertaken  | Nursery to be set up by early Aug 23 to provide saplings for 23/24 planting season.            |
| 3.8 Undertake lakeside habitat restoration alongside VOIs, including trials for harvestable crops in reforested patches   |   | Planning with the VOIs undertaken  | Lakeside habitat restoration with harvestable crops due to start 2023                          |
| <b>Output 4.</b><br>Increased understanding of the importance of natural systems and biodiversity for livelihoods and wellbeing amongst different socio-economic groups using and living around the lake. | 4.1 12 information panels are in place in all villages to inform rules and regulation on the management of natural resources<br><br>4.2 70% of fishers and market sellers are able to identify, and are aware of rules and regulations around, threatened species by Y2 | 4.1 Nothing to report at this time<br><br>4.2 Nothing to report at this time.<br><br>4.3 Nothing to report at this time. |  |

|  |   |   |   |
|--|---|---|---|
|  | <p>4.3 Understanding of the importance of nursery habitats and no-take zones increases by 80% amongst lake users by Y2</p> <p>4.4 60% of wider community members associate a healthy lake to health and wellbeing by end of project</p> <p>4.5 300 school children have received a dedicated curriculum-linked programme of environmental education and at least 75% believe that their actions can affect the future of the environment, and in-turn, their own futures.</p> | <p>4.4 Nothing to report at this time.</p> <p>4.5 Nothing to report at this time.</p> |   |
| 4.1 Conduct a schools competition to develop a single unified project logo and slogan promoting 'healthy nature for healthy people'  |   | Planned with the schools and education department but not yet launched.               | Part of the ongoing schools programme; competition for the design of logo and slogan is due in May 2023.    |
| 4.2 Develop a curriculum-linked environmental education programme for local schools, including field elements at the lake  |   | This activity is happening along the year, based on the school calendar.              | Continue implementing the education programme as agreed with the education department and schools.          |
| 4.3 Conduct teacher training events, with selected teachers nominated as teacher coaches to increase wider adoption of the materials   |   | No activities during the reporting period.  | As agreed with the Education Office at Regional and District levels, this is scheduled for July 2023.       |
| 4.4 Develop and maintain school environmental ambassador schemes, including school plant nurseries and engaging local school children in restoration schemes                             |   | This activity is happening along the year, based on the school calendar.              | School nursery establishment will be undertaken alongside the lake restoration nursery.                     |
| 4.5 Establish Community Information Points for project and VOI updates, environmental awareness campaigns, publication of project social safeguarding policy and Grievance Mechanisms    |   | Delayed as pending VOI creation, and now awaiting end of the rainy season.            | The installation of the panels is scheduled for July 2023, and will be done by VOI oversight committees.    |
| 4.6 Develop and deliver targeted awareness campaigns to focus on importance of wetland ecosystem services, mitigation of key threats, and identification and value of Threatened species |   | Underway. World Wetland Day and World Environment Day events held.                    | We have education awareness campaigns for adults scheduled around key events such as World Environment Day. |
| 4.7 Mainstream project messaging into all activities   |   | This was key to the creation of the VOIs and is a standard procedure.                 | Continue as previously.   |
| <b>Output 5.</b><br>Current and future wider threats are understood for the local Tseny  | 5.1 Ramsar Management Effectiveness Tracking Tool (R-METT) used to identify perceived threats in Y1, with relevant applied research projects  | 5.1 RMETT was carried out in April 2022   |   |

