

## 1.5 Stakeholder Analysis

122. The following table provides the list of stakeholders and their role within the project.

*Table 2: Stakeholder Matrix*

Stakeholder	Relevant Role
MEEFM	<p>The Ministry of the Environment, Ecology, Sea and Forests (Le ministère de l'Environnement, de l'Ecologie, de la Mer et des Forêts, MEEF) is responsible for conducting the country's environmental policies, ensuring their implementation and effectiveness.</p> <p>Under the coordination of the project management unit, some departments of the Ministry will be involved in the project providing expertise and monitoring. Mentioned below are some of the units (not exhaustive):</p> <ul style="list-style-type: none"> <li>- The Directorate for the Environmental Dimension Mainstreaming that will ensure the implementation of mainstreaming activities with IEC Environmental activities</li> <li>- The Directorate of Environmental Assessment can provide knowledge in environmental impacts assessment, monitoring of specifications requirements and environmental control</li> <li>- The Directorate of Forest Resources Promotion will bring its proficiency in management plan</li> <li>- The Directorate of Terrestrial Protected Areas System can provide expertise about PAs creation and management.</li> </ul> <p>The Directorate for Planning, Programming, Monitoring and Evaluation will ensure the project's monitoring and evaluation</p>
DREEMF/ RDEESF	<p>The Regional Directorate of Environment, Ecology, Sea and Forests (Direction Régionale de l'Environnement, de l'Ecologie, de la Mer et des Forêts, DREEMF) is the MEEF's decentralized service. The directorate for the Atsimo Andrefana Region, is a key stakeholder for project's component 1. It will house the BD LUP system, and will lead the process to integrate the Recommendation Plan for Land-Use and Biodiversity Conservation (RPLUBC) within the Regional Land-Use Plan (SRAT), and the Regional Development Plan (PRD), currently being developed by the Region.</p> <p>Once the Regional Environmental Unit (EU) is set up within the DREEMF, this agency will lead the inter-sector and multi-stakeholder dialogues which will enable to set up plans and agreements and improve biodiversity management within development planning at the landscape level for the Region.</p>
ONE/NEB	<p>The National Environment Board (NEB) or Office National pour l'Environnement (ONE) is an agency under the administrative and technical supervision of the MEEF. It was created to regulate the environmental impact of economic investments and development activities, conduct and coordinate the monitoring of environment quality and facilitate the implementation of the environmental impact assessment (EIA) process by investment projects, following the regulations contained within the MECIE decree. Support will be provided to this unit by the Project and this service will itself provide support to the DREEMF to help strengthen their capacity to conduct monitoring of environmental measures contained in the EIA of development investments in the Region.</p> <p>In addition, the ONE will provide support to the DREEMF to manage the ORBE (Observatory for Regional Biodiversity), a capacity that is currently developed within the ONE who currently manages a data base on which the Project will capitalize to build the ORBE.</p> <p>This unit will also provide support to the Environmental Units within the Region and the DREEMF, and sector ministries to manage EIA, ECC, PGEP and ESMP.</p>

Stakeholder	Relevant Role
	It will be a key player in engaging with the private sector, negotiating collaborative agreements, and the applying the mitigation hierarchy in the programs signed between the private sector, the government and local communities that the project aims to facilitate.
MNP	<p>Madagascar National Parks was created in 1990 as an independent non-profit organization to manage the PA Network. It is under the administrative and technical supervision of MEEF. It is in charge of managing PA categories IUCN I, II and IV.</p> <p>It is the main stakeholder for the management of Bezaha Mahafaly, Tsimanampetsotsa and Mikea protected areas targeted by the project.</p> <p>MNP will work closely with the DREEMF and the project teams (i.e. the Core Team and Component 2 Team) to complete the process of legally defining PAs and in strengthening PA management.</p>
Local communities of targeted districts	<p>This group is a key stakeholder in the project. Their involvement and action will be determinant of the project's success. Component 1 of the project will mobilize communities to raise their awareness on their rights to a safe environment and to public consultation during the EIA process, and the role of the State in protecting these rights.</p> <p>The role of local communities will also be to articulate their aspirations vis-a-vis the process of TDG and realise their responsibilities in it. Through facilitation availed by the project, local communities will be involved in biodiversity &amp; livelihoods spatial assessments and planning, and thereafter, with adequate resources, in the management of their terroir and its zone of influence. They will also lead the CCA proclamation process as well as the management of these areas.</p>
Land use regulating agencies	The national entity in charge of land use planning ( <i>Ministere de la planification et aménagement du territoire</i> – currently MPATE) and agencies such as ONE, BDDP, OMNIS, the <i>Guichets Fonciers</i> and the <i>Observatoire du Foncier</i> , have a key role to play in supporting and adopting the BD LUP and mainstreaming activities and with respect to communities' own spatial planning and tenure security issues.
Sub-national government	<p>The decentralized administration at regional, district and municipalities has an important role in the SRAT process.</p> <p>Regional (decentralized authority) are accountable for this process by establishing a Regional Planning Committee (CRAT) composed of all Regional development sectors and all government entities present in the Region. The various inputs from districts and municipalities are integrated.</p> <p>Through Component 1, the project will provide support to the DREEMF and actors within multi-stakeholder platform, in the Environmental Unit.</p> <p>Decentralised government at the regional, district and commune levels also will play a key role in supporting NRM across the landscape, mainly for the TDG schemes. They will be among the beneficiaries of capacity building activities under Component 2.</p>
Ministry of Agriculture (MINAGRI)	The Ministry is a key co-financier in the project, leveraging AfDB programmes that will co-support the implementation of livelihoods activities under Output 2.4. It will play a key role in the provision of agricultural extension services (or facilitating those). MINAGRI staff will also benefit from capacity building activities under Component 1.
ADER	ADER is a key co-financier in the project, leveraging funds for energy access programmes at the site level. Their involvement is crucial, as some of the forest degradation is directly driven by demand for energy in rural areas.
CSOs, universities,	Several CSOs operating in the Region are key partners: WWF, Blue Ventures, and WCS - particularly in marine sites -. TAFO MIHAOVO, community organizations network involved in

Stakeholder	Relevant Role
research centres and partners	NRM, will also be involved. Yale University, in partnership with ESSA-Forets, intervened actively in Bezaha Mahafaly, with local community organizations. Other associations such as FAMARI and FIMAMI are very active in environment issues. The participation of CSOs, universities and research centers will be important partners in promoting the SRAT, especially for the implementation of BD LUP and related activities.
Private sector	<p>Components 1 and 2 of the project will actively involve the private sector in the integrating environmental measures within their activities. Output 1.3 will also include a dialogue with extractive industries' stakeholders active in the landscape.</p> <p>The project will engage with potentially active private companies in the Region, to develop collaboration agreements. An objective of Component 1 is to create a pilot program with a private company to negotiate the activities to be undertaken by the company in accordance with the mitigation hierarchy, negotiating environmental and social safeguards plans that are more favourable for the biodiversity conservation.</p>

## 1.6 Site Selection

123. During the PPG phase a spatial planning study was carried out with the dual aim of prioritising the sites within the project intervention zone and of scoping out the outputs and activities linked to the establishment of a geo-based spatial planning system, as it had been foreseen at PIF stage.
124. The project intervention zone comprises three adjacent administrative districts: Morombe, Toliara II, and Betioky. Extending over a total of 2.4 million hectares, they are home to a population of approximately 800,000 people. Numerous conservation interventions have taken place which now harbours many protected areas, as well as key biodiversity areas (KBA) that are identified as priority conservation sites but are not yet under protection.<sup>29</sup> In addition, the area is home to numerous ecosystems that are critically endangered that are essential to preserving the integrity of the biodiversity sites and to providing ecosystem services to the Region.
125. Currently, thirty-seven potential terrestrial biodiversity conservation sites have been identified, extending over a surface area of approximately 361,940 hectares.<sup>30</sup> Six priority sites are already included in the Protected Area System of Madagascar (SAPM): the New Protected Area of the Mangoky-Ihotry Wetland Complex (Category V of IUCN); the Mikea National Park (Cat. II); the New Protected Area of KP 32 Ranobe (Cat. V); the Tsinjoriake New Protected Area (Cat. V); the Amoron'i Onilahy New Protected Area (Cat. V); the Tsimanampesotse National Park (Cat. II).
126. **Key protected areas** are by default sites for this project, to the extent that certain activities under output 1.4 are aimed at integrating their management within the overall management of the landscape. This will imply supporting critical management measures to help PA manager face threats to the sites' integrity. This is because formal protection through proclamation gazettal is not enough to avert threats, even though formal PAs present a lower 'human pressure indicator score' (see e.g. Figure 18). Management is obviously

<sup>29</sup> Razafimpahanana, A. et al. 2012. Priorisation : une approche pour l'identification des zones importantes pour la conservation à Madagascar.

<sup>30</sup> MEEF (2015) et [www.atlas.rebjoma.net](http://www.atlas.rebjoma.net). Potential sites are those that contain key biodiversity areas following further precision in the identification of conservation sites. These sites were identified as a result of in-depth studies conducted by the University of Berkeley in collaboration with WCS. These sites are mainly fragments of natural habitats identified recently and difficult to convert into PAs, but that will be taken into consideration by the project, during the different planning processes.

needed for averting threats. This is being provided in part by baseline investments. The project will complement these investments.

127. **Across the landscape**, and outside of PAs, the PPG spatial planning study has identified a number of areas of high biodiversity value where threat management will likely yield good results. This implies actions both in terms of sectoral mainstreaming (the subject matter of Component 1) and at the level of communities (the subject matter of Component 2), the latter through co-management approaches. Using a step-wise methodology for spatial analysis sites have been prioritised, as it is explained further down.

128. **At community level**. Concerning community-based management, the project's three target districts contain forty or so management transfer contracts (TDG). The implementation of these transfers is promoted by various organizations such as SAGE, WWF, MNP, and GIZ. Community-based management enables conservation and sustainable use of natural resources, and transfers the right of use and management to communities. A few TDG in the district of Betioky have been implemented for the purpose of commercial production. These community-managed areas are not protected from mining operations, either small or large-scale mining.

129. **The step-wise methodology**. In order to implement conservation measures in these priority sites, the *fokontany* was considered an useful administrative boundary<sup>31</sup>. A total of 138 fokontanys out of a total of nearly 800 within the project zone would classify under 'conservation priority' sites. Yet, due the practicalities of implementation, and in order to keep a good balance between project scope and the feasibility limitations imposed by its budget, the goal has been ideally select approximately 12-15 sites at the level of *fokontanys* for intervention. Therefore, qualitative criteria (i.e. non-systematic) applied in the final selection, citing the following in order of importance:

- **Importance of the sites (notwithstanding the importance for biodiversity) for ecosystem services.**
- **Sites close to protected areas of category II where a threat on the integrity of the protected area exists, sites allowing more connectivity between protected areas or between protected areas and unprotected untamed lands.**
- **Results of community consultations performed by the national team consultants who scouted the study area.**
- **Willingness of locals to get involved in community conservation as indicated by the presence or proximity of management transfers (TDG) or other probing elements.**

130. A total of 17 sites were then identified, as below and grouped according to level of human pressure and geographically through zones, tallying five, whereas the first is sub-divided in two sectors:

**Zone 1) Lake Ihotry watershed: (a) East Sector corridor and (b) North West Sector**

**Zone 2) East Mikea**

**Zone 3) Southwest corridor of Mikea**

**Zone 4) Ranobe Sector**

**Zone 5) Betioky Sector**

See **Table 3** further down for the list of sites.

