



Nouvelle Energie Hydroélectrique de l'Onive

## **Madagascar Sahofika Hydropower Plant**

### **RESETTLEMENT ACTION PLAN**

**Part One: Detailed Resettlement Action Plan for the Dam  
and Reservoir**

**Part Two: Abbreviated Resettlement Action Plan for the  
Linear Components of the Project**



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Date: June 30, 2019  
Version: C



## TRACEABILITY

Version	Date	Reference	Commented on by	Status
A	04/25/2019			Draft
B	06/20/2019			Draft for publication
C	07/05/2019			Version for submission to ONE

## ABBREVIATIONS

AEC:	Administrative Evaluation Commission
AFD:	French Development Agency
AfDB:	African Development Bank
AIDS:	Acquired Immunodeficiency Syndrome
ALC:	Local Liaison Officer
Art.:	Article
AWS	Drinking Water Supply
BD:	Board of Directors
BFV:	Banky Fampadrosoana ny Varotra (Malagasy subsidiary of the Société Générale Group)
BIF:	Birao Ifoton'ny Fananan-tany (Communal Land Office)
CASEF:	Agricultural Growth and Land Security
CIRTOPO:	Topographic Constituency
COBA:	Grassroots Community
CPAR:	Short Resettlement Plan Framework
CSB:	Basic Health Center
CTD:	Decentralized Territorial Communities
DIREDD:	Inter-Regional Departments and Services for the Environment and Sustainable Development
DO:	Design Office
DREEF:	Regional Directorate of Environment, Ecology and Forests
DUP:	Public Utility Declaration
EPs:	Essential products
FCI:	Finance, competitiveness and innovation
FDA:	Agricultural Development Fund
FLM:	Fiangonana Loterena Malagasy (Malagasy Lutheran Church)
FRAM:	Fikambanan'ny Ray Aman-drenin'ny Mpianatra (Parent Association)

FTM:	Foiben-Taosarintanin' i Madagasikara (Madagascar Geographic and Hydrographic Institute)
GIS	Geographic Information System
GPS:	Global Positioning System
GSM:	Global System for Mobile
GWh:	Gigawatt-hour
HIER:	Hydro Ingénierie Études et Réalisations
HIV:	Human Immunodeficiency Virus
HLI:	High Labor Intensity
HWM:	Highest Water Mark
IGA:	Income Generating Activity
IKVK:	Iraq'i Kristy
INSTAT:	National Statistics Institute
JICA:	Japan International Cooperation Agency
JIRAMA:	Jiro sy Rano Malagasy (National Electricity and Water Company of Madagascar)
LC:	Land certificate
LIDAR:	Light Detection and Ranging
MATHTP:	Ministry of Land Use Planning, Housing and Public Works
MDMK:	Mpiray dinidinika miaraka amin'i Kristy (Association in the Catholic Church)
MEDD:	Ministry of Environment and Sustainable Development
MEEH:	Ministry of Energy, Water and Hydrocarbons
MEF:	Ministry of Economy and Finance
MGA:	Malagasy Ariary
MM:	Minutes of meeting
MMR:	Network of Rural Observatories
MNP:	Madagascar National Park
MW:	Megawatts
Nb:	Number of people
NGOS:	Non-Governmental Organization
NP5:	Performance Standard No. 5
NPA:	New Protected Area

NPK:	Nitrogen (N), Phosphorus (P), Potassium (K)
NR:	National Road
NRL	Normal retention level
NTFP:	Non-timber forest products
ONE:	National Office for the Environment
OP:	Operating Policy
OPs:	Operational policies
OS2:	Operational Safeguard 5
OTIV:	Ombona Tahiry Ifampisamborana Vola (Cooperative Savings and Credit Society)
PAP:	Project Affected Persons
PAPAM:	Madagascar Agricultural Productivity Improvement Project
PAPRIZ:	Rice Productivity Improvement Project in the Central Highlands
PDC	Community Development Plan
PEJAA:	Program to promote youth entrepreneurship in agriculture and agro-industry
PEPP:	Stakeholder Engagement Process
PN:	National Park
PPS:	Public Primary School
RAP	Resettlement Action Plan
REDD:	Reducing Emissions from Deforestation and Forest Degradation
SAPM:	Madagascar's Protected Areas System
SFI:	International Finance Corporation
SFK:	Sekoly Finoana Katolika (Catholic Private School)
SIS:	Social impact study
STIP:	Computerized PAP Data Processing System
TF:	Land Title
TFPs:	Technical and Financial Partners
USD:	United State Dollar
VOI:	Vondrona Olona Ifotony (local forest management and protection entity)



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## Introduction – Content of this Document

Madagascar has one of the lowest electricity service ratios in the world, with most of the island's population (87%) using wood as their primary source of energy. The country's electricity production is largely driven by imported fossil fuel-based thermal generation which has increased in recent years as a result of population growth, thereby contributing directly to global warming and increased financial deficit in the sector.