|  |  |  |  |
|--|--|--|--|
| <p>catchment, with a conservation strategy developed to mitigate threats into the future, and national conservation managers and government staff valuing and able to use tools to plan long-term resilient community-based wetland conservation projects.</p> | <p>interrogating options for threat mitigation by Y3.</p> <p>5.2 Climate Change Vulnerability Assessment (CCVA) and Mitigation Plan completed for species, habitat and livelihoods at Lake Tseny in Y2.</p> <p>5.3 In Y3, an Open Standards conservation strategy has been agreed for the Lake Tseny catchment, generating conceptual models and results chains that link threat mitigation with measurable improvements in biodiversity targets and ecosystem services.</p> <p>5.4 National training courses, designed in-line with Madagascar's National Wetland Strategy, attended by 80% of Ramsar Site Managers and the National Ramsar Committee, showcasing tools and approaches of the Lake Tseny project.</p> | <p>5.2 Community consultation method revised, species and habitats identified, background section of report drafted. But community consultations delayed due to bad weather.</p> <p>5.3 Nothing to report at this time.</p> <p>5.4 Nothing to report at this time.</p> |  |
| <p>5.1 Ramsar Management Effectiveness Tracking Tool workshop to gather baseline data on current stakeholder knowledge of ecological character, threats, and existing management capacity within the catchment</p>   | <p>Complete</p>  | <p>n/a</p>   |  |
| <p>5.2 Climate Change Vulnerability Assessment (CCVA) to consolidate baseline information on current status of key species, habitats and livelihoods and associated potential impacts of climate change based on regional modelling</p>                        | <p>Community consultation method revised, species and habitats identified, background section of report drafted. But community consultations delayed due to bad weather.</p>   | <p>Complete the village VA. Write up results and complete report.</p>  |  |
| <p>5.3 Multi-Stakeholder Open Standards Conservation Planning process for the catchment to develop a Conceptual Model, providing a greater understanding of current threats and contributing factors</p>   | <p>Underway</p>  | <p>The new VOI management transfer agreements already cover 90% of the catchment. Joint planning to address land use issues planned for 2023.</p>  |  |
| <p>5.4 Research programme developed and agreed with local government to interrogate the extent, severity and drivers of identified threats in the catchment</p>  | <p>Delayed</p>   | <p>Awaiting completion of 5.3, ie, by Aug 23. If not, will be conducted concurrently.</p>  |  |

|   |  |  |
|---|--|--|
| 5.5 Climate change resilient threat mitigation strategies developed for the Lake Tseny catchment and approved by regional government  | Delayed due to delays with the completion of the community CCVA consultations.   | Compile example climate mitigation measures from other wetlands. Convene stakeholder workshop(s) to present findings from the CCVA (Activity 5.2) and discuss mitigation measures. |
| 5.6 Funding proposal developed for conservation action in the wider catchment   | Complete.  | n/a  |
| 5.7 Lake Tseny designated as a Ramsar Site through the Government of Madagascar   | Ramsar eligibility identified and documented (see biodiversity survey report).   | Free, prior and informed consent of communities required, as per WWT's and Mavoa's internal safeguards.  |
| 5.8 National Ramsar Committee and all Ramsar Site Managers in Madagascar trained in Climate Change Vulnerability Assessment (CCVA)  | Complete (training held in Antananarivo on 9 Feb 2023 for 25 managers of 11 organisations, collectively managing most of Madagascar/s 21 Ramsar sites)   | n/a  |
| 5.9 Wetland training programme for all managers of important wetlands (in and outside of Ramsar Sites and Protected Areas) to fill knowledge gaps identified in the National Wetland Strategy | This is part of WWT's wider ambition to establish a 'Wetland Learning Hub' for in-service training of wetland professionals. The need and content are defined, but funds are still being sought. | We will continue to seek financing for the Wetland Learning Hub, potentially just for a pilot in Madagascar.   |

**Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)**

| Project Summary  | SMART Indicators  | Means of Verification   | Important Assumptions   |
|--|---|---|---|
| <b>Impact:</b> Lake Tseny catchment provides resilient ecosystem services and sustainable livelihood opportunities for communities, secure healthy habitat for increasing populations of native biodiversity, and inspires resilience planning for wetlands throughout Madagascar. |   |   |   |
| <b>Outcome:</b><br>Sustainable, representative, and legally recognised community-based management of Lake Tseny catchment results in improved ecosystem services for 5000 local people and enhanced habitat for threatened biodiversity, with techniques showcased nationally.     | 0.1 5000 people empowered to sustainably manage Lake Tseny through a legally endorsed 'Gelose' management transfer agreement by end of Y1<br><br>0.2 Like for like monthly income of fishers increases by 20% between Y1 and Y3.<br><br>0.3 Extent (# of ha) of aquatic vegetation and fringe Phragmites habitat increases by 10% by end of project. Reforestation plots increase forest extent by 5%.<br><br>0.4 Experimental catch per unit effort of threatened fish species increases by 10% by end of project.<br><br>0.5 Long-term regional conservation strategy agreed by local communities and Tsaratanana District Government, starting to address threats throughout the local catchment by end of project<br><br>0.6 At least 40 National Ramsar Committee members, Ramsar Site managers, and Managers of Protected Areas containing important wetland habitat, understand how to use R-METT and VA tools, and VAs taking place at at least 2 other important wetlands. | 0.1 Community association 'Gelose' agreement signed by government<br><br><br><br>0.2. Fisher diaries, surveys and market assessments.<br><br><br>0.3 Drone mapping and ground-truthed habitat assessments<br><br><br>0.4 Project staff adopting consistent catch and return methods targeting threatened species.<br><br>0.5. Strategies resulting from an Open Standards conservation plan are signed by local communities, with activities featuring in District Plans. Funding proposal developed by project partners.<br><br>0.6. Capacity Assessment survey. VA reports. | The political situation within Madagascar remains stable and no restrictions are imposed on NGOs.<br><br>Public health restrictions do not prevent project activities from taking place.<br><br>Project partnership with local government remains strong and all stakeholders remain supportive of management transfer to local communities.<br><br>Local community associations respect commitments to democratic processes and encourage participation of under-represented groups.<br><br>Local fishing communities maintain strong relationships with migrant fishers to agree equitable use and management models. |