131. In particular, refer to **Annex 6: Description of selected Sites** for a detailed description of (i) the methodology behind the site selection and threat identification; (ii) key features for each of the sites; and their precise location on the landscape.

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<sup>31</sup> Délimitation cartographique des Fokontany, Madagascar BNGRC, National Disaster Management Office, 2011.

132. Refer also to PPG Study #3 for yet more details potential CCA sites.

**Table 3: Proposed project sites for community co-management at fokontany level**

Zone and District	Comunne	Fokontany (colour denotes level of human pressure)	Approximate location of zones within the landscape
<b>Zone 1a) Lake Ihotry watershed, East Sector Corridor</b>			
Morombe District	Nosy Ambositra Commune	Nosy Ambositra	
	Befandriana Sud Commune	Ampilokely	
	Antanimieva Commune	Andranovorindregataka	
	Antanimieva Commune	Analatele Sud	
<b>Zone 1b) Lake Ihotry watershed, West Corridor</b>			
Morombe District	Basibasy Commune	Maharihy	
	Nosy Ambositra Commune	Ankatsankatsa Sud	
	Nosy Ambositra Commune	Tantalavalo	
<b>Zone 2) East Mikea</b>			
Toliary-II District	Analamisampy Commune	Analodolo	
	Ankililoaka Commune	Ankiliabo	
	Analamisampy Commune	Anjabetrongo	
Morombe District	Basibasy Commune	Iaborao	
<b>Zone 3) Southwest corridor of Mikea</b>			
Toliary-II District	Manombo Sud Commune	Ambohimandroso	
	Manombo Sud Commune	Fiherenamasay	
	Manombo Sud Commune	Karimela Mampiratra	
<b>Zone 4) Ranobe Sector</b>			
Toliary-II District	Maromiandra Commune	Mamery	
	Ankililoaka Commune	Antanimena Maikandro	
<b>Zone 5) Betsioky Sector</b>			
Betsioky Atsimo District	Ankazombalala Commune	Miary	

Refer also to Table 14 in Annex 6 where sites are ordered by intensity of pressure.

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## 2 Project Strategy

### 2.1 Project Goals, Outcomes, Outputs and Activities

133. **The Project's Development Goal** is to contribute to integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human wellbeing.
134. **The Project's (immediate) Objective** is to protect biodiversity within the Atsimo Andrefana Landscape from current and emerging threats, and to use it sustainably, by developing a collaborative governance framework for sectoral mainstreaming and devolved natural resource management.

#### 2.1.1 Project Outcomes

135. In order to achieve this objective, and based on the project's barrier analysis—which identified: (i) the problem being addressed by the project; (ii) its root causes; and (iii) the barriers that need to be overcome to actually address the problem (see previous section and relevant annexes), the project's intervention has been organized in two components, producing two key Outcomes.

##### **Component 1. Effective Landscape-level Conservation Mainstreaming**

**Outcome 1: Landscape level planning and economic analysis support the mainstreaming of biodiversity into management of the Atsimo Andrefana Landscape, covering three districts and totalling ~2.4 million hectares**

136. Under this component the project will strengthen resource use governance at the landscape level by developing and implementing a Landscape Level Land-Use Plan that explicitly incorporates biodiversity conservation needs and prescribes land uses with a view to mitigating threats—the Biodiversity Land-Use Planning Tool (BD LUP Tool) and the Plan of Recommendations for Land-Use with a Biodiversity Component (PRLUBC) respectively. It will work with national and sub-national level stakeholders to engage economic sectors, and negotiate the application of biodiversity conservation and sustainable land-use measures.
137. The development and adoption of key tools to BD mainstreaming will include: (i) landscape level planning (SEA; biodiversity concerns integrated into the SNAT / SRAT); (ii) EIA and key sectoral permitting systems for project affecting biodiversity at the landscape level; (iii) addressing the 'park edge' effect in critical PAs and improving the management of ecologically sensitive areas.
138. The approach under this component can be summarized as follows:
- Integrate ecosystem conservation and biodiversity mainstreaming within regional land-use and development plans (SRAT and PRD);
  - Ensure information is available and accessible to key stakeholders to allow them to assess environmental mitigation measures linked to large scale private investments (e.g. mining, oil, commercial agriculture and infrastructure investments) with potential impacts on ecosystems and biodiversity, in order to enable the government to make informed decisions on land-use planning, and where the BD LUP Tool will play a pivotal role in collecting data and providing analysis;

- Set up a platform to enable dialogue and negotiations between environmental stakeholders (including government at the national and regional levels, but also CSOs), private sector representatives (in this case, from the emerging economic sectors) and local community stakeholders (including local government);
- Encourage the participation of civil society in decision making processes concerning land-use planning, through a bi-directional communication and monitoring system on the environment state
- Obtain the engagement of emerging economic sectors in the negotiation processes concerning trade-offs between conservation and development benefits;
- Achieve agreements based on inter-sector collaboration to put in place environmental mitigation measures (e.g. mirroring those proposed by BBOP and the CBD, and those reflecting local perceptions) to safeguard biodiversity based on negotiated trade-offs;
- Raise awareness of economic sectors and local communities on the links between ecosystem functions, services, biodiversity and the derived social and economic benefits. Demonstrate the negative consequences on local benefits if environmental mitigation measures are not duly applied
- Promote the implementation of development micro-projects contained in the Communal Development Plan (PCD) and the Regional Development Plans (PRD) that are environmentally sound;
- Reinforce the capacity of local and regional institutions to ensure that they may integrate biodiversity within development investments effectively and sustainably.
- Sensitize local communities on their rights and on the obligations that private investors have in terms of prior informed consent and consultations contained in legislation (EIA, mining and oil codes, COAP, other);
- Consolidate landscape governance by reinforcing legislative frameworks and their application, concerning respect of PA, environmental measures contained in EIA and, ultimately, ensure a much more systematic application of the mitigation hierarchy across the landscape for minimising harm to biodiversity; and
- Lastly, prioritise the role played by PAs within the landscape as ‘storehouses’ of biodiversity, but strengthening their management with the most pressing needs, but without losing the mainstreaming focus of the project.

139 All of the measure are expected to positively impact biodiversity management at the landscape level and result in a reduction of threats to targeted PAs (covering an area of ~240,000 hectares), as well as improved management in surrounding landscapes, in particular in zones 1b, 2, 3 and 4, where pressure from emerging economic sectors is high (see map in Table 3 and Figure 18 for a proxy geographical reference).

## **Component 2. Community-based conservation and sustainable use operationalised**

### **Outcome 2: Community-based production and resource use activities incorporate the conservation and sustainable use of biodiversity into management practice, into at least 100,000 ha of new CCAs**

140. Work under this Component will ensure the incorporation of conservation and sustainable use of biodiversity into local communities’ productive activities and in land and resource management practices at the local level.
141. There are two key aspects. One is linked to peoples’ own livelihoods, where food security and income generation are essential. The second aspect is linked to need to change predominant land use practices – from itinerant slash-and-burn agriculture and charcoal production, based on unregulated access to forest resources, to practices that do not require land clearing and make a more rational use of land and forest. Both need to be pursued, but noting that the project strategy recognises that there are a number of baseline activities that are already addressing food security and income generation issues. These have been taken

into account in the choice of sites and in the development of project activities. GEF support will influence that land-uses towards making them more compatible with conservation.

142. A key focus is on how a network of CCAs, strategically located across the landscape, can contribute to reducing habitat loss. These CCAs will also serve as a key vehicle for governing communities' *terroirs* and their zone of influence.
143. As a result, at least 100,000 ha of new CCAs and *transfert de gestion* (TDG) areas with sanctioned *Dinas* are expected to be proclaimed across the Atsimo-Andrefana landscape in sensitive areas. Focus sites will be sought within the selected *fokontany* listed in Table 3, many of which are near existing PAs and within ecological corridors. Within the selected *terroirs* and in CCAs, the conversion of natural habitats for agriculture is expected significantly reduced. In addition, sustainable use management practices in agriculture, forestry, non-timber forest products (NTFP) exploitation and freshwater fisheries will also be established and respected in these sites with the full support and engagement of local communities.
144. The approach under this component can be summarized as follows:
- Establish CCAs by identifying potential sites, and by promoting on-going creation processes and ensuring their operationalization
  - Provide support to traditional institutions and norms, namely to enable their legal recognition by the Malagasy State
  - Conduct ecological and socio-economic studies and community consultations to identify economic needs and subsistence activities and their compatibility with environmental sustainability of target communities
  - Facilitate negotiations to identify trade-offs and agreements on socio-economic activities to be developed and reinforced, and integrate them within community land-use plans (PAG-T), and traditional norms (DINA) and legislative texts (TDG, GELOSE, GCF)
  - Integrate agreed upon trade-offs within higher level land-use plans (PCD, PRD, and SRAT)
  - Identify and enhance the knowledge on the value of key biodiversity and ecosystem functions and their benefits to local communities
  - Reinforce local economies

### 2.1.3 Activities and outputs by component

#### Component 1: Effective Landscape-level Conservation Mainstreaming

145. The core of this Component is mainstreaming or an integrated approach to landscape and sectoral governance, which seeks to improve the management of biodiversity within the landscape at large. In order to produce the desired ecological, economic and social benefits that biodiversity provides, a landscape level-mainstreaming approach must take into consideration the multiplicity of land uses required to secure local development implemented by diverse productive sectors (including extractive, industrial, agricultural and subsistence economies and sectors), as well as the role of PA sites within the landscape in averting threats to biodiversity. These productive land uses, are prioritized in land-use plans and programs – the spatial planning aspect is therefore important for landscape level governance. So is the institutional strengthening and regulation. Sectoral mainstreaming, in turn, focuses on working directly with sectoral stakeholders towards changing various aspects of production so that threats to and impacts on biodiversity are at best avoided, if not then, mitigated, and, where needed, compensated upon.
146. Targeting the Atsimo Andrefana Spiny and Dry Forest Landscape through a mainstreaming approach, four outputs are planned.