To address this situation, the Republic of Madagascar has embarked on a series of reforms and established a program called "Priority Hydropower Program" focused on several sites. These include the Sahofika Hydropower Plant which was subject to a restricted international call for tenders (No. 001/15/MEH).

On June 17, 2016, the Ministry of Water, Energy and Hydrocarbons declared the Eiffage, Eranove, Themis and HIER consortium as the provisional contractor and signed, on December 2, 2016, a Project Agreement for the implementation of the Sahofika Hydropower Project ("the Project"). This consortium will be responsible for designing, financing, building, operating and maintaining the Sahofika Hydropower Plant under a concession contract to be entered into with the Government of Madagascar, via a Malagasy company currently being established called Nouvelle Energie Hydroélectrique de l'Onive ("NEHO" or the "Concessionaire")

To implement this project, three hundred and seventy-four (374) households (2,114 individuals) will be physically or economically displaced. Therefore, the Concessionaire must demonstrate that the acquisition of the lands required for the implementation of the Project and compensation measures for Project-affected Persons (PAPs) comply with the Malagasy legal framework and international standards on involuntary resettlement. In this respect, the Consortium must also demonstrate that the standard of living of the affected populations will remain the same or even improve after the resettlement process has been completed.

This document was prepared by the Concessionaire to ensure the Project is in compliance with national legislation and the environmental and social policies of the International Finance Corporation and the African Development Bank. It is divided into two sections:

1. A Resettlement Action Plan (RAP) for the dam and reservoir; this plan is currently defined with a level of precision sufficient to ensure that detailed asset inventories are carried out with all the necessary details;
2. An Abbreviated Resettlement Action Plan (ARAP) for the linear components of the Project (roads and transmission line), whose impacts in terms of physical and economic displacement are minor and for which some technical details are currently under consideration, which did not make it possible to conduct the required comprehensive inventories. This linear ARAP for linear components will be detailed at a later stage once all road and transmission line footprints have been accurately identified.

# **PART ONE – RESETTLEMENT ACTION PLAN FOR THE DAM AND RESERVOIR**

Eiffage Eranove HIER Themis Consortium  
Madagascar - Sahofika Hydropower Plant  
Resettlement Action Plan - Version C

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# EXECUTIVE SUMMARY

## Project Background

Madagascar has one of the lowest electricity service ratios in the world, with most of the island's population using wood as a source of energy. Electricity generation is largely dependent upon fossil fuels, and the Government has therefore identified increasing hydro-electric generation as one of the country's priorities and private sector involvement as an avenue to do so without increasing the country already overwhelming debt.

The Sahofika project development was awarded to the consortium formed by Eiffage, Eranove, Themis and HIER companies, which agreed on 2 December, 2016 with the Ministry of Water, Energy and Hydrocarbons of Madagascar a Project agreement to design, finance, build, operate and maintain the Sahofika hydro-power project, further to a concession contract to be signed with the State. A Malagasy company has been established by the Consortium in this purpose, which is called *Nouvelle Energie Hydroélectrique de l'Onive* ("NEHO" or "Concessionaire").

The Project entails the physical displacement of 364 households (2,062 individuals) residing in the Project footprint, as well as the economic displacement of an additional 10 households (52 individuals). This Resettlement Action Plan (RAP) is submitted by the Concessionaire. It addresses these impacts in line with both Malagasy legal requirements and international standards, specifically those of the African Development Bank (AfDB) and of the International Finance Corporation (IFC). The RAP was prepared in the period July 2018 – May 2019 by Malagasy consulting firm Land Resources, supported by international resettlement consultant Frederic Giovannetti.

At this stage, this RAP addresses the dam and reservoir area in full detail (all socio-economic and asset surveys done, detailed budget available), while the linear components of the Project (road and transmission line) are addressed at a conceptual level, with surveys to be done later when the level of progress of technical design allows. It is not expected that the road and transmission line will entail any physical displacement or significant economic displacement.