| Project Summary  | SMART Indicators   | Means of Verification   | Important Assumptions  |
|--|--|---|--|
| <p><b>Outputs:</b><br/>1. Five sustainably financed community institutions (VOIs) are representing the breadth of local society and providing efficient, and legally recognised, management of natural resources in and around Lake Tseny.</p> | <p>1.1 800 households, with proportional representation of all sectors of society (e.g. gender, socio-economic group, professional group, belief system) have been engaged in management transfer consultations and management group elections in Y1, with women representing at least 50% of membership.</p> <p>1.2 Community-based natural resource management plans agreed for three lake-side associations for coordinated and zoned management of Lake Tseny, and signed off by local and district government by end of Y1</p> <p>1.3 Community-based natural resource management plans agreed for two forest associations to coordinate and zone management of the surrounding forest fragment. Signed off by local and district government by end of Y2</p> <p>1.4 Community-based savings groups in place, generating sufficient revenue to cover operations for all community associations by end of Y3</p> <p>1.5 Final project assessment of community assessment of natural resources is rates 'good' or better by 75% of all sectors of society</p> | <p>1.1 Social surveys in Y1, Y2, and Y3. Election and membership records. Reports from community consultations</p> <p>1.2. Signed plans.</p> <p>1.3 Signed plans.</p> <p>1.4 Community association financial records.</p> <p>1.5 Social survey at end of project.</p> | <p>All sectors of society engage with management transfer process and support wider project initiatives, including community-based savings groups and equipment rental schemes, which have been designed to fill existing needs.</p> <p>Local government honour legal community rights to manage natural resources and do not interfere with democratic processes.</p> |
| <p>2. Fishing regulations are in place and being followed by local and migrant fishers, which, alongside fish habitat restoration areas, is increasing the productivity of the fishery. Fishing communities have new knowledge on</p>          | <p>2.1. Net exchange programme ensuring &lt;5% of users of the fishery are not abiding by legal mesh-size regulations in Y2</p>  | <p>2.1. Community patrols and checks at boat launch sites.</p>  | <p>Local and migrant fishers are willing to engage in a long-term process to improve fisheries.</p>  |

| Project Summary   | SMART Indicators  | Means of Verification   | Important Assumptions  |
|---|---|---|--|
| value chains and the potential to increase profitability.       | <p>2.2. Community-association patrol reports showing that at least 90% of fishing activity abides by local regulations, including respect of no take zones in Y2</p> <p>2.3 Zones are allocated for nursery habitat have conservation strategies, and 8 ha restored by end of project.</p> <p>2.4 80% of both male and female fishers report perceived increase in productivity and desire to continue following local regulations by end of Y3.</p> <p>2.5 Fish catch per unit effort increases by 15% by the end of Y3</p> <p>2.6 Value Chain Analysis published for the fishery in local language by end of Y2.</p> <p>2.7 A feasibility study is published for restocking native species through cage farming at Lake Tseny by and of project by end of project.</p> <p>2.8 60% of both male and female fishers receive technical support for the valuation and market research of the Lake Tseny fishery by the end of Y3.</p> | <p>2.2 Patrolling reports.</p> <p>2.3. Nursery habitat restoration report</p> <p>2.4 Social survey of fishers (data disaggregated by gender and other factors).</p> <p>2.5 Ecosystem service assessment, including catch counts/weights, interviews and analysis of local fish available at village markets</p> <p>2.6 Value Chain Analysis report</p> <p>2.7 Feasibility Report</p> <p>2.8 Training report. Partnership agreement with operators</p> | Local community association patrolling and enforcement can be done safely and efficiently at the lake. |
| 3. Quality and extent of aquatic and lakeside habitat increased | <p>3.1 Open water aquatic vegetation increases by 10% by end of Y3.</p> <p>3.2 80% survival rate of planted peripheral habitat (inc. <i>Phragmites spp</i>, <i>Tamarindus indica</i>, <i>Pourpartia sylvatica</i>) at end of project</p>  | <p>3.1 Drone maps and restoration reports</p> <p>3.2 Vegetation assessment</p>  | There are no unforeseen barriers to standard restoration methods that work elsewhere locally.          |