### ***Output 1.1 Spatial Planning and land-use management***

#### **Biodiversity management integrated and operationalized in the Regional Land-Use Plan (SRAT) and the Regional Development Plan (PRD) of the Atsimo Andrefana Region**

147. The mainstreaming approach of this project requires the application of participatory ecological and economic assessments at the landscape level in order to collect and analyse state-of-the-art information on ecosystems and biodiversity at the landscape level. It will make use of mapping tools and other effective spatial planning technologies. The approach also implies availing this information to all stakeholders concerned, in a manner that is open, accessible and user-friendly, including at the local level, where community members may have limited access to modern technologies.
148. The main product resulting from this output will be a **Biodiversity Land-Use Planning Tool (or the “BD LUP Tool”)**. This interactive tool is contained with an online portal regrouping a variety of functionalities serving previously mentioned objectives. It was conceived by the project during project preparation (PPG phase) and it will be developed and deployed during the first year of project implementation.
149. **An Observatory for Regional Biodiversity and Ecosystems (ORBE)** will be established as a small office in regional capital Toliara (also known as Tulear) and it will rely on the information produced by the BD LUP Tool to formulate recommendations on land-uses. Quasi-real-time and up to date data will e.g. allow the ORBE to perform monitoring and surveillance of PAs, will emit alerts for violation perpetrated on PAs and assess emerging threats to biodiversity at the landscape at large. The ORBE will work in sync with existing data bases and country based observatories currently set up within the MEEF departments, in order to capitalize on efforts and experience.
150. The BD LUP Tool main spatial information layer will consist of a **Plan of Recommendations on Land-Uses based on a Biodiversity Component (PRLUBC)** that will be a specific product enabling users to operationalize support to the Region for managing land-use at the full extension of the landscape and at fine scale. The PRLUBC will synthesize information on ecosystems and biodiversity and prescribe land-uses that are compatible with landscape-level biodiversity conservation, aimed at integrating this guidance into the Regional Land-Use Plan (the SRAT). The PRLUBC will also define the spatial domains of **key biodiversity areas (KBA)** and **Ecological Support Area** within the Region. It will be backed by economic assessments, and will be freely accessed by the public, through an on-line portal offering web-mapping technology.
151. In this manner, the project will provide support to the regional government to undertake the SRAT planning process with the necessary information for ensuring the mainstreaming of biodiversity concerns into a key planning process. This is also expected to be done in collaboration with key partners such as the GIZ, and integrate on-going activities of the CRAT to the full national territory.
152. In addition, specifically for the three target districts of the project: Tulear II, Morombe and Betioky, the project will provide on the ground technical and financial support for the SRAT planning process. This will include conducting the processes necessary for local land-use planning. This support will be provided in partnerships with the GIZ and other development partners engaged in these activities in support to the Region.
153. This output will be achieved by implementing the following activities:

#### ***Activity 1.1.1) The BD LUP Tool***

The BD LUP Tool (Biodiversity Land Use Planning Tool) developed by the project seeks to facilitate the operationalization of the landscape approach with full participation by stakeholders across sectors (government decision makers, NGOs, private sector investors, civil society). The BD LUP will supply geo referenced spatial information that will be accessible on-line and open to public access. This will enable informed decision making on land-use planning, help monitor the state of the environment, and ensure a warning system on violation of natural resource and forest regulations. This will enable to address threats to

biodiversity in real time (also refer to Output 1.2). The BD LUP Tool will rely on the PRLUBC, an end-product in itself consisting of a systematic biodiversity plan associated with compatible land use guidelines. The BD LUP relying on the PRLUBC will allow to issue advice on the projects footprints and assess impacts on biodiversity.

Assessments of the existing national land-use management systems in Madagascar showed that baseline geo-referenced spatial data exists but are scattered within several organisations in various formats and are often unreferenced. Data search and access is therefore difficult. During realization of the BDLUP Baseline data and digital documents will be gathered and new data will be produced. The BDLUP will harbour centralize and give access to this data within an online data catalogue along with a document management system that may easily be consulted by different government, non-government, private sector and civil society actors.

The BD LUP will facilitate:

- Both wider-scale and fine-scale land-use planning at the landscape level, taking into consideration the impacts that productive activities have on biodiversity, and where maps and plans at different resolutions can be navigated and compiled according to the needs, audience and context, but where the background data will always be collected and stored at the finest scale possible;
- The zoning/demarcation of the limits of PAs in the project zone;
- Identifying KBA's that need to be accorded higher protection status, e.g. as a New Protected Areas or a Community Conservation Areas;
- Recommendations on land-uses and environmental management measures that are appropriate and compatible with the ecological sensitivity of certain areas (such as rare habitats, including those that harbour populations of threatened species, buffer zones surrounding core PAs, riparian areas that are key to the maintenance watersheds, important support areas that provide ecosystem services etc.);
- Monitoring and control, thanks to a warning system, based on near real time remote sensing data acquisition and treatment, where the focus will be on forest loss, fires, violations...)

Detailed specification for the BD LUP Tool are described in Study #2<sup>32</sup> referred to in Annex 7.

In sum, the overall BD LUP system includes thematic, technical and organizational aspects:

- 1- **Structured geo-spatial baseline and synthetic thematic data layers** providing relevant information on Biodiversity and other thematic data allowing to develop a Plan with Recommendations on Land-Uses that are Biodiversity Compatible (PRLUBC).
- 2- **An Online Geographic Information System** providing a variety of tools to support decision making:
  - a. Standard data querying tools;
  - b. A Land Use Planning Toolbox which allows to assess and measure the impact of projects footprint on specific areas of the landscape, based on the PRLUBC; and
  - c. A geo-catalogue and a digital document management system;
- 3- **Observatory of Regional Biodiversity and Ecosystems (ORBE)**, in charge of maintaining and updating data, formulating guidelines and recommendation for land-use planning, also responsible for monitoring, surveillance and warnings relying on real time data acquisition and treatment

The dynamic and interactive aspects of the tool enable users to rapidly obtain information on potential impacts, and develop strategies to mitigate these impacts on biodiversity and ecosystem services, by testing different potential footprints interactively, and modifying or shifting footprints elsewhere when possible. Additionally, the system will enable users to assess the potential for impact off-setting, e.g. by allowing users to establish scores that represent the level of intactness of ecosystems, including at habitat level, and thereby assessing the implications of ecosystem degradation and loss of biodiversity, not just at the locality, but at the wider landscape level.

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<sup>32</sup> PPG Report Activities, BDLUP technical functional and organisational requirements, Djoan Bonfils (September 2015)

### Activity 1.1.2) Plan of Recommendations on Land-Uses based on a Biodiversity Component (PRLUBC)

The PRLUBC plan is a systematic biodiversity sectoral mainstreaming plan that contains a suite of recommendations on compatible land-use activities. It relies on spatial information layers and other contextual analysis from the BD LUP Tool for issuing advice on potential land uses. The PRLUBC in itself is an end product resulting of systematic analysis and research studies to characterize importance of areas for biodiversity conservation at landscape level. The aim of this activity is to ensure that the PRLUBC, including its spatial information layer, will be annexed to the regional land-use plan (SRAT) and the regional development plan (PRD), where and will be considered for their implementation.

The Charter for Engagement signed by partners working in the CRAT committee, in charge of the regional land-use planning process (refer to the section on Land-use planning at the regional level for more information) will be pivotal in negotiating the process of integrating these recommendations. The SRAT is latter made official by the regional government through a decree giving this document the force of law.

The technical content of the PRLUBC will be a geospatial data layer showing, among other features, critical and key biodiversity areas, support areas for ecosystem services and other natural or already degraded areas. It will then prescribe the classes and types of land-uses possible to enable the safeguarding biodiversity. It will indicate the main lines of action and management measures to be followed, integrating the needs of different development and conservation sectors.

The SRAT process is currently underway in the Region of Atsimo Andrefana, with local authorities setting up the CRAT committee and other requirements to carry out the planning process. The GIZ is the technical partner engaged with the Region providing financial and technical support for this process for community level planning (PAG-T) in the surrounding of PAs targeted by the project. During the PPG phase, the project mobilised a partnership with the latter institution, in the form of co-financing (refer to Annex 1) and collaboration, in an effort to provided concerted support to the Region in the same project sites. Collaboration and synergies will be developed by the project teams (i.e. Core and Component 2's) during work planning. The partnership will enable to coordinate field activities, cut costs, and share technical approaches and best practices.

The SRATs that have been completed up to date—and only a few regions have actually completed this plan—are useful and official planning documents, but compared to the project is proposing, it can be considered a 'static' land-use planning tool. It lacks 'land-use management' elements to guarantee safeguarding biodiversity, and does not provide in-depth analysis to the SRAT or the PRD planning processes. This gap will be filled by addressing through the PRLUBC emerging and historical threats in real time. The BD LUP and the PRLUBC are both dynamic and responsive tools, based on state of the art technology that is expected to considerably improve biodiversity management in the Region.

The national land-use plan (SNAT) and the regional plan (SRAT) contain information elements required to develop the national development plan (PND) and the regional plan (PRD) that are management tools. The recommendations emanating from the SNAT/SRAT are essential and must be up to date. The PND/PRD are key elements in biodiversity conservation, because they prescribe the development investments that will be carried out, based on information provided in the two latter documents.

Consequently, the project will work both in land-use planning (SRAT) and development planning (PRD) at the regional level, reinforcing the biodiversity and ecosystem conservation elements and proposing environment management plans and recommendations for both processes through the PRLUBC.

### Activity 1.1.3) The Observatory of Regional Biodiversity and Ecosystems (ORBE)

This structure will allow stakeholders to observe, inform, and liaise among them on important biodiversity management aspects pertaining to the Atsimo Adrefana region. It will be the organisational unit that hosts and manages the data developed by the BD LUP system. It will be housed in the DREEMF.<sup>33</sup>

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<sup>33</sup> Refer to PPG Study #2 for more on specific recommendations on data hosting and management.

This tool will be developed and refined during the implementation phase of the project, based on identified needs. It is meant to be a flexible and dynamic tool that allows to update information on a frequent basis. Above all, it will be openly available to any interested stakeholder.

Information provided by the ORBE will focus on the state of biodiversity, development sectors and human settlements. It will produce geo-referenced maps, and develop different types of analysis and projections on the potential impacts that large-scale investments may have on biodiversity. This system will also enable to monitor the violations on forest regulations, through a warning system in quasi-real-time. By providing local authorities with this information, the impacts on biodiversity caused by illicit activities may be better managed.

A network of multi-disciplinary experts will be in charge of the ORBE, providing the required information and conduct analyses. Although it will be housed by the DREEMF, the ORBE will conserve its independence, so as to separate the roles of control and enforcement (exercised by the Ministry) to those of monitoring and information sharing (by ORBE).

One of ORBE's main functions will also be to broadcast information and create synergies among stakeholders through its monitoring functions.

### ***Output 1.2 Capacity for Threat Management***

#### **Land use allocation practices and applicable regulations and means of enforcement at the regional, district and commune levels are strengthened, in light of new mainstreamed planning instruments**

154. Through this output the project will operationalise a transparency system and to foster stakeholder capacity at various levels to apply a legal and enforcement framework at the regional level that favour biodiversity mainstreaming. In other words, it will focus on the management, monitoring, control and application of environmental norms and regulations on land use allocation practises through systemic, institutional and even individual capacity development. It will build on the results from Output 1.1 and it is closely related to activities under Output 1.3. The expected results from this Output are improved law enforcement capabilities by relevant stakeholders to effectively reduce pressures on biodiversity resources across the landscape.
155. New threats resulting from large scale productive investments, in addition to the historical threats linked to forest encroachment will be object to stricter controls. Violations of norms will be identified through a monitoring system and authorities will be alerted in real time.
156. The ORBE will serve as a two-way information and communication facility. By enabling access to information at the field level, it will allow authorities to react to encroachments on PAs in almost real time. Inversely, information made available from top levels to communities, will feed back to ORBE to improve the quality of its products and thereby also contribute to the application of environmental measures contained in legal texts and agreements through its monitoring function.
157. Local populations are often not aware of the rights they have to free access to public information. Local authorities do not necessarily share nor communicate legal texts and regulations (e.g. those contained in EIAs), and are often ill informed themselves. The ORBE system will improve communication to inform communities.
158. Moreover, the law does not contain an effective complaint system. Nor does it foresee adequate conflict resolution mechanisms. Law enforcement authorities, such as forest agents, do not have the means or the capacity required to maintain control systems. By informing local communities of their rights to information, to being consulted on investments, and their role in alerting authorities, in addition to building the capacity of forest agents, the control systems may be improved and reinforced.
159. The project will also **build the capacity** of the DREEMF to duly monitor the mitigation measures established during multi-stakeholder negotiations on new investments, and where the ORBE and BD LUP Tool will play a key role. (see [Output 1.3](#)).

