

Verified by:



Filosoofi 31
50108 Tartu
Estonia
www.preferredbynature.org

Verification managed by:

Preferred By Nature

Contact person: Mateo Cariño
Fraisie
Email:
mcarino@preferredbynature.org

Ver 19 November 2021

**Ecosystem Restoration
Verification
Report for:
Eden Reforestation Projects
in
Mahajanga, Madagascar**

Report Finalised: 23 March 2022
Audit Dates: 15th to 19th November 2021
Audit Team: Gérard RAMBELOARISOA
Mateo Cariño FRAISSE
Richard DONOVAN

Verification
issue/expiry: 22 March 2023
Organisation Contact: Pâquerette Binatienne
Contact details: paquerette.binatienne@edenprojects.org
0320583386

TABLE of CONTENTS

INTRODUCTION	3
EXECUTIVE SUMMARY	4
1 AUDIT CONCLUSIONS	6
2 AUDIT PROCESS	18
3 ORGANISATION DETAILS	21
Annex I: ER standard conformance checklist (confidential)	
Annex II: List of all visited sites (confidential)	
Annex III: Detailed list of stakeholders consulted (confidential)	
Annex IV: List of documents and records (confidential)	

INTRODUCTION

This report presents the findings of an independent verification audit conducted by a team of specialists representing Preferred by Nature. The purpose of the audit was to evaluate the ecological, economic, and social performance of Eden Reforestation Project Madagascar restoration initiative as defined by the established Ecosystem Restoration Standard by Preferred by Nature.

Dispute resolution: If Preferred by Nature clients encounter organisations or individuals having concerns or comments about Preferred by Nature and our services, these parties are strongly encouraged to contact relevant Preferred by Nature regional office. Formal complaints and concerns should be sent in writing.

Impartiality commitment: Preferred by Nature commits to using impartial auditors and our clients are encouraged to inform Preferred by Nature management if violations of this are noted. Please see our Impartiality Policy here:

<http://www.preferredbynature.org/impartiality-policy>

EXECUTIVE SUMMARY

Eden Reforestation Projects is a non-profit association whose objectives are:

- (i) Promote and protect forest ecosystems through reconstitution and reforestation
- (ii) Raise awareness in communities about the preservation and conservation of forests
- (iii) Fighting poverty by employing the most deprived people and those without opportunities in the communities where the project is developed, and
- (iv) Promote development in deprived communities through the execution of agroforestry projects.

Since 2007, Eden intervenes on mangroves restoration in 122 sites totaling 36.642 ha. The legal ownership of the land under the scope of this auditing is by the Government of Madagascar. Preferred by Nature is a non-profit organisation that for more than 25 years has worked to support better land management and business practices that benefit people, nature and the climate. With the rising relevance and actions towards restoration initiatives, there is increasing need from funders, investors or other stakeholders seeking to monitor the progress. Verification against the Standard allows project managers to communicate about the efforts and demonstrate resources are invested in the right direction, taking into account the social and environmental conditions of the restoration areas. Preferred by Nature has thus conducted a field audit to evaluate the ecological, economic, and social performance Eden Reforestation Project restoration initiative in the Mahajanga Province (Madagascar) as defined by the established [Ecosystem Restoration Standard](#) vs.2.0, as part of the last round of field tests before finalization the Standard. The field audit lasted for 5 days, preceded by a stakeholder consultation process that continued throughout the audit as well. The methodology consisted in triangulating the verification of existing files with the various Eden responsible staff, interviews with stakeholders and beneficiaries, and the field visit observations. With no major specific stakeholder concerns having been raised, the sites were sampled based mainly on the type of management, the degradation drivers, the size, and the age of the plantations. Four sites were selected: Mahabana, Akalimboro, Boanamaray, and Mahajanga.