| Project Summary  | SMART Indicators   | Means of Verification  | Important Assumptions  |
|--|--|--|--|
|  | <p>3.3 Percentage of key habitat for threatened species rated 'good' by expert working group increases by 25% by end of project.</p> <p>3.4 Zero habitat loss in Y3 of project.</p>  | <p>3.3 Expert working group baseline and endline assessments. Habitat monitoring by project teams.</p> <p>3.4 Vegetation assessment</p>  |  |
| <p>4. Increased understanding of the importance of natural systems and biodiversity for livelihoods and wellbeing amongst different socio-economic groups using and living around the lake</p> | <p>4.1 12 information panels are in place in all villages to inform rules and regulation on the management of natural resources</p> <p>4.2 70% of fishers and market sellers are able to identify, and are aware of rules and regulations around, threatened species by Y2</p> <p>4.3 Understanding of the importance of nursery habitats and no-take zones increases by 80% amongst lake users by Y2</p> <p>4.4 60% of wider community members associate a healthy lake to health and wellbeing by end of project</p> <p>4.5 300 school children have received a dedicated curriculum-linked programme of environmental education and at least 75% believe that their actions can affect the future of the environment, and in-turn, their own futures.</p> | <p>4.1 Photos and information posters.</p> <p>4.2 Targeted surveys and ID assessments (data disaggregated by gender and other factors).</p> <p>4.3 Baseline and endline social surveys (data disaggregated by gender and other factors).</p> <p>4.4 Baseline and endline social surveys (data disaggregated by gender and other factors).</p> <p>4.5 Environmental education appraisal report. Assessments to verify if children can name activities that they believe they can do to help maintain a healthy environment for themselves and for plants and animals.</p> | <p>Community members from all villages and sectors of society engage with the project.</p> <p>Schools continue to support comprehensive programmes of environmental education provided by project staff.</p> |
| <p>5. Current and future wider threats are understood for the local Tseny catchment, with a conservation strategy developed to mitigate threats into the future, and national conservation</p> | <p>5.1 Ramsar Management Effectiveness Tracking Tool (R-METT) used to identify perceived threats in Y1, with relevant applied research projects interrogating options for threat mitigation by Y3.</p>   | <p>5.1 R-METT report. Research plans. Research reports</p>   | <p>Good climate projection models are made available to the project.</p>   |



| Project Summary  | SMART Indicators   | Means of Verification  | Important Assumptions  |
|--|--|--|--|
| <p>managers and government staff valuing and able to use tools to plan long-term resilient community-based wetland conservation projects.</p>  | <p>5.2 Climate Change Vulnerability Assessment (CCVA) and Mitigation Plan completed for species, habitat and livelihoods at Lake Tseny in Y2.</p> <p>5.3 In Y3, an Open Standards conservation strategy has been agreed for the Lake Tseny catchment, generating conceptual models and results chains that link threat mitigation with measurable improvements in biodiversity targets and ecosystem services.</p> <p>5.4 National training courses, designed in-line with Madagascar's National Wetland Strategy, attended by 80% of Ramsar Site Managers and the National Ramsar Committee, showcasing tools and approaches of the Lake Tseny project.</p> | <p>5.2 VA report and mitigation plan</p> <p>5.3 Catchment conservation plan agreed by communities and regional government</p> <p>5.4 Attendance records, Training report</p> | <p>A full programme of research on wider threats can undertaken safely and effectively within the project period.</p> <p>National Ramsar Committee members remain engaged with the capacity building activities identified in the draft National Wetland Strategy.</p> |
| <p><b>Activities</b> (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> <p>1.1 Conduct community consultations for formalised community-based natural resource management transfer agreements</p> <p>1.2 Management Plans developed and agreed by local government</p> <p>1.3 Constitute membership of VOIs and support elections for leadership groups</p> <p>1.4 Conduct capacity assessments (resource management, administrative, legal, financial) of groups and develop VOI training plan</p> <p>1.5 Facilitate a study tour to Lake Sofia to learn from similar successful ongoing schemes</p> <p>1.6 Develop VOI Business Plan to ensure sustainable financing of the associations, including equipment rental and community-based savings groups</p> <p>1.7 Deliver VOI training programme and provide ongoing support</p> <p>1.8 Hold community fora 2 times per year in each community to ensure wider accountability</p> <p>1.9 Hold annual catchment management group meeting</p> <p>1.10 Capacity assessment and legacy planning</p> <p>2.1 Collect and analyse socio-economic data, including legal and illegal use of the fishery</p> <p>2.2 Conduct fisheries assessment to map key nursery habitats, potential high-value no-take zones and priority restoration actions to inform Activity 1.2 and Output 3</p> <p>2.3 Training from fisheries specialist and visit by representatives of other successful community fishery projects to share advice on best-practice and common mistakes</p> <p>2.4 Value chain analysis and fishery business plan agreed alongside local fishers</p> |  |  |  |