## Project Location and Summary Description

The Project is located at a distance of about 100 km from Antananarivo, Madagascar capital city, and 40 km from Antsirabe. Two administrative districts (Antanifotsy and Ambatolampy districts, both in Vakinankaratra region) are affected by the dam and reservoir. The Commune of Belanitra in Antanifotsy district is the most affected by the Project as it contains the Fokontany (communities) of Antenina and Befotaka, which are both significantly affected by the reservoir, while the Commune of Tsinjoarivo contains Ankazomena and Antandrokomby Fokontany, which are marginally affected by the reservoir.

The total population of the four fokontany that are affected by the dam and reservoir is estimated around 5,760 persons, 2,062 of whom will be affected by the Project.

The following two maps present the location of the Project within the region and in its more local setting. Key technical characteristics of the Project are described in the detailed RAP and ESIA reports.

Figure 1: Regional location of the Project

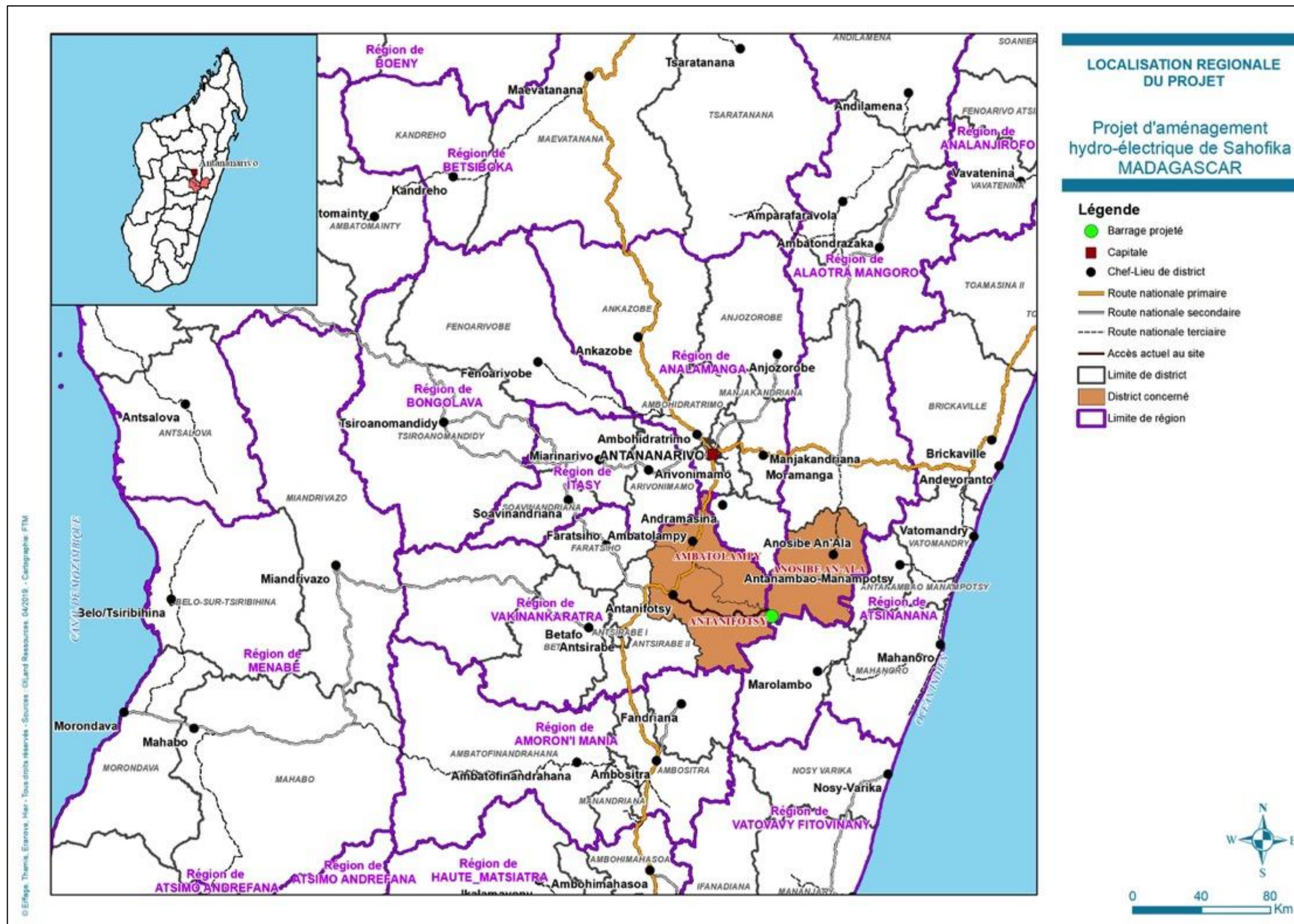