The main issues identified to be dealt with by Eden are:

1. Stakeholder identification and engagement needs improvement.
2. Clarity on the organization's environmental, social, and economic desired restoration outcomes, goals and objectives restoration plans for the next 5 to 20 years.
3. Evidence of longer-term resources (5 and 20 years) to implement the Restoration Plan, while explanations on a Forest Guard Endowment Fund in place in perpetuity have been provided in the discussions at closure of the report that would help respond to this criterion at the next audit.
4. No documented version of the Restoration Plan was provided.
5. Lack of a continuation strategy, i.e. clarity on how the organization is planning to continue empowering the communities after the project leaves.
6. No documented version of the Monitoring Plan was provided.
7. No documented dispute resolution mechanism was provided.
8. No publicly available document stating that discrimination of workers is not permitted was provided.
9. Access to first aid kits and parts of the basic protective equipment for all workers.
10. The social impacts and benefits are not documented, which makes difficult to have a consistent vision on how they are going to be monitored and evaluated over time.
11. Adaptation of the monitoring system after development of point 2 above.
12. Clarity on the resources for implementation of the Monitoring Plan over a 5-year period.

Eden reforestation projects has been verified as meeting the standard and will need to close the above issues, expressed as Non-Conformity Reports, in a one year period in order to maintain this recognition.

1 AUDIT CONCLUSIONS

1.1 Audit Recommendation and verification decision

Based on Organisation’s conformance with verification requirements, the following recommendation is made:

- Verification approved:
 - Upon acceptance of NCR(s) issued below
- Verification not approved:

Additional comments, including issues identified as controversial or hard to evaluate and explanation of the conclusion reached: NA

1.2 Non-conformity Reports (NCRs)

Note: NCRs refer to non-fulfilment of a requirement. In simpler terms this means that some part of the standard has not been correctly fulfilled and need to be corrected in the deadline (from the closure of the report) in order to maintain the verified status.

- Check if no NCR(s) have been issued

NCR: 01/22	
Standard & Requirement:	ER standard vs. 2.0, 1.5.1
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
Not all relevant stakeholders have been identified and thus consulted or engaged with. The field interviews revealed that some important people/organizations were missing, e.g., at DELC (Development and Environmental Law Center) and Asity or a chief Fontakany. The forestry service themselves had also been notified at a later stage, after the operations were ongoing. No specific considerations with regards to power dynamics for stakeholder engagement, especially at the communities’ level, have been provided (e.g. women, elders, or young people would require a specific focus to participate). Also, the auditor interviews in the field revealed a lack of consistent understanding by the local communities in general of the expected actions, results and benefits of the project.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months

Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 02/22	
Standard & Requirement:	ER standard vs. 2.0, 1.6.2
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The desired restoration outcomes over an initial 5-year period and a longer term, 20-year period, in connection with the environmental, social, and economic goals and objectives have not been provided to the audit team.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 03/22	
Standard & Requirement:	ER standard vs. 2.0, 1.6.6
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The Organization has only provided evidence that initial resources are secured, i.e., until 2022, but is in progress only until 2031. Clarity on longer term resources is needed, including clarity on shared long-term commitments with the local community.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN

Comments (optional):	<p>After the field visit, during the final round of report review by Eden, the Organization has provided further explanation stating that for every partner-sponsored site, Eden reserves ten cents per dollar raised into its Forest Guard Endowment Fund (FGE). The Guard Endowment is governed by an Eden board-approved policy and subject to the rules of California's Uniform Prudent Management of Institutional Funds Act (UPMIFA). Both the board policy and UPMIFA regulations are designed to guarantee that the FGE will be held in perpetuity. Eden withdraws up to 4% of the endowment fund balance annually for the express purpose of supporting perpetual guard operations at completed sites.</p> <p>This information helps to answer this criterion and would be subject of further review at the next audit.</p>
-----------------------------	--

NCR: 04/22	
Standard & Requirement:	ER standard vs. 2.0, 1.6.7
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The Organization has not provided a documented version of the Restoration Plan.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 05/22	
Standard & Requirement:	ER standard vs. 2.0, 1.6.8
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The audit team has not been provided with this continuation strategy, i.e. clarity on how the organization is planning to continue empowering the communities after the project leaves.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well</p>

	as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 06/22	
Standard & Requirement:	ER standard vs. 2.0, 1.8
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
A M&E system is functional, with the responsibilities sitting at the headquarter level. Monitoring records of the tree planting activities are documented and have been provided. Nevertheless, no documented Monitoring Plan has been presented to the auditors.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 07/22	
Standard & Requirement:	ER standard vs. 2.0, 2.4
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The Organization has not provided a documented dispute resolution mechanism.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING

NCR Status:	OPEN
Comments (optional):	

NCR: 08/22	
Standard & Requirement:	ER standard vs. 2.0, 3.10
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The organization has not disclosed in a publicly available document that discrimination of workers, based on gender, race, age, religion, national/territorial/social origin, caste, birth, disability, sexual orientation, family responsibilities, marital status, union membership, political opinions, or any other condition, is not permitted.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 09/22	
Standard & Requirement:	ER standard vs. 2.0, 3.13
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
No personal protective equipment or first aid kits has been provided to workers as per the auditor observations in several sampled sites (Mahabana, Akalimboro, and Boanamary).	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 10/22	
Standard & Requirement:	ER standard vs. 2.0, 3.16.1
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
Social benefits and impacts are defined and include aspects as development of fishing activities, future development of aquaculture, wood production, development of beekeeping, promotion of the sericulture of wild silk, carbon sequestration, or production of tannin for leather processing. The people in the communities are in general satisfied with the project as per the field auditor interviews, but they were unable to explain where the project is heading and the projection of the benefits, nor a consistent explanation of their benefits and responsibilities in the mid-term. Specifically, for this criterion, the audit team notes that these impacts and benefits are not documented, which does not help to have a consistent vision on how they are going to be monitored and evaluated over time.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 11/22	
Standard & Requirement:	ER standard vs. 2.0, 4.2
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
The monitoring is targeted to the outcomes but with a very limited extent for now and too short a period. It is to be noted that per the indicator 1.6.2, the desired restoration outcomes over an initial 5-year period and a longer term, 20-year period, in connection with the environmental, social and economic goals and objectives need to be provided to the audit team.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

NCR: 12/22	
Standard & Requirement:	ER standard vs. 2.0, 4.2.2
Report Section:	Annex I
Description of Non-conformance and Related Evidence:	
No evidence of the resources to ensure implementation of the Monitoring Plan over a 5-year period have been provided to the audit team.	
Corrective action request:	<p>Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.</p> <p>Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.</p>
Timeline for Conformance:	12 months
Evidence Provided by Organisation:	PENDING
Findings for Evaluation of Evidence:	PENDING
NCR Status:	OPEN
Comments (optional):	

1.3 Observations

Note: Observations are issued for the early stages of a problem which does not of itself constitute a non-conformance, but which the auditor considers may lead to a future non-conformance if not addressed by the organisation; observations may lead to direct non-conformances if not addressed.

No observations

OBS: 01/22	Standard & Requirement:	ER standard vs.2.0, 1.1, 1.2
	Report Section	Annex I
Description of findings leading to observation:	Due to recent changes in the Eden Madagascar team, the responsibilities and capacity to respond to the audit team were sometimes blurry at the time of the audit. It was difficult to get hold of some information, as for example the documented Restoration Plan,, which raises questions in terms of the effectiveness of the current management system as well.	
Observation:	The Organisation should ensure that the responsibilities are clearly assigned in the management team and empower the responsible people so that they can engage effectively with any stakeholder.	

OBS: 02/22	Standard & Requirement:	ER standard 1.4.7
	Report Section	Annex I

Description of findings leading to observation:	Affected stakeholders are identified as the managers of the four PAs inside or adjacent to intervention zone of Eden and local population. The list of stakeholders should be improved though as some relevant people (e.g., the major in one of the areas or some managers at DELC and Asity) have not been included in the consultations, as observed by the auditors during the field interviews. The organization is aware that a comprehensive list is missing and has hired some local staff, who are actually involved in the degradation of the mangroves, to participate in and support that process, which is both necessary and positive.
Observation:	The Organisation should ensure that all affected stakeholders or rights holders to be consulted during planning and implementation are clearly identified.

OBS: 03/22	Standard & Requirement:	ER standard 1.6.4
	Report Section	Annex I
Description of findings leading to observation:	It can be seen that restoration techniques are evolving with the observations and monitoring done also in other Eden projects, e.g., in Mozambique. That said, the stakeholder interviews revealed that there are other useful projects that hasn't been contacted for the purpose of gaining useful insights that would enhance project efforts (e.g. the WWF <i>Mangrove restoration in Landscape and Seascape in Manabe and Melaky Regions</i> or an earlier GIZ project in the very Mahajanga area.	
Observation:	The Organisation should expand their stakeholder activity to further include the lessons learnt from the analysis of restoration projects in similar settings and conditions inside and outside of Madagascar.	