| Project Summary  | SMART Indicators | Means of Verification | Important Assumptions |
|--|------------------|-----------------------|-----------------------|
| <p>2.5 Conduct feasibility study for restocking native species through cage farming</p> <p>2.6 Update and implement education and awareness programme, including dissemination of information on strict common standards for fishing control</p> <p>2.7 Operate voluntary net exchange programme</p> <p>2.8 Community fishery trust fund established and recommendations from the Business Plan implemented with associated training provided</p> <p>2.9 Design and implement fish catch monitoring programme</p> <p>2.10 Community fishery monitoring and patrols to strengthen compliance with regulatory mesh and fishing season and no-take zones</p> <p>2.11 Annual review of fisher perceptions, scheme, management approval ratings, recommendations for the coming year (independent consultant)</p> <p>3.1 Consolidate all historical imagery and mapping of the lake and wider catchment to assess change over time</p> <p>3.2 Conduct detailed annual habitat/vegetation assessments to generate baseline and monitor change over time</p> <p>3.3 Conduct assessment of the habitat requirements of, and baselines for, Threatened species at the site</p> <p>3.4 Develop, and agree with stakeholders, a habitat restoration plan, aligned to CBNRM Association Management plans (see Activity 1.2), and applied research</p> <p>3.5 Identify and formalise a local community monitoring team and train on monitoring protocols</p> <p>3.6 Undertake aquatic plant restoration alongside VOIs and local fisher groups</p> <p>3.7 Establish community nursery for lakeside habitat restoration (including in local schools - see Activity 4.4)</p> <p>3.8 Undertake lakeside habitat restoration alongside VOIs, including trials for harvestable crops in reforested patches</p> <p>4.1 Conduct a schools competition to develop a single unified project logo and slogan promoting 'healthy nature for healthy people'</p> <p>4.2 Develop a curriculum-linked environmental education programme for local schools, including field elements at the lake</p> <p>4.3 Conduct teacher training events, with selected teachers nominated as teacher coaches to increase wider adoption of the materials</p> <p>4.4 Develop and maintain school environmental ambassador schemes, including school plant nurseries and engaging local school children in restoration schemes</p> <p>4.5 Establish Community Information Points for project and VOI updates, environmental awareness campaigns, publication of project social safeguarding policy etc</p> <p>4.6 Develop and deliver awareness campaigns on importance of wetland ecosystem services, mitigation of threats, and identification and value of Threatened species</p> <p>4.7 Mainstream project messaging into all activities</p> <p>5.1 Ramsar Management Effectiveness Tracking Tool workshop to gather baseline data on current stakeholder knowledge of ecological character, threats, and existing management capacity within the catchment</p> <p>5.2 Climate Change Vulnerability Assessment (CCVA) to consolidate baseline information on current status of key species, habitats and livelihoods and associated potential impacts of climate change based on regional modelling</p> <p>5.3 Multi-Stakeholder Open Standards Conservation Planning process for the catchment to develop a Conceptual Model, providing a greater understanding of current threats and contributing factors</p> <p>5.4 Research programme developed and agreed with local government to interrogate the extent, severity and drivers of identified threats in the catchment</p> <p>5.5 Climate change resilient threat mitigation strategies developed for the Lake Tseny catchment and approved by regional government</p> <p>5.6 Funding proposal developed for conservation action in the wider catchment</p> <p>5.7 Lake Tseny designated as a Ramsar Site through the Government of Madagascar</p> <p>5.8 National Ramsar Committee and all Ramsar Site Managers in Madagascar trained in Climate Change Vulnerability Assessment (CCVA)</p> <p>5.9 Wetland training programme for all managers of important wetlands to fill knowledge gaps identified in the National Wetland Strategy</p> |                  |                       |                       |