160. By developing tools such as the BD LUP and the ORBE two-way communication facility, and by enabling their application, the project aims to promote a **Transparency System for Biodiversity Management**. The warning systems, enabled by the ORBE will also help to conduct oversight of the application of regulations by local authorities reducing potential wrong-doing in the control and enforcement functions exercised by authorities (as a 'checks and balances' system). The improved control system will enable stakeholders to identify if commercial wood producers have the required permits and warn authorities on illegal logging (police, MNP, DREEMF). The project may e.g. conduct studies to trace the origin of various types of wood products under activity 1.2.3, and in this manner reduce loss of precious resources because of flaws in information systems and data.
161. The DREEMF, the ONE, Regional authorities and sectoral ministries, local association and NGO's will have the tools to exercise control over the application the environment mitigation measures contained in different texts and control illegal use of biological resources. Free access to information on violations to applicable regulations on biodiversity management, including on PA management, will enable both local authorities and the society at large to provide support to the control system.
162. Additionally, **community based control systems** contained in TDG contracts (e.g. COBA control groups and other), will be reinforced to support the system mentioned above, by providing tools and materials used in control and monitoring (e.g. Bicycles, lamps, books, digital cameras, smart phones, etc.) (Refer to Output 2.3).

#### Activity 1.2.1) Capacity building

The capacities of personnel in charge of the Regional Environment Units, the DREEMF, and those who function within the sector ministry Environment Units, will be built through project support. Capacity building will be essential to enable monitoring the application of mitigation measures (contained in EIA and PRLUBC) (Refer to Output 1.3). Training within the DREEMF and the Region, will focus on building the following competencies:

- Implementation of the environmental mitigation hierarchy (see Box 2 and Box 3 for more explanations)
- To make use of spatial data and analysis, where direct experience with the BD LUP Tool and products prepared by ORBE, among them the PRLUBC, will be crucial
- Technical knowledge on potential environmental impacts concerning the types of large scale investments currently in the Region (ORBE can e.g. work on building an extensive, annotated and searchable e-bibliography on the matter)
- Training in monitoring and evaluation, warning systems, surveillance of law enforcement and implementation of applicable regulations and environmental governance tools with respect to biodiversity management at the landscape level

The stakeholders and institutions participating in Environmental Units of region based sector ministry's will also benefit from periodic training on diverse environment related themes.

#### **Box 2: Mitigation Hierarchy**

##### **Why offset threats to biodiversity, when they can be avoided altogether?**

The idea of biodiversity offsets is controversial to some in the conservation community. The fear is that the use of offsets could encourage regulators to allow projects with severe impacts on biodiversity to go ahead as long as they offered offsets to compensate, allowing companies to leave significant impacts in areas affected by projects as long as they undertook conservation work elsewhere.

BBOP addresses this concern by advocating for strict adherence to the "mitigation hierarchy", which views the role of biodiversity offsets as a "last resort", after all reasonable measures have been taken first to avoid and minimize the impact of a

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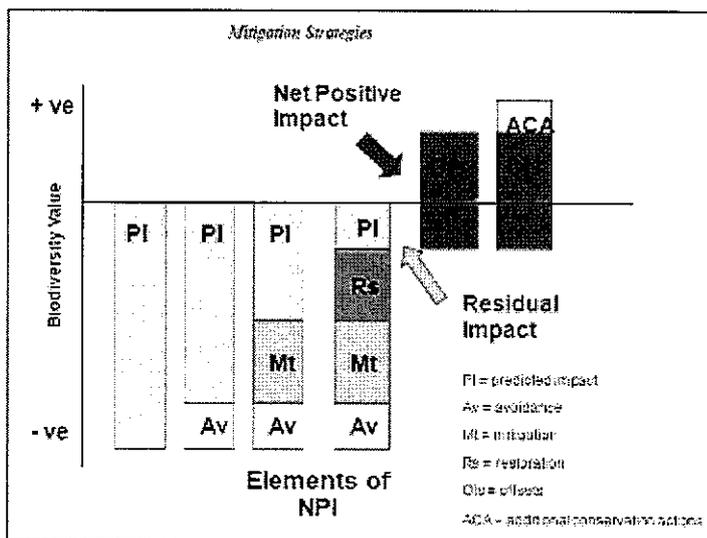
development project and then to restore biodiversity on-site. Conformance to the mitigation hierarchy is the first of the ten best practice Principles established by BBOP, and a fundamental part of the Standard on Biodiversity Offsets.

*"Biodiversity offsets only come into play once rigorous steps have been taken first to avoid and minimize impacts. Far better to avoid harm to vulnerable and irreplaceable biodiversity to the extent possible, than to make good on damage later."* (Kerry ten Kate, BBOP Director)

This simple graphic below depicts the steps of the mitigation hierarchy, (avoid, mitigate, restore or rehabilitate and offset). This approach enables an infrastructure development project to work towards "no net loss" of biodiversity, and ideally, a net gain. The application of the mitigation hierarchy, and how far each step should be pursued before turning to the next, is one of the key issues for consideration in biodiversity offset design.

The mitigation hierarchy is defined as:

- **Avoidance:** measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity.
- **Minimisation:** measures taken to reduce the duration, intensity and / or extent of impacts (including direct, indirect and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible.
- **Rehabilitation/restoration:** measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/ or minimised.
- **Offset:** measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and / or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, protecting areas where there is imminent or projected loss of biodiversity.



Source: [www.bbop.net](http://www.bbop.net)

### Activity 1.2.2) Develop guidance documents on environmental threats and management

To ensure on-going training and promote good practice within the DREEMF and the Environment Units of different sector ministries, the project will develop two 'Guidance Documents' (still to be named and properly scoped) related to how to manage environmental threats and how to integrate mitigation measures within the project cycle of high impact sectors – in particular extractive industries and large-scale commercial agriculture projects.

Guidance will draw from international standards and good practices on the matter (e.g. ISO 14001, CBD, USAID Guide, ICMM, DFID, WHO, BBOP, FAO, CGIAR among others). The Guidance Documents will help users conduct oversight of mitigation measures implied in the different phases of a project cycle, either of private productive investments, enabling to apply corrective and adaptive measures before further potential environmental impacts occur.

The Guidance Documents will be used in several training contexts but also as everyday use literature on key threat management processes. The Guidance Documents should be owned by the public sector – DREEMF, ONE and ORBE – but they should also be publicly available online.

Although building on international best practices, the Guidance Documents will be unique to the extent that they will bring the mainstreaming experience in the Atsimo Andrefana Region to other parts of the country and also to the international level.

Activity 1.2.3) Develop a pilot program for improved threat management at the landscape level as a public private partnership

A **pilot program** for improved threat management at the landscape level will be developed. It will engage DREEMF and a private company to be defined in applying appropriate threat mitigation strategies based on the hierarchy of environmental measures (refer to Box 2) with a particular focus on biodiversity and by building on key information provided by the BD LUP Tool. The choice of company should tend towards company that plans to invest in a high impact productive project in Atsimo Andrefana (it may be in extractives or large-scale commercial agriculture), but where the actual detailed scoping and planning processes are yet to start. This should serve as a model and provide experience and training to personnel of the public environment sector on the practice of mainstreaming.

To date, the 'Ambatovy off-setting project' is seen as the most thorough example for the application of the Mitigation Hierarchy in Madagascar (refer to Box 3 for more information). This GEF project proposes to expand this experience, by showing e.g. that, by intervening early in the project cycle, the opportunities for threat avoidance and minimisation can in fact pay-off in certain circumstances, in particular depending on how trade-offs are negotiated.

By implementing a pilot project, regional stakeholders in Atsimo Andrefana (government in particular) will have first-hand experience, on how the mitigation hierarchy is actually applied, how to integrate context specific environmental measures within the project cycle of extractive industry projects, and how to negotiate and sign agreements containing trade-offs that will benefit both the environment and the economy of the region.

Taking into account that private companies must comply with the EIA process, which is supervised and managed by the ONE, the pilot project that will be developed by the DREEMF authorities, following the EIA, will build the capacity of the DREEMF. The pilot program, through in-depth studies conducted by the DREEMF with support from the project, will facilitate a greater collaboration, enable to review mitigation measures contained in the EIA and identify in-depth context specific measures, complementing in this way the EIA measures.

The process of developing a pilot programme will serve the government to engage with the private sector in a proactive manner, attempting to set up a dynamic work culture between sectors. Inter-sector negotiations will create awareness within the private sector on environmental needs, and may result in promoting further technical and financial support for biodiversity and ecosystem protection.

A policy white paper, analysing and documenting the experience of the public-private partnership will enable to draw lessons and communicate these best practices, to different government sectors, that are responsible for decision making concerning productive investments.

**Box 3: Case Study: Ambatovy: Mitigation Hierarchy and Off-set program**

As the cobalt and nickel mining investment project Ambatovy, owned by the Sheritt International Company, went ahead in the East of Madagascar, it became clear that it would cause damage to the area's biodiversity through progressive forest clearing (see mention on Ambatovy in Box 4 for more detail on the Environmental Footprint).

In light of these sensitivities, the project developed a biodiversity management program including a **biodiversity-offset initiative** with projected conservation outcomes leading to **no net loss** to biodiversity.

The onsite biodiversity program includes **impact avoidance, minimization, and reclamation** measures. Impact avoidance was achieved by creating a forest conservation zone that includes two tracts of distinctive azonal forests overlying the ore body. Impact minimization was attained through paced and directional forest clearing associated with taxa-specific salvaging and

monitoring activities. For that effect, specific management programs for plants, lemurs, frogs, and fish were designed and implemented.

In parallel, the multifaceted *biodiversity offset program* is being developed with the establishment of a large conservation zone with biodiversity components similar to the impacted site. Other offset components include buffer zone protection with joint Ambatovy community management of forest corridor linkages, wetland protection, and re-vegetation activities. The mine closure plan is based on a progressive revegetation process, which will re-establish a multi-functional replacement forest with restored biodiversity values to be accounted for in the offset calculations.

Developing a project biodiversity vision and policy. Due to its setting and magnitude, the Ambatovy project elaborated a vision. The vision states that the project will develop and operate a sustainable mining and processing enterprise that significantly contributes to Madagascar, while delivering outstanding safety, environmental and social records, and generating attractive economic returns. The environmental strategy designed to honour the project's vision to deliver outstanding environmental records consists of:

- 1) Ensuring full regulatory compliance and conformity with international loan agreements;
- 2) Minimizing residual impacts through the stringent application of the mitigation hierarchy;
- 3) Reducing environmental risks through dynamic management guided by Malagasy know-how and stakeholder consultation; and
- 4) Producing positive conservation outcomes on biodiversity through the offset program that aims at achieving no net loss on biodiversity, and possibly net gain, in order to sustain 'a good citizen project' status in a host country recognized as constituting an internationally important biodiversity hotspot.

The Ambatovy project's actions with respect to biodiversity are guided by a project-specific biodiversity policy (Ambatovy Project, 2007). The vision of the policy is that responsible attention to the maintenance of biodiversity is in the best interest of the Ambatovy project, the human communities in which the project operates, and the world at large. The biodiversity policy sets the projects biodiversity end goals and the approach to achieve them, namely through a biodiversity management plan.