OBS: 04/22	Standard & Requirement:	ER standard 2.1
	Report Section	Annex I
Description of findings leading to observation:	The two protected areas (Bombetoka-Belenoka and Complexe Mahavavy-Kinkony) have their PAG (Plan d'Aménagement et de Gestion) validated with their restoration plans. The other sites of Eden are recorded by polygons, but there is no legal document yet, although it's in the due (and positive) process of become "regularized" by preparing an MOU with the DIREDD.	
Observation:	The Organisation should ensure that the due process for regularization of the activity is continued in order to provide better security for the project over the long term.	

OBS: 05/22	Standard & Requirement:	ER standard 3.2
	Report Section	Annex I

Description of findings leading to observation:	<p>All seeds are collected locally, and the seed selection is usually sound (i.e., high quality).</p> <p>That said, the field auditor noticed that in few zones near the shore, in areas ranging from 10m to 30m, the mangrove is difficult to reinstall, probably because the low level of water for the species used is not suitable. e.g., in Boanamary the Organization planted Hokonlahy instead of Afiaty, which is known to have difficulties as they don't have the same water level requirements.</p>
Observation:	<p>The Organisation should ensure that species selection and use are well aligned to meet the restoration objectives, when there are cases where the species used are not working as expected, changes need to be made and documented for future similar situations/learning.</p>

OBS: 06/22	Standard & Requirement:	ER standard 3.16.2
	Report Section	Annex I
Description of findings leading to observation:	<p>The metrics for monitoring are quite limited and not covering all the social and environmental aspects as required in the Restoration Plan.</p>	
Observation:	<p>The Organisation should improve the metrics for monitoring to include all the social and environmental aspects required in the Management Plan.</p>	

1.4 Stakeholder consultation

The purpose of the stakeholder consultation strategy was threefold:

- To ensure that the public is aware of and informed about the assessment process and its objectives;
- To assist the field assessment team in identifying potential issues; and,
- To provide diverse opportunities for the public to discuss and act upon the findings of the assessment.

This process is not just stakeholder notification, but to the maximum extent possible, detailed, and meaningful stakeholder interaction. The process of stakeholder interaction does not stop after the field visits, or for that matter, after even a verification decision is made. Preferred by Nature welcomes, at any time, comments on certified operations and such comments often provide a basis for field assessment.

For this Eden Mangroves restoration project, the stakeholder consultation has focussed on the regional forestry service, the two NGOs managing the two Protected Areas involved in Eden mangrove restoration, and the local communities.

The regional forest service is responsible for all forest resource management. The head of forest service was informed on the certification process on 25th November, and a discussion was held. The auditor met also the Regional Director on the 22th of November.

For Asity (National NGO), manager of the Mahavavy-Kinkony PA (Protected Area) complex, Mr Tahina Rakotondralambo the national Responsible were notified by phone about the verification process underway. A conference call was organized between Mr Tahina, Mr Solofoson and the auditor on 18th November. There are 21 sites totaling 5749 hectares which are a focus for restoration by Eden. "Regularization" through an MOU is in progress in order to smooth out the management problems. Asity is happy with the collaboration, but asks for more collaboration in the future.

Two calls with Asity representatives (the National Responsible and Solofoson) were held. The first to inform them on the process and the second for follow-up on their comments.

The field auditor met several DELC (Development and Environmental Law Center) representatives (the persons in charge of the area, the administration, and an intern) on 22nd and 25th of November to discuss the verification process.

Finally, a number of individual and group interviews were done during the field visits, per the table below.

Stakeholder Type (NGO, government bodies, local inhabitant, contractor etc.)	Stakeholders Notified (#)	Stakeholders consulted directly or provided input (#)
National/International NGOs	2	2
Local/Regional NGOs	x	x
Local Community members	x	24
Government Agency	1	1
Labor Union	x	x
Certified Companies	x	x

The table below summarises the issues identified by the assessment team with a brief discussion of each based upon specific interview and/or public meeting comments.