**Annex 3: Standard Measures****Table 1 Project Standard Output Measures**

| Code No. | Description   | Gender of people (if relevant) | Nationality of people (if relevant) | Year 1 Total | Year 2 Total | Year 3 Total | Total to date | Total planned during the project |
|----------|---|--------------------------------|-------------------------------------|--------------|--------------|--------------|---------------|----------------------------------|
| 3        | Number of people to attain other qualifications (i.e. Not standard measures 1 or 2 above)   | F                              | Malagasy                            | 0            | 1            | 0            | 1             | 1                                |
| 4C       | Number of postgraduate students to receive training   | F                              | Malagasy                            | 1            | 1            | 0            | 3             | 1                                |
| 4D       | Number of training weeks to be provided   | F                              | Malagasy                            | 2            | 4            | 2            | 4             | 0                                |
| 6A       | Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)   | F/M                            | Malagasy                            | 4            | 0            | 1            | 4             | 0                                |
| 6B       | Number of training weeks to be provided   |                                |                                     | 1            | 4            | 0            | 1             | 3                                |
| 7        | Number of (i.e., different types - not volume - of material produced) training materials to be produced for use by host country                                     |                                |                                     | 0            | 0            | 1            | 0             | 1                                |
| 9        | Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country |                                |                                     | 0            | 0            | 1            | 0             | 1                                |
| 22       | Number of permanent field plots and sites to be established during the project and continued after  |                                |                                     |              | 0            | 1            | 0             | 1                                |

| Code No. | Description   | Gender of people (if relevant) | Nationality of people (if relevant) | Year 1 Total | Year 2 Total | Year 3 Total | Total to date | Total planned during the project |
|----------|---|--------------------------------|-------------------------------------|--------------|--------------|--------------|---------------|----------------------------------|
|          | Darwin funding has ceased   |                                |                                     |              |              |              |               |                                  |
| 23       | Value of resources raised from other sources (i.e., in addition to Darwin funding) for project work |                                |                                     | 0            | 0            | tbd          | 0             |                                  |

**Table 2 Publications**

| Title (full title, see below)* | 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) |
|--------------------------------|-----------------------------------|---|-----------------------|----------------------------|-------------------------|--|
| WWT_2022_01                    | Report                            | Full references provided in Annex 4: Supplementary material | M                     | UK                         | WWT                     | WWT  |
| WWT_2022_03                    | Report                            |   | M                     | MDG                        | WWT                     | WWT  |
| WWT_2022_04                    | Report                            |   | M                     | MDG                        | WWT                     | WWT  |
| WWT_2022_05                    | Report                            |   | M                     | MDG                        | WWT                     | WWT  |
| WWT_2023_01                    | Report                            |   | M                     | UK                         | WWT                     | WWT  |
| WWT_2023_02                    | Report                            |   | M                     | UK                         | WWT                     | WWT  |
| WWT_2023_04                    | Report                            |   | F                     | MDG                        | WWT                     | WWT  |

\* Full titles provided in Annex 4: Supplementary material

**Checklist for submission**

|   | Check                               |
|---|-------------------------------------|
| Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the <b>correct template</b> (checking fund, type of report (i.e. Annual or Final), and year) and <b>deleted the blue guidance text</b> before submission? | <input checked="" type="checkbox"/> |
| <b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.  | <input checked="" type="checkbox"/> |
| <b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.   | No                                  |
| <b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.   | <input checked="" type="checkbox"/> |
| <b>Do you have hard copies of material you need to submit with the report?</b> 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.                             | n/a                                 |
| Have you involved your partners in preparation of the report and named the main contributors  | <input checked="" type="checkbox"/> |
| Have you completed the Project Expenditure table fully?   | <input checked="" type="checkbox"/> |
| Do not include claim forms or other communications with this report.  |                                     |