Source: Steven Dickinson I & Pierre O. Berner, Ambatovy Project, Golder Associates Pty Ltd.

### ***Output 1.3 Landscape Governance***

#### **Collaborative landscape and sectoral governance framework is developed and provides a platform for monitoring and ensuring compliance with prescribed land-uses**

163. Through this output the project seeks to make landscape management effective and operationalise it by reinforcing the institutional and legislative frameworks, by applying the environmental measures contained in legal texts. It will capitalise on the capacity development efforts from Output 1.2 and the tools availed by work under Output 1.1, but it will focus more on action-oriented landscape level governance.
164. The project proposes to operationalise this output by setting up an Environment Unit for inter-sector dialogue that will function as a multi-stakeholder platform. The MEEF is currently setting up this unit at the Regional Level, and the project will provide support to strengthen its operations and enable its functioning.
165. The Platform will host debates, negotiations, and encourage dialogues on biodiversity and ecosystem conservation and mitigation measures. It will act as monitoring and control unit, of the application of measures prescribed within the SRAT and the PRD, as described in the PRLUBC.
166. The concrete results of the work within the Platform will be: collaborative inter-sector agreements; proposals to revise the content of norms, regulations, laws; clear roles and responsibilities by stakeholders in monitoring the application of the measures contained in agreements, contracts and regulations; inter-sector collaboration.

167. This outcome aims to reinforce the institutional and legislative frameworks, and promote effective law enforcement. The tools will enable transparency in biodiversity and ecosystem management with due capacity for it developed (with reference to previous outputs).
168. Thanks to a concrete experience resulting from the implementation of a Pilot Project (Activity 1.2.3), and to information collected and analysed through the ORBE and the BD LUP Tool, the multi-stakeholder debate will be better informed and shed light on the needs of the environment sector in Atsimo Andrefana and the links to production sectors, enabling an informed dialogue among sectors and stakeholders.
169. The conclusions reached through debates will also serve to inform the process of developing a Strategic Environmental Assessment (SEA) that will be coordinated by the ONE.

Activity 1.3.1) Regional Environmental Unit and the multi-sector Platform

Providing support to set up an Environmental Unit at the Regional Level, currently under development, will enable to operationalize a collaborative governance framework. This Unit is formally presided by the regional authorities, with the DREEMF, having an executive role ensuring the management and technical coordination of a 'platform'.

The Regional Environmental Units of Atsimo Andrefana will extend its work through a multi-sector platform with same name (see section on Institutional Frameworks for more background). The Platform will harbour a variety of thematic working groups, that will give voice to a wider variety of stakeholders and discuss sector specific needs. Some of biodiversity specific themes that will be treated by the working groups are: "how to mainstream biodiversity within private sector projects", "how to mainstream BD within land use planning", "how to establish equitable trade-offs between sectors" etc. Other related themes will be: civil society rights to public consultation; sustainable development, livelihoods and ecosystem benefits to local communities; monitoring environmental measures; etc.

Dialogues held through the Environmental Units' Platform will assemble key development actors of the Region, such as: the regional, district, commune and *fokontany* level authorities; decentralized technical ministries (Regional Direction of Agriculture, Energy, Tourism, Livestock, etc.); conservation constituents (e.g. MNP, WWF, Blue Ventures, etc.) and engage actively with the private sector.

The DREEMF will coordinate the Environmental Units' Platform, and will set up an management council formed by actors from different sectors, who will be made responsible for the implementation of different activities (e.g. launching and communicating ideas for debates, drafting inter-sector collaborative agreements, etc.) gaining participation and continued support by different sector ministries.

The Environmental Units' Platform will play a pivotal role in EIA and their monitoring, through the Technical Committee for Environmental Evaluation and Monitoring, set up for each individual EIA process, by the Region with support from the ONE.

On-going dialogues will enable the DREEMF and key stakeholders to:

- Obtain technical information from the private sector to better understand the potential impacts of their activities on PAs and fragile ecosystems within the context of the exposure to their productive activities;
- Raise awareness of private sector actors on the dire consequences of their activities on the environment;
- Assess the variety of measures contained within the « environmental mitigation hierarchy » and the feasibility of their application in the local context;
- Avoid signing contracts and agreements based uniquely on off-setting measures that may lead to permanent damage on the environment;
- Assess the trade-offs between conservation and development, allowing to reduce the impacts on biodiversity and provide long term benefits to local communities.

### Activity 1.3.2) Initiate partnerships between conservation and development sectors

Negotiations taking place within the Environmental Units' Platform will enable to develop concerted actions, plans, recommendations and partnerships between sectors. By exposing sector needs in an open dialogue the details on context specific environment measures and management needs for each sector will be available. Agreements to work in partnership to build in biodiversity measures may be developed thanks to these negotiations.

The project can support by carrying our key sectoral studies aimed at informing the processes. These are still to be defined and scoped, but would cover e.g. ecological, social and economic aspects of the region, needs assessments on biodiversity and ecosystem management, law enforcement, etc. They could also focus on specific sites targeted by the project and my include PAs, potential CCAs, and on ecosystems adjacent these, where large scale investments are currently taking place or bound to. These studies will provide in-depth information to put on the negotiating table and inform each sector from a scientific point of view how biodiversity conservation may benefit local development and how productive investments may integrate conservation measures within their projects.

### Activity 1.3.3) Review relevant legislation and policies

In the coming months and into 2016 the Environmental Units' Platform, along with collaborating stakeholders, are expected to dedicate time to draft analyse and propose contents for revising a number of environmental regulations, norms, decrees and codes concerning environment and land use management (such as the Mining and Oil Codes, other) that will be submitted by the DREEMF to Parliamentary committees. There is a general understanding that this is needed for improved environmental governance in Madagascar, and the process is expected to be a multi-donor and multi-stakeholder effort, piloted by government. It could take time and the goals are yet to be set. This project is but a co-adjutant in the process.

Also, until now, the process of developing sectoral policies has remained enclosed within their sector-based priorities, making it is difficult to negotiate conservation and development trade-offs. Yet, this can change in light of the role to be played by Environmental Units' Platform.

The project will contribute to the process of reviewing and revising legislation and policies through specialised mainstreaming consultancies<sup>34</sup> and by engaging on regular basis with Environment Units to show the advantages and achievements of the BD LUP, the ORBE and the PRLUBC. The project's Chief Technical is expected to contribute significantly to it from a technical input point of view. The specialised inputs and the project's engagement will allow the Environmental Units and associated stakeholders to gain a greater understanding and coherence among sector policies, and legal frameworks by conducting sectoral and legal studies, making presentations to high-level audiences and directly contributing to the processes of policy and legislation review. The likely targets of legislation/policy review and mainstreaming includes legal packages on land property, mining, forest legislation and EIA.

### Activity 1.3.4) Regional Strategic Environmental Assessment

Debates held between sectors, hosted by the Environmental Units' Platform, will aim to develop a common vision for the Region's economic development and environment conservation. Thematic working groups may debate and propose draft content for a regional Strategic Environmental Assessment (SEA) for the Atsimo Andrefana Spiny and Dry Forest Landscape.

Although there is a Strategic Environmental Assessment Service, under the General Direction for the Environment within the MEEF, a SEA does not yet exist for the Atsimo Andrefana Region.

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<sup>34</sup> To be planned in more detail during the project inception.

In support to the ONE, which is the institution mandated by the MEEF to coordinate this process, for the Region, the project will contribute by reinforcing capacities and providing expertise for its elaboration.

The SEA development process will be participatory and consultative. Hence, it must result from a multi-sectoral dialogue. Work within the Environmental Units' Platform will enable the DREEMF to produce a SEA document that is regionally owned, and also owned across sectors, thanks to their active participation.

#### Activity 1.3.5) Communication strategy and awareness raising plan

A key role that the DREEMF will play is to promote and engage the private sector and line ministries through the discussions within the Environmental Units' Platform. A communication strategy and awareness raising plan, containing a detailed work plan, in order to enhance and promote participation, will be developed and implemented by the DREEMF with support from the project (e.g. Proposing theme based meetings, information sharing between sectors, organizing events, etc.).

Through communication, awareness will be raised among local communities and civil society, key players in the inter-sector dialogues, on the rights they have to be consulted during EIA processes and their roles and responsibilities in land use planning. Environmental education, land degradation, climate change adaptation awareness will be some of the themes addressed in communication plans and campaigns. Messages will be transmitted through information tools such as brochures, radio, documentaries, and tools such as learning manuals. Crowd sourcing and identifying "champions" among community actors (e.g. those managing TDG contracts) will be sought to collaborate with mobilisation, community awareness raising, and monitoring (also see [Activity 2.3.1](#)).

The project's communication strategy is directly linked to the BD LUP Tool and the ORBE and will enable information to circulate two ways, both from the bottom up and from top down sources. To facilitate communication with community level actors the project will provide the necessary means of communication and awareness (e.g. access to internet at the DREEMF and at the community level). This will enable the DREEMF to acquire information to feed into the BD LUP Tool portal in real time and alert authorities when conservation laws are infringed; while also enabling local leaders to disseminate information passed down from the DREEMF.

This activity will help implement the country's education policy and the National Strategy for Environmental Information and Communication for Sustainable Development.

#### ***Output 1.4 Protected Areas integrated into Landscape Management***

**Critical measures for completing pending PA proclamation processes and boundary demarcation are supported**

170. This output is concerned with further integrating PAs within land-use planning of the regional landscape governance and threat management frameworks through strengthening. The aim is enable better conditions for partners and PA managers to fulfil the most pressing gaps in PA management so that these sites can better fulfil their essential role of 'biodiversity storehouses' within the wider landscape.
171. In terms of financial resources, the project has limited funding for a more thorough PA strengthening work, especially because its main focus is on mainstreaming. However, the project will have the human capacity within its Core Team to leverage additional funding for PA management and strengthening on behalf of PA managers, and it can even assume technical advisory tasks, if needed or requested. Work under this output will therefore focus on enabling studies and on availing state-of-the art spatial information to key PAs stakeholders through a variety of tools.

#### Activity 1.4.1) Strengthen PA Management where it is urgent and needed

METT scores for the four sites where it was applied were high: respectively 71%, 73%, 70% and 80% for Mikea, Onilahy, Beza Mahafaly and Tsimanampesotse. This is because these sites have been established for quite a while, even though some are tagged “new” (e.g. for Onilahy, it is a result of re-gazettement). Hence, for the most, these sites have and have had management interventions for a few years, which explains the high METT scores. Yet, the METT results for the four assessed sites point out to glaring gaps in PA management:<sup>35</sup>

- Mikea scored low on law enforcement and on community welfare programmes.
- Beza Mahafaly and Amoron'i Onilahy scored low on equipment for PA management, and the latter also on the collaboration with commercial neighbours on water use.
- With the exception of Tsimanampesotse, all other three PAs that scored METT reported on inadequate visitors' facilities.

Under this activity, and as a result of a more careful needs assessment (to be done under Activity 1.4.4), the work will aim to help operationalise the PA management, where it is urgent and mostly needed. This will be done with the support of PA authorities, such as the MNP, private sector operators and cooperation partners already investing and working on core site management.

#### Activity 1.4.2) Zoning

In order to proclaim an area as a PA, a variety of preceding steps must be finalized. A key element is the demarcation and zoning of the area. Initially conducted at the community level, zoning frequently lacks spatial mapping technology based support. To reinforce initial community zoning, the project will provide spatial geo-referenced technology through the BD LUP Tool, (refer to Component 2, support to the PAG-T process), for each target site to reinforce the mapping and spatial zoning processes that are conducted at the local level.