Principle/Subject Area	Stakeholder comment	Preferred by Nature response
1: Planning	<p>1 – We are missing a technical responsible person that can serve as local focal contact for us after the departure of the former responsible . We also don't have clarity on the long term vision of the project.</p> <p>2 - Eden must conform to forest legislation and contact the forest service prior to set a new polygon in the field. Eden needs to more effectively involve directly engaged stakeholders from the beginning af each restoration site.</p> <p>3 - There is a lack of study on the landscape context for restoration activities.</p>	<p>1 - Due to recent changes in the Eden Madagascar team, the responsibilities and capacity to respond to the audit team were also sometimes a bit blurry at the time of the audit. It was difficult to get hold of some information, which raises questions in terms of the effectiveness of the current management system as well. See OBS 01/22.</p> <p>2 – The stakeholder engagement process of the Organization needs to be improved. The list of stakeholders should be more thorough, as some relevant people have not been included in the lists, per the consultations and field</p>

	<p>4 - Restoration plan must be revised and taking in account longer term planning, i.e. for years 4 -10 of the planning cycle.</p>	<p>interviews conducted by Preferred by Nature. The organization is aware that a comprehensive list is missing and has hired some local staff, including those actually involved in the degradation of the mangroves, to support improvement of that process. No specific considerations with regards to power dynamics for stakeholder engagement, especially at the communities level, have been provided. This could easily bias the results or limit/constrain the type of input provided or engagement, as e.g. women, elders, or young people would require a specific focus to participate or provide input that is significant for them. Also, the auditor interviews in the field revealed a lack of understanding by the local communities in general of the expected actions and benefits of the project. See OBS 02/22 and NCR 01/22.</p> <p>3 - There is a general understanding of most aspects of the context since all the team is local and are very connected to the local communities, with many being workers of the organization as well. In this sense this indicator is informally complied with as per the audit team observations. That said, since it is not documented (see NCR 04/22 below) it is not systematic and some of these aspects could be easily overlooked, especially as the organization expands into new areas.</p> <p>4 - Agreed, this is required under criterion 4.4.</p>
<p>2: Tenure & Security</p>	<p>The status of restored mangrove must be clarified and responsibility for future management formalized: Transfer of Management to CBOs or Delegation of Management to Eden.</p>	<p>The two protected areas (Bombetoka-Belenoka and Complexe Mahavavy-Kinkony) have their PAG (Plan d'Aménagement et de Gestion) validated with their restoration plans. The other sites of Eden are recorded by polygons, but there is</p>

		no legal document yet, although it's in the due process of being regularized through preparation of an MOU with the DIREDD. See OBS 03/22.
3: Implementation	NA	NA
4: Monitoring and Reporting	The project lacks documentation of a longer term vision, including exit strategy.	The desired restoration outcomes in the medium- and long-term, in connection with the environmental, social and economic goals and objectives, have not been provided to the audit team. See NCR 02/22. The audit team has indeed also not been provided with this continuation strategy. See NCR 05/22.

1.5 Actions taken by Organisation Prior to Report Finalisation

NA

2 AUDIT PROCESS

2.2 Verification Standard Used

Standards Used (including version):	Ecosystem Field Verification Standard ver. 2.0 Preferred by Nature Standard, July 2021.
-------------------------------------	--

Audit Team and accompanying persons	Role and qualifications
Mateo Cariño Fraisse	Lead auditor, supporting from desk. Mateo is Land Use Program Manager at Preferred by Nature. As Forest engineer with a master's degree in Rural and Tropical Forestry, Mateo has gained extensive experience in forestry and carbon auditing (FSC, PEFC, CCB, VCS, Gold Standard, Plan Vivo, Carbon Footprint Management, etc.) and projects over 20 years globally. He has been training in forestry auditing and is currently leading the PbN FER Initiative. Mateo speaks Spanish, French, English, and Portuguese. Mateo reviewed the draft report and will approve any verification statement that is released for this restoration project. He did not conduct field work.
Gérard Rambeloarisoa	Field Auditor. Gérard is based in Antananarivo, Madagascar. M.Sc. Forestry- Forest Ecology, (Univ. of Antananarivo, Madagascar); Forest Engineer. From (ESSA-Forêts, School of Agronomy Univ d'Antananarivo). Certificate of Forest Certification SSC-forestry, Uppsala, Forestry School of Garpenbeï Sweden He has involved in FSC forest management and chain of custody assessments at FANALAMANGA plantation with SGS in 2015. He his member of ICFM of Madagascar promoting FSC certification.
Richard Donovan Zell	Report reviewer. Richard is a senior forestry specialist with a Master's in Natural Resources Management & Administration, with an emphasis on forest hydrology and community forestry. He provided technical support prior to the field work and reviewed the draft report.

2.3 Audit Overview

Note: The table below provides an overview of the audit scope and auditors. See standard checklist annex for specific details on people interviewed and audit findings per site audited.

Site(s)	Date(s)	Main activities	Auditor(s)
Mahajanga	25.Oct.21	Stakeholder Interviews	Gérard RAMBELOARISOA

Mahajanga	15.Nov.21	Opening meeting, document review	Gérard RAMBELOARISOA & Mateo CARIÑO
Mahabana	15.Nov.21	Meeting and field visit and interviews	Gérard RAMBELOARISOA
Akalimboro	16.Nov.21	Field visit, meeting and interview	Gérard RAMBELOARISOA
Boanamary	17-18.Nov.21	Field visit and interviews	Gérard RAMBELOARISOA
Mahajanga	19.Nov.21	Final document review, closing meeting	Gérard RAMBELOARISOA & Mateo CARIÑO
Total number of person days used: 10 (not including days spent in preparation, travel, or post-field work analysis, writing and review)			

2.4 Description of Overall Audit Process

The audit has been longstanding due to COVID issues, with several attempts and desk interaction in which some documents were shared, reviewed, and discussed. As the situation started to get better, the audit team started planning for the field visit and doing the most recent and updated document review in June, with several follow-up calls to respond to the inquiries by the audit team and involving either the international team, directly within Madagascar with the local team and local auditor, or all together.

The methodology consisted in triangulating the verification of existing files with the various Eden responsible staff, interviews with stakeholders and beneficiaries (Eden staff and line field employees, local communities) and the field visit observations.

As mentioned, the date of the visit was set and changed several times mainly connected to COVID. Finally, it was set for the week of November 15. The number of days was increased from the originally planned due to the distance/travel time between the sites.

A first visit to Mahajanga allowed the audit team to meet with the regional forestry service and a DELC manager. It should be noted that Eden Reforestation Project works on the restoration of mangroves and dry deciduous forest, but the verification concerns only the mangrove part. EDEN had started mangrove restoration since 2007 with the Mahabana site. There are 122 sites totaling 36642ha.

For the choice of the sites, the audit team based the selection on the following criteria:

- Presence of plantations of different ages included the first plantations,
- Type of degradation drivers (mainly cutting for service wood by external people; cyclonic damage; cutting for energy wood or other use),
- Status of the mangrove site: protected area, domanical mangrove,
- Representativeness in relation to size (surface area), and,
- Availability of time and accessibility.

After analysis, three sites were selected: Mahabana, Akalimboro and Boanamary.

Sites	Age of Plantation	Main degradation drivers			Statut	Area (ha)	Accessibility
		Logging	Cyclons	Energy wood			
Mahabana	1 month-12 years	Externe			Domanial	4581	6h by boat
Akalimboro	1 month-10 years	externe	Since 2 years	Charcoal for local Use	Domanial, adjacent to a PA	5381	4h by boat
Boanamary	1 month-5years			Lime and charcoal production	PA Bombetoka	233	1h by car

Several people across the organization were interviewed and supported the process, including the main coordinator and National Director, Ms. Pâquerette, Binatienne. Ms. Binatienne was responsible for welcoming the auditors and our main contact throughout the process.

2.4.1 List of sites selected for evaluation

FMU Name	Rationale for Selection
Mahabana	First site restored with plantation of different ages. Presence of different types of mangroves, along the channel on flow channels, on land, on islets.
Akalimboro	Varied settlement, with a wide strip along the sea, ranging from the seashore to contact with adjacent dry forest. Largest site undergoing a cyclone and with logging pressure, next to a PA.
Boanamary	Site close to the city of Majunga, inside a PA, logged for firewood for cooking limestone to produce lime.