#### Activity 1.4.3) Integrate PA in land-use planning

The project will help integrate all target PAs within landscape planning, within the SRAT, PCD and PRD. Information provided through the BD LUP Tool will be made available to the different sector authorities involved in the different planning processes, working within the CRAT committee.

#### Activity 1.4.4) Multi-disciplinary studies and needs assessments

The project will conduct needs assessments to determine the type of support required for each specific PA. Studies will highlight the cost of PA management and the value of ecosystem services for local development. Studies will be composed of multi-disciplinary research teams, and include the perception of stakeholders. Where recent and relevant studies exist, this will not apply.

Results will shed light on:

- Economic value of ecosystem services and natural capital;
- Social and cultural benefits of ecosystem services as perceived by communities;
- Threats on PAs and natural capital (biodiversity and ecosystem functions) ecological footprint of different productive investments (e.g. mining, oil, large scale agriculture, land conversion, slash and burn agriculture, charcoal production, etc.);
- Assess cost of PA management (annual budget, human resources, etc.)

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<sup>35</sup> This gave rise to the proposal of one high-level logframe indicator (#4) that focuses not on the overall METT scores, but on specific METT questions.

Study results will shed light on the value of PAs for local development, mobilise resources for their maintenance and identify gaps in management capacities. Information will enable the DREEMF to propose working agreements to private companies (refer to activity 1.3.1) to develop partnerships and request technical and financial support. The DREEMF will be in a better position to negotiate environment mitigation measures thanks to a deeper understanding of PAs and their needs<sup>36</sup>.

An example of a need identified by the Madagascar Protected Areas System (MPAS/SAPM) is the lack of sustainable financing sources for PA management. The systems created through the project (refer to outcomes 1.1 to 1.3) by aiming to sensitize and create interest among the private sector to provide support to PAs, may help encourage support by the private sector.

Additionally, support will be provided to MNP and other PA operators in threat management (refer to output 1.2) and build their knowledge to apply the GEF METT tool where it is relevant, starting with the two NAPs within the landscape, where this remained to be done.

## Component 2: Community-based conservation and sustainable use operationalised

172. The mainstreaming goal is to incorporate the conservation and sustainable use of biodiversity into management practice through community-based production and resource use activities.
173. Activities under this component will ensure conservation and sustainable development are mainstreamed in productive economic practises of local communities and land-use and natural resource management. The project will both work on the communities' livelihood aspect of local populations, and on the need to change predominated land-use practices that are unsustainable. Support by the GEF will promote land-uses that are compatible with conservation, effectively establishing a positive correlation between these two aspects. Additionally, the project will work towards the establishment of a network of strategically situated Community Conservation Areas (CCAs) within the landscape, thereby contributing to reducing habitat loss in selected local areas. CCAs and their buffers will equally play a key role in community land-use management. Overall, the project will simultaneously promote the mainstreaming of conservation and sustainable biodiversity use in local practices.
174. This component of the project aims to establish Community Conservation Areas (CCA). The ICCA<sup>37</sup> defined these areas as territories that have been conserved voluntarily, by traditional communities (or indigenous communities). The types of subsistence activities conducted are sustainable and enabled to conserve the ecosystems, maintaining resilience and diversity. This conception of community areas highlights the importance of maintaining tradition and culture as a strategy for biodiversity conservation (see Annex 5-F for further explanation on CCAs in Madagascar and for an analysis of the relevant legal and policy frameworks for environmental management more generally; see also Section 1.2.3 for a summary).
175. To establish CCAs, the project will need to take into consideration the current context, practices and legal frameworks in Madagascar. The legal and institutional system for PA management values traditional norms (such as *Dina*), which contain elements that help regulate natural resource management by communities. These norms are capitalized and valued within the formal legal framework for community natural resource

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<sup>36</sup> International companies have internal environmental principles and policies that they respect, and they cannot ignore the scrutiny from their clients and share-holders, and NGOs, and public opinion from their country of origin. Such oversight may be an opportunity to develop a new type of environment partnership model to encourage future investors and demonstrate the environment and mining sectors do not necessarily have opposing interests in the country. CEA, Banque Mondiale (2015).

<sup>37</sup> Legal and institutional aspects of recognizing and supporting conservation by indigenous peoples and local communities, an analysis of international law, national legislation, judgements, and institutions as they interrelate with territories and areas conserved by indigenous peoples and local communities, Jonas, Harry, et al., ICCA (2012)

management (GELOSE/GCF) by their recognition (homologation) and the integration of these within the TDG contracts.

176. The revised PA Code (COAP) has opened a new path that enables the legal recognition of community co-management of PAs. It also gives new PAs (NAPs) of IUCN Categories V and IV a guiding framework for their development. This is an addition to the existing community management system in the buffer zones of PAs categories I, II, and IV, where several communities are already managing TDG contracts in support of the PAs.
177. The two types of community co-management of PAs value the DINA norms, and hence they value the traditional norms which guide community practice. Both systems may be considered as a type of CCA system specific to the local context of Madagascar, even though the project will be seeking a CCA recognition that has an international equivalent.
178. Four outputs are planned: (1) CA Establishment; (2) Codifying Local-level Resource Use Governance; (3) Local Capacity for BD Management; and finally (4) Local Economy and Benefits. The project's Component 2 Team will be composed by the CSO(s) responsible for the implementation of the bulk of Component 2 activities. Specific support for biodiversity management, use of the BD LUP and mainstreaming, as well as M&E will come from the project's Core Team.

### ***Output 2.1 CCA Establishment***

**Selected habitats with high conservation value in target communes are set-aside through formal proclamation as 'Community Conservation Areas' (CCAs) and their management is operationalised**

179. This will be achieved through a two-pronged approach: (1) local-level spatial planning (applying the *PAG terroir*) and (2) community-based resource use monitoring and enforcement mechanisms.
180. During the PPG a site selection exercise enabled to make a selection of CCA sites, and where the specific identification of key biodiversity areas (KBA) was part of the step-wise methodology. (Refer to Section 1.6 on site selection, in particular to Table 3 to the site list at *fokontany* level, and to Annex 6 for a wealth of details).
181. Future CCAs, will be constituted by a KBA (an area within in with high value for conservation) and the agro-pastoral zones surrounding these areas. The KBAs will be constituted by two physical limits: the first frontier will be formed by the limits of the forest formation identified as a KBA (established in the intersection of the polygon which resulted from research conducted on ecosystems and biodiversity), and the second frontier constituted by the limits of the CCA. The latter frontier will be set up through community consultations. Zones that are currently inhabited and industrial production zones (including industrial farming areas) will be excluded from the CCAs.
182. Two steps are involved in the formal creation of CCAs: (1) acquiring formal status for KBA protection, and (2) acquiring the formal status of the CCA as a whole.
  - (1) The first step will be achieved through a *transfer de gestion contract* (TDG), transferring forest management to communities (GELOSE or GCF type contracts). The administrative steps involved will be provided project support, including: identifying forest formations of KBA, formalizing a TDG vis-a-vis the authorities, developing an inventory of existing biological inventory (identifying endemic species, and those under threat), developing a land-use plan and ritualising support to the TDG by communities.
  - (2) Formalizing the CCA status in the Region follows the same process conducted in creating PAs. This includes: conducting environmental and social impact assessments, public consultation, and

zoning, developing a management plan and acquiring an official creation decree. A CCA may contain more than one KBA.

183. Establishing and managing CCAs and managing KBAs is a long-term progressive activity, and will require adequate financial resources. A large portion of the GEF Component 2 budget will go to this aspect.
184. Spatially, it is assumed that any CCA is to be fully comprehended within a single community's territory (i.e. the *fokonolona*, which is basically synonymous with community at the very local level). To strengthen the sense of "ownership" towards the CCA and for allowing a smooth operationalisation of TDG contracts, it should be avoided that more than one community is responsible for the same CCA.
185. Through the site selection process, the project has already ensured that the 13 proposed *fokontany* are those where community leaders manifested a willingness of locals to get involved in community conservation (see more on the criteria in paragraph 129). At the same time, the project should also strike a good balance between the surface of CCAs—and especially of their KBAs—and the community's ability and capacity to play the role of "biodiversity custodians" vis-à-vis the sites.
186. CCAs and KBAs should therefore neither be "too big", so the *fokonolona* cannot fulfil its responsibilities under the TDG, or has it difficulties in managing both internal external resource use conflicts; neither should CCAs and KBAs be "too small". The latter would mean that key habitats become fragmented and the value added to conservation of these CCAs and KBAs is diminished. There is no "magic number" that infers the ideal ratio between the number of community inhabitants and the surface of a CCA or KBA. It all depends on a number of variables, so this needs to be assessed spatially and at fine scale. The **BD LUP Tool** will be brought to use for this purpose.
187. Also, when more than one *fokonolona* has an interest in the same piece of forest that can be potentially proclaimed as CCA, the project should consider artificially dividing the CCA, and even demarcating it on the ground, while maintaining the contiguity of KBAs within them. This should avoid resource use conflicts. If needed, conflict resolution mechanisms may also be brought to bear (this is foreseen under Activity 2.2.1).
188. Finally, the community's land-use management plan (PAG-T) and the land-use management plan to be developed for the CCA with support from the project will be combined with the aim of simplifying processes and using formalised templates with good acceptance among the authorities.
189. With the exception of aspects where the project's Core Team will provide specific technical and monitoring inputs, all other activities under this output will be piloted by the project's Component 2 Team and are within the scope of the project grants, as follows:

#### Activity 2.1.1) Identify KBA's in the target landscape

During the PPG phase KBAs were identified, where fine-scale data were used (as opposed to global data sets). Some KBAs had been previously identified by conservation specialists and taken into account during the project identification exercise. They were then validated as potential KBA's to be targeted by the project.

For some KBA's to be identified, further to the PPG exercise, biological inventories will need to be conducted to confirm their key biodiversity status. Target KBAs are located outside the larger forest blocks, the bulk of which is currently under protection status as formal PAs. These KBAs are therefore smaller and spatially restricted areas, although they are assumed to represent rare habitats where unique fauna and flora species still survive. It is hence urgent and worth it to provide protection to these areas.

The BD LUP Tool provides the satellite imagery required to establish an objective zoning and delimitation for KBA's to back the identification exercise.

Activity 2.1.2) Provide support to communities to implement TDG contracts in KBAs

Management transfer of KBAs to communities is a key step, which precedes the establishment of a CCA. The process is initiated by communities. The actual request for a TDG contract requires a KBA resource inventory, which will be the object of the management transfer contract, and detail the management roles and responsibilities by communities to manage the contracts. Support from the project will be provided for all these steps. Specific support will also be provided to develop the KBAs a land-use management plan which will contain detailed list of management activities required to include in the contracts.

Another step required to set up KBA and CCA is for communities to develop a social contract (DINA) with biodiversity components, granting the conservation status for the KBA at the local level and setting up the access rights to the perimeters of the CCA. The process is concluded through a ritual ceremony that ensures the cultural acceptance of the transfer contract by communities and their engagement in implementing the DINA.

Activity 2.1.3) Establish CCAs based on resource transfer contracts of KBAs

Establishing a CCA is essentially a community based process, more so than the preceding steps.