2.4.2 List of management aspects reviewed by assessment team

Type of site	Sites visited	Type of site	Sites visited
Road construction	4	Illegal settlement	
Soil drainage	3	Bridges/stream crossing	5
Workshop		Chemical storage	
Tree nursery	2	Wetland	2
Planned Harvest site		Steep slope/erosion	
Ongoing Harvest site		Riparian zone	
Completed logging		Planting	3
Soil scarification		Direct seeding	
Planting site		Weed control	
Felling by harvester		Natural regeneration	9
Felling by forest worker	2	Endangered species	
Skidding/Forwarding		Wildlife management	

Clearfelling/Clearcut		Nature Reserve	
Shelterwood management		Key Biotope	
Selective felling		Special management area	
Sanitation cutting		Historical site	
Pre-commercial thinning		Recreational site	
Commercial thinning		Buffer zone	
Logging camp		Local community	4

3 ORGANISATION DETAILS

3.2 Organisation specific background information

<p>Ownership and land tenure description (legal and customary)</p> <p>Mangrove forest, according to the forest law in Madagascar, is part of the "Domaine Forestier National" (DFN) or part of a Protected Area (PA). It may be transferred to the CBOs (Community Based Organisation) according to GELOSE (Gestion Locale Securisée) law or to decree GCF (Gestion Contractualisée des Forêts.). Mangroves under the Eden project have 2 status, asPAs under category 5:</p> <ul style="list-style-type: none"> – Bombetoka-Belenoka managed by DELC (Development and Environmental Law Center) who act as-NGO, and – CMK (Complex Mahavavy-Kinkony) managed by Asity Association (NGO) o <p>Domain Forestier National (DFN) under the jurisdiction of the DIREDD Boeny.</p> <p>For mangroves inside PAs, a MOU (Memorandum Of Understanding) is ongoing between Eden and the PA manager. The management is under a special law COAP (Code des Aires Protégées). For mangroves under DFN an MOU is ongoing between Eden and DIREDD, but Eden has to choose between a transfer of the management to CBOs through GELOSE or a delegation of management by Eden itself. Law enforcement is ensured by DREDD agent. The use-rights are limited to firewood collection and the felling of some poles, logs and NTFP (Non Timber Forest Products) for houses building or renovation, on an annual basis. Bee keeping is a tradition in Akalimboro just for self-consumption. Fisheries are free and it is the main activity of the local population. There are no other land rights, either legal or customary, and no occurrences of conversion or other uses.</p> <p>Legislative and government regulatory context</p> <p>Mangroves are forest according to Art: 2 of Law 1997-17 of April 8, 1997 on forestry legislation. They are included in the DFN or national forest estate. They are under the jurisdiction of the DREDD or DIREDD and the forestry law applies to their management. They may be subject to the logging regime by granting permits for a fee. They can be subject to management transfer to the applicant communities by the GELOSE Law or the GCF decree on the basis of a management plan and management rules bylaw 'Dina' endorsed by the forestry service. The certificate is renewable for 10years after evaluation.</p> <p>It can be gazetted as PA, like Bombetoka, CMK and Antrema. In terms of legislation, PAs are under the realm of COAP specific law, as such, illegal offences are considered as a crime. The manager must present a 5 year management plan and prove at least 5 years secure financing to get delegation of management from Forest Service. Law enforcement is ensured by forest agent of DREDD or gendarmerie in case of offence. The forest administration can do a monitoring and evaluation all along the running contract or at least each 5 years before the renewal of the delegation contract.</p> <p>On the other hand, mangrove management also has to meet requirements per the definitions of forests, wetlands and marine areas in Madagascar. They are therefore subject to to the management rules of wetlands and marine areas. Apart from its role in regulating</p>
--

erosion, they also meet the needs for the spawning and development of several fish species. They are subject to the laws on fishing and marine area management. Organic laws: 2019-138; 214-018. Decrees 60-128.

In 2020, the two concerned Ministries Agriculture / Fisheries and Environment with the coordination of the National Committee for Integrated Coastal Zone Management (CN-ICZM) developed a national strategy for mangrove management, which among other things deals with the revision of the text and expectations related to mangrove management.