This process consists of establishing limits to the territories, well defining different land-uses such as agriculture use lands, horticulture and pastoral lands with respect of the KBA. In these adjacent lands to the KBA, resource sustainability is key to maintaining the KBAs. These areas were previously forest covered areas, later transformed into productive zones for community subsistence activities.

This land zoning process will be participatory, strongly supported by public consultation and participatory exchanges with relevant communities. Special consideration needs to be made, considering that these areas should not encroach the KBAs. Zoning and land-use types will be completed and formalized when the KBA protection status is granted. A CCA may contain one or more KBAs under a resource transfer contract.

Activity 2.1.4) A land-use and management plan that integrates community resource management will be developed with local communities (fokonolona)

The PAG-T is a land-use management plan developed by local populations with support from environment institutions. Tany Meva is one of the promoters of the PAG-T in the region of Atsimo Andrefana. This plan spatially defines the different land-uses of community lands.

The territory of traditional populations is traditionally defined, and it is important that the areas that are slated to become a CCA in this territory be identified initially with local populations. This reinforces the social acceptance of the resource transfer contracts for KBAs and the establishment of a CCA, across the full population of the community.

A CCA may have more than one resource transfer contract, hence the management structure of the CCA will be set up accordingly.

Activity 2.1.5) Provide support to KBA and CCA management operations

Community management of CCAs requires standard activities specific to conservation, such as patrolling, monitoring pressures on resources and biological monitoring. These activities will be carried out with the communities that have signed the resource transfer contracts. Communities will receive training and required material (bicycles, camping materials, smartphones, IT equipment, applications, GPS, etc.).

### ***Output 2.2 Codifying Local-level Resource Use Governance***

**Local governments (commune, *fokontany*) and participating local communities collaborate to sanction into by-laws (*Dinas*) the proclamation and sustainable management of CCAs**

190. This output will reinforce the actions taken through the preceding outputs, by codifying the sustainable land and resource use measures at the community level that will later be integrated within legal texts at a higher administrative level, such as the SRAT and PRD.
191. With the exception of aspects where the project's Core Team will provide specific technical and monitoring inputs, all other activities under this output will be piloted by the project's Component 2 Team and are within the scope of the project grants, as follows:

#### *Activity 2.2.1) Integrate CCAs within the PAG-T and the regional land-use plan (SRAT)*

A PAG-T is a management instrument which regulates sustainable land and resource use on the long term. Essentially, it provides an inventory of lands uses at the territory in question and the actors involved. Consequently, from a spatial planning point of view, CCAs are an element contained within the PAG-T. Given that land management plans of the CCAs are constituted by elements that pertain not only to CCAs (e.g. impact compensation measures or mitigation hierarchy measures for the CCA), operationalising a CCA will also be a central focus of the PAG-T and the SRAT. The project will make sure the land-uses defined in the CCA land-management plans are duly integrated within the PAG-T and the SRAT.

#### *Activity 2.2.2) Codify biodiversity and sustainable development measures within the DINA, the PAG-T and legal texts*

The project will facilitate the legal recognition of DINA, as part of the resource transfer contract and PAG-T process to enable communities to propose a site as a CCA.

The project will help integrate sustainable economic activities and biodiversity conservation measures that have been identified by communities. These activities will be integrated within the DINA before communities seek legal status of this customary law, before commune authorities.

#### *Activity 2.2.3) A framework to negotiate trade-offs*

The project's Component 2 Team will facilitate community level negotiations of trade-offs between conservation, sustainable natural resource use and community economic benefits to establish the content of the land-use plan for CCAs, and the TDG. The results of these negotiations will be included in community land-use plans and ensure that CCAs obtain legitimate recognition by all stakeholders (communities and local authorities).

Negotiations will take place between local actors and the public authorities responsible for developing the resource transfer contracts, in the target communities.

Facilitation by the project will focus on helping stakeholders expose sector needs and enable a more equitable balance of power between community level stakeholders and more powerful actors, such as authorities or private sector actors. Stakeholders may draw information from scientific research and community consultations to strengthen negotiations.

In this manner a framework for public, participatory and transparent negotiations will be set up and enable to establish trade-offs that better reflect the local context. By promoting the involvement of communities in defending their rights to social and environmental benefits, and raising their awareness, communities will be

capable of negotiating and engaging in an open dialogue about the environment, their economic needs, and the benefits derived from ecosystem services that they require to sustain their livelihoods<sup>38</sup>.

The latter activities are directly in sync with the **Transparency System** promoted by the project to manage biodiversity developed through Component 1 (see Outputs 1.2 and 1.3), and the open communication system that underpins the consultative and participatory CCA establishment and KBA custodianship (refer to Activity 2.1.3).

The trade-offs resulting from public negotiations will be considered and integrated within the different legal texts and plans (*Dina*, TDG, and PAG-T). They will be recorded in and communicated through the BD LUP System to different decision making levels, so that key stakeholders are able to access this information freely allowing them to be integrate the results within higher level planning processes (SRAT, PCD et PRD).

The project will also provide support to finalise the process to obtain legal protection status of the CCA, including: validating management documents; the legal recognition of the DINA; the integration within the BD LUP information system and the PRLUBC; and annexing the PRLUBC within the SRAT and the PRD.

As described above, the project aims to mainstream biodiversity within regional land-use planning, starting with community level planning processes, followed by the integration into communal and regional planning. As a result, CCA will have legal recognition and implementing force ensuring, in this way, the respect of the limits set to the CCA within land-use planning.

### ***Output 2.3 Local Capacity for BD Management***

**Strengthened and functional CBOs in targeted local communities establishing CCAs provide a vehicle for building community capacities to manage biodiversity sustainably**

192. This output focuses on building the capacity of local communities and community based organizations for biodiversity and ecosystem management, to operationalize and implement sustainable development activities that have been negotiated and agreed upon through agreements, plans and contracts mentioned above.
193. With the exception of Activity 2.3.3 below and aspects where the project's Core Team will provide specific technical and monitoring inputs, all other activities under this output will be piloted by the project's Component 2 Team and are within the scope of the project grants, as follows:

#### *Activity 2.3.1) Technical and organizational capacities of community based organizations (CBO's/COBA, other)*

The main actors who are in charge of implementing the local management plans (regulations stipulated in the resource transfer contracts/TDG, TOR of the COBA) are community members that were elected by their own community as representatives and TDG managers, who are in charge of the CSO/COBA that were set up to implement the TDG contracts. They are responsible for applying biodiversity management measures, monitoring and applying control mechanisms, contained within the TDG. Community managers often lack the full competencies required to implement the TDG, consequently the project will need to build their capacities and provide on-going support during project implementation.

Workshops, working sessions with the project, exchange visits to share good practises and experiences between community managers of different target communities enabling managers to work in a network of COBA's, are some of the capacity building activities that the project will carry out.

A competition based system will be set up between communities and managers. Those who successfully implement regulations will be considered the "champions" and their communities as a model. By involving the community as a whole in competition based social events, awareness will be raised throughout the

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<sup>38</sup> This project is based on a Human Rights Based Approach.

communities, not just among those involved directly in implementing TDG, enabling to mobilise respect for the biodiversity component of the DINA's and the TDG by the whole population. Community mobilisation will be part of the responsibility and a formal activity of the COBA managers.

Workshops will focus on training community managers in management of CCAs and PAG-T, planning, identifying socio-economic community needs, biological monitoring, and control and monitoring of violations on forest and natural resource regulations. Special focus will be put on building the capacity to manage the flow of information required to inform the BD LUP system by communities (such as use of smart phones and other means) in real time.

Additional thematic trainings on relevant issues, such as resource-use conflict resolution, managing forest fires, sustainable natural resource practises, public health issues, and equitable sharing of benefits, will also be provided. Trained community managers will be trained to facilitate training in their communities (training-of-trainers). Additionally, by working with the project's Component 2 Team in the field, capacities will be reinforce on a day-to-day basis.

#### Activity 2.3.2) Systems and structures for community biodiversity management

This activity refers to support by the project in setting up the required systems and organizational structures for biodiversity management by communities contained in the PAG-T, in CCA plans and the measures defined for KBA management. By accompanying communities during the set up phase of management structures, the project will be able to monitor the competencies of trained COBA managers in applying the knowledge acquired through trainings and their management capacities, and subsequently reinforce their capacities where needed.

Material support to this activity will be provided as part of the project grant to the CSO(s) responsible for Component 2, but specific technical support on biodiversity management aspects will be provided by the project's Core Team.

The project will have a specific focus on enhancing the participation of women in: biodiversity management, in public consultations and decision making regarding natural resource management.

#### Activity 2.3.3) Build the capacity of the Regional Forest Administration

The project will provide support to civil servants involved in community management of natural resources, principally the regional forest administration based on a needs assessment, to enable forest agents to provide support to communities in applying the measures contained in the DINA; ecological monitoring; organizational requirements; and capacity building among others.

This activity falls outside the scope of the project grants to the CSO(s) responsible for Component 2

#### **Output 2.4 Local Economy and Benefits**

**Livelihood activities carried out by targeted local communities are managed sustainably, ensuring conservation of biodiversity and its use within sustainability thresholds, but equally the generation of socio-economic benefits**

194. The project will promote local livelihoods and subsistence production activities of target communities and ensure that they are compatible with biodiversity. The rotating funds provided by Tany Meva, and small grants programs implemented by other development partners (non-GEF) for agriculture activities, food security and energy provision are part of the project's baseline and co-financing—activities that reinforce

local development<sup>39</sup>. Agriculture, horticulture and pastoral activities, small scale plants for distilling of essential oils, production of cash crops such as rice, maize, and green pea production are some of the activities that will be promoted and for which social and environmental safeguards will apply and will be monitored. If required, the project will build basic infrastructure, such as water irrigation systems (small scale dams, irrigated perimeters etc.) to improve agriculture and food security, even though co-financiers such as MINAGRI have a strong interest in working on the same sites as this project for activities already identified (see baseline investment descriptions).

195. If needed, the project's Component 2 Team will carry out market analysis out and support in identification of both traditional and new markets, where the GEF increment and the pursuit of global biodiversity benefits can be maximised.
196. As seen in the Situation Analysis, the high prevalence of poverty is considered one of the drivers of overexploitation on forests and of habitat loss in the target areas, in particular due to fuel wood production and prevailing land-use practices linked to subsistence agriculture. In recent years, large-scale commercial agriculture is emerging as a threat factor vis-à-vis biodiversity and ecosystem services.
197. In order to enhance development of local economies, it is essential to create food security, revenue sources for women and women's groups, and progressively insert household economies within the market economy. The Project has a gender approach and will focus on promoting access to credit, producing added value and inserting products in high value market chains, developing community ecotourism, and promoting sustainable agriculture, to enhance local economies, and consider the role of women in local economies.
198. Many development partners currently work in the project's target community sites, enhancing local economies. The aim of this activity is to work with these partners to ensure that biodiversity and ecosystems sustainability are integrated within these activities.
199. All activities proposed under this output will be piloted by the project's Component 2 Team and are 100% within the scope of the project grants. They are as follows:

#### Activity 2.4.1) Promote sustainable agriculture in CCA multi-use zones

Activities that will be promoted in CCAs will be based on agro-forestry techniques, which ensure that soil and water resources are sustainably maintained and that the choice of crops, cultivars and agricultural techniques are in line to the best biodiversity and ecosystem services friendly ones given the specific context in each of the project sites. Avoiding threats from IAS will also be pursued. Species like igname and sorgho will be promoted to enhance food security, and high value agriculture products will be promoted for commercial use. Initially one farmers' group per CCA will be set up and trained in the use of agro-forestry techniques, if none are pre-existing. Farmers will then train other farmers and extend the knowledge among other community members (farmer-to-farmer training system).