Environmental Context

In Madagascar, mangroves occur in the west coast face to the Mozambique channel. Mahajanga region has plenty of mangrove all along the estuary, bays (Bombetoka, Mahajamba, Narindra, Baly) and cap (Vilanandro, St André, etc.). Mangrove covered 390 853 ha in 2018 (to the most recently available statistic data). They are vital for the protection against marine erosion, are a reproduction zone for shrimp and lots of fish species, host crab and oyster and some comestible mollusc, host a species of wild silk, and also provide habitat for beekeeping. Finally, mangrove is reputed to store more carbon than various types of rainforest.

There are four Protected Areas with mangrove: Bombetoka-Belenoka managed by DELC, Complex Mahavavy-Kinkony managed by Asity Association, National Park of Baly Bay managed by MNP (Madagascar National Parks) and the Biocultural Site of Antrema managed by IRD (French Institut de Recherche Développement). Except Antrema, the three other Aps have management connections with the Eden project. It is to be noted that the hard core of Baly Bay National Park is adjacent to the site of Akalimboro. The other mangroves are under the responsibility of the regional staff of the Forest Service. Some of the areas are undergoing transfer of management to local communities' CBOs under GELOSE or GCF regulation, and some are included in the Eden intervention zone.

Logs and lumber which are supplied to the town of Mahajanga are more than 90% mangroves woods. Some charcoal is also produced from mangrove. The artisanal lime factory also uses mangrove wood for cooking. The pressure on mangrove is increasing with the growth of the demand. The cyclone is another driver which causes significant damage toward mangrove stand. Betsiboka river, one of the important rivers flows into the sea adjacent to the estuary of Betsiboka. It is a very red color due to being loaded with significant erosion material. Apart from the erosion due to deforestation on the mainland, the degradation of mangrove and coastal forest exacerbate the negative dynamics.

Socioeconomic Context

The area where mangrove occurs are remote, populated by fishing communities and agricultural people. Mangrove were used for collecting firewood and felling logs for construction (traditional settlements are made entirely with wood). Mangrove exploitation is most of the time done by people from Mahajanga. Illegal logging for logs and firewood to cook limestone is done by the local villagers or loggers from Mahajanga and transported by boat or by truck for firewood. The degradation of mangroves following illegal logging destroys fish, shrimp, and oyster habitat. The local population can't prevent the logging because it is the legal responsibility of the DREDD to enforce law. As they are in remote areas, most of the time, illegal loggers are not worried. People noticed that their catch decreases with the destruction of mangrove. Some of them become loggers as well to compensate their revenue. Since the intervention of EDEN all forms of cutting have stopped. As they become an employee of EDEN, their economic situation improvements but they also typically continue their activities as fisherman. Their socioeconomic condition is better, because at the same time the catch is better since the mangrove began restored. The main barrier for development of most of the site is the remoteness and the distance from the market. Apart the fisheries product which has a small market, it is difficult to invest in product with a sustainable value chain. Development of ecotourism was one of the hopes of some CBOs after mangrove restoration as they are in the same area of Bali Bay National Park. It is a possibility that can be developed further in the future.

3.3 General overview of the organisation and scope

First, the land is owned by state under DFN (Domaine Forestier National) status; For the management, there is 2 possibilities:

- Transfer of management to local communities.
- Delegation of management to an entity (Ngos, Association, Society etc. . . .).

For Eden, part of the mangrove project areas are included in PAs under delegation of management to DELC for Bombetoka-Belenoka and to Asity for the CMK. The others are under DFN.

Delegation of management excludes the ownership of land, but allows just the management of the forest. According to Malagasy law the natural forest is owned exclusively by the State.

Since 2007, Eden intervenes on mangroves in 122 sites totaling 36.642 ha. They are hosted by 2 Regions:

- Boeny Province of Mahajanga Madagascar under the jurisdiction of DIREDD Boeny-Betsiboka.
- Melaky, Province of Mahajanga Madagascar under the jurisdiction of DREDD Melaky.

The project is divided in two different statuses:

- 1° Mangroves under Protected Area PA under the realm of COAP law.
- 2° Mangroves inside DFN, under forest law.