#### Activity 2.4.2) Enhance access to micro-finance

The micro-finance institution *Volamahasoa* works in the Region. The project will work with this institution to develop credit lines that respond to the needs of local farmers who are adopting sustainable techniques. In addition, a solidarity guarantee system, will be set up to grant micro-credit to women's groups. Depending on a number of conditions, a protocol is envisaged signed between the project's Component 2 Team and the latter institution. A small amount of project funding can be set aside for the start-up of the solidarity guarantee, if other funding cannot be leveraged otherwise.

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<sup>39</sup> Refer to Annex 1 for the co-financing table.

### Activity 2.4.3) Community ecotourism

This is a modest and exploratory activity at this early stage.

Some CCAs have a great tourist potential that should be valued and heightened. To provide support the project will develop basic infrastructure, and promote tourist operators, and build the capacity of local communities to manage tourism. Site selection for tourism sites will be conducted as part of the CCA and KBA site selection process, which is programmed to be finalised at the outset of the project and within the socio-economic studies linked to the development of the land management plans for CCAs.

All the above mentioned activities will draw from the technical knowledge of specialized professionals, with whom the project will partner in order to guarantee:

- Sustainability: ensure that local communities may develop techniques and set up structures with support while progressively taking full ownership and responsibility over the activities before the end of the project;
- Economic inclusion: ensure that community based economies are fully integrated within the real economy of the region, with minimum subsidies provided by the project, and community actors interacting independently with other economic actors and competitors. The project seeks to avoid distorting the perception of community households and their economic behaviour, to ensure that they make the correct economic choices and are able to carry them out without project support.

### Activity 2.4.4) Women's participation and integration into development

The project will enhance the role of women in natural resource management. Socio-economic baseline studies, conducted at the outset of the project, will contain disaggregated data by gender. Information will be collected through focus group discussions with women's groups. This information will enable the project to understand and promote those activities that women conduct, the capacities of women's associations, the potential to create new groups, and the technical weaknesses and strengths of women in their social and economic activities, to then provide adequate training.

Studies will also inform on the situation of children and girls, in order to promote and enhance people's skills and capacities from an early age.

## **2.2 Gender Considerations and Other Project Benefits, including Innovativeness, Sustainability and Replicability**

### **2.2.1 Gender Considerations**

200. The project is guided by the UNDP Gender Equality Strategy, 2014-2017. The UNDP's vision states that gender equality is grounded in international human rights, norms and standards.
201. The overarching goal is to contribute to building the resilience of poverty stricken women and men, in order to achieve sustainable development. By conducting gender disaggregated research and capacity assessments, the project will develop knowledge on how gender relations are reflected in natural resource management; be able to develop gender sensitive project activities; develop government capacity to address gender issues; encourage governments to take action to integrate gender perspectives within natural resource management legislation, policies and programmes in the project target region of Atsimo

Andrefana. The latter will also enable to institutionalize the use of these tools within the government structures that the project will work with and reinforce at the regional project site level.

202. The project's strategy is to mainstream gender considerations as a means to achieving gender equality. Challenges in promoting gender equality and women's empowerment may be faced in any stage of the project cycle. The project will aim to integrate gender sensitive considerations and activities to counterbalance these inequalities.
203. The gender mainstreaming approach is dual: 1. supporting the empowerment of women and girls through gender-specific targeted interventions, and; 2. addressing gender concerns in the developing, planning, implementing and evaluating of all project activities.
204. The project will ensure that in all stages of the project cycle, starting from the design phase, gender concerns are integrated.
205. Clear guidance for gender mainstreaming in the project cycle will be included in the UNDP quality assurance tool. In addition, the UNDP environmental and social screening procedure which is a mandatory project level screening requirement that aims to minimize or offset the potentially adverse environmental and social impacts of UNDP development work, contains a screening checklist that includes specific questions related to the project's gender equality impact and engagement with women<sup>40</sup>.

### 2.2.2 Global Environmental Benefits

206. The highly threatened dry deciduous forest and spiny thickets totalling 2.4 million ha will enjoy increased conservation security and, at the wider landscape level, biological resources will be used more sustainably and essential ecosystem services maintained. Adverse land-use change will be stabilised in the fringes of core PAs (existing and new terrestrial PAs sum 240,000 ha), thereby reducing the level of threats to biodiversity in PAs that emanates from their periphery.
207. Forest fragments and extensive areas of high biodiversity value outside PAs (minimal estimated surface is 100,000 ha) will be brought under conservation management and will function as connectivity corridors.
208. Threatened species found within the landscape will enjoy improved chances of survival among them emblematic species of lemur (*Propithecus verreauxi*, *Lemur catta* and *Cheirogaleus medius*), red-listed birds (*Monias benschi* and *Uratelornis chimaera* among others), as well as reptiles and amphibians (e.g. *Furcifer antimena* and *Ptychadena madagascareniensis*).
209. The current and emerging negative impacts on biodiversity from production sectors will be more effectively avoided, and managed at the landscape level, in particular within the agriculture, forestry, extractive industries, energy production and transport sectors.
210. Protected areas combined with Community Conservation Areas will be reinforced and secured, and enhanced within the landscape land use management and planning processes. Traditionally one of the most widely used and, arguably, most effective tools for achieving conservation goals are protected areas which play a significant role in supporting local, national, and international biodiversity policies. They also serve as places for scientific research, wilderness protection, maintenance of environmental services, education, tourism and recreation, protection of specific natural and cultural features, and sustainable use of biological resources.

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<sup>40</sup> Refer to Annex 8 for the SESP.

### 2.2.3 Development Benefits

211. With the project, Madagascar will implement concrete measures for conserving, sustainably using and safeguarding biodiversity in the Atsimo Andrefana Landscape covering three contiguous districts (Morombe, Tulear II and Betioky).
212. In terms of response to the current, and emerging threats to biodiversity, the project promotes a paradigm shift from site based work to a landscape approach. The project will develop a collaborative governance framework for sectoral biodiversity mainstreaming involving public, private, CSO and CBO actors. Biodiversity considerations will be integrated into the development of economically relevant sectors across the landscape, in particular agriculture, forestry, extractive industries, and energy production, but also in the livelihoods and land use patterns of local communities.
213. A two-pronged approach will apply: First, it will strengthen resource use governance at the landscape level by developing and implementing the BD LUP. It will work with national and sub-national level stakeholders to engage economic sectors, and negotiate the application of biodiversity conservation and sustainable use measures, and bring about necessary policy change. Second, the project will work with local communities to strengthen conservation on communal lands by establishing and managing multi use CCAs. It will put in place measures to ensure the sustainable utilisation of wild resources and conservation-friendly farming through a focused sustainable livelihoods and capacity building programme.
214. The project will enhance the knowledge and understanding of the role of ecological processes and the services that Biodiversity provides in benefit of local development. The project will engage with sector ministries (e.g. Agriculture, energy, infrastructure, land use planning, etc.) and the private sector, in discussions and negotiations, where biodiversity and ecosystem conservation will be presented as an essential part of development planning, introducing a long term and sustainable development vision. In this respect, the project will promote the negotiation of trade-offs between conservation and development partners, with the aim to enhance environmental considerations within development planning; and will provide guidance and information to the government on the Mitigation Hierarchy which can be applied when negotiating with large scale investment projects.
215. The project will promote a multi-sector landscape governance structure enhancing the negotiating capacity of local stakeholders, such as community members living in and around PA, hence building their knowledge and capacity to defend their rights to a safe environment and strengthening their ability to monitor potential violations on PAs. Communities will be able to participate actively in decision making regarding land use planning, and safeguard their environment and their livelihood base.

### 2.2.4 Innovativeness, Sustainability and Replicability

216. **Innovation** is embedded in the novelty of the project's landscape approach and the move away from site based work to addressing diffuse and indirect threats to biodiversity from both the economically emerging sectors in Madagascar and from communities' subsistence activities. In the current setting, there is a need to do both.
217. Another innovation aspect pertains to the PA approach to community conservation and its link to the internationally recognised ICCAs. Demonstrating constructive ways of involving local stakeholders in the conservation and sustainable use of biodiversity in and around protected areas remains one of the most important challenges and priorities for nature conservation. Although Madagascar has a long history of Community Based Natural Resource Management (CBNRM), and it's PA system has benefited with a significant increase in the protected area surface, thanks to innovative CBNRM models, many communities which are targeted by the project, in the Atsimo Andrefana Region, which have participated in integrated

conservation and development initiatives, continue to show weaknesses in capacities to sustainably manage community conservation sites. Findings from previous projects (i.e. EP III Final Evaluation), show that CBNRM models in and around PAs remains a challenge. The project will work by learning on past experience, identifying gaps and strengths, and creating an enabling environment both for the social and economic benefit of local communities and for biodiversity conservation. The project will introduce best practices and guidance provided by ICCA experiences worldwide, and enhance the current CBNRM practices in Madagascar.

218. The project will introduce tools and technologies (BD LUP) and build government capacities to integrate PAs within land use management and development planning. This has been tried previously in Madagascar, but due to the lack of suitable access to information, full understanding of the role and importance of PAs for local development, and non-inclusive consultation processes, land use management has proven not to be comprehensive of biodiversity conservation.
219. The project will innovate by providing tools that will counterbalance previous experience and build the capacity civil society to play a more significant role, by raising their awareness on their right to participate and be consulted prior to decision making regarding private and public sector investments. The use of georeferenced spatial planning, will enhance current community based land use planning (PAG terroir approach) bringing innovation in terms of how they intertwine the spatial, socio-economic and ecological dimensions, while fostering participation, both remotely and on the ground.
220. By working both at the government (regional, municipal) land use planning, and the community level land use planning levels (local community level: *fokontany*, *fokonola*), the project will aim to tackle threats to biodiversity conservation in a comprehensive manner. By enabling informed decision making and promoting an inclusive negotiation based land use and development planning and decision making, the project aims to set the stage for the long term sustainable development of the region.
221. **Sustainability and replicability of the project.** The sustainability elements of the project derive from two aspects. First, the concerted landscape governance approach, involving public, private and CSO actors in biodiversity mainstreaming. Second, the socio-economic benefits that the project is expected to generate through livelihoods activities.
222. The project will work with the Ministry of Environment (MEEF), specifically with the regional department (DREEMF), where guidance, technical assistance and tools will be provided and built. The aim of the project is to convey experience and knowledge on how to dynamically work among different sector ministries involved in land use planning; and how to engage with the private sector, in benefit both of biodiversity conservation and development planning. By working within a government structure, such as the DREEMF, the project expects that products and know-how passed on during project implementation will be perennial.
223. On the latter, *Fondation TANYMEVA's* revolving Fund is a key instrument in securing financial sustainably and encouraging communities to establish community funds.
224. The second component of the project is dedicated to the support and building of CCAs. This approach combines sustainable development, in the form of introducing economic activities that are respectful of conservation needs, within community livelihood enhancement activities. The CCAs that have been identified as target sites of the project, are areas where local communities have voluntarily requested resource transfer contracts and require support for CBNRM.
225. The project has a participatory approach to development. All stakeholders are involved in the design, development and will be integrated in the implementation of its activities. This is key to generating ownership, cooperation and active engagement, all elements which are crucial to the sustainability of the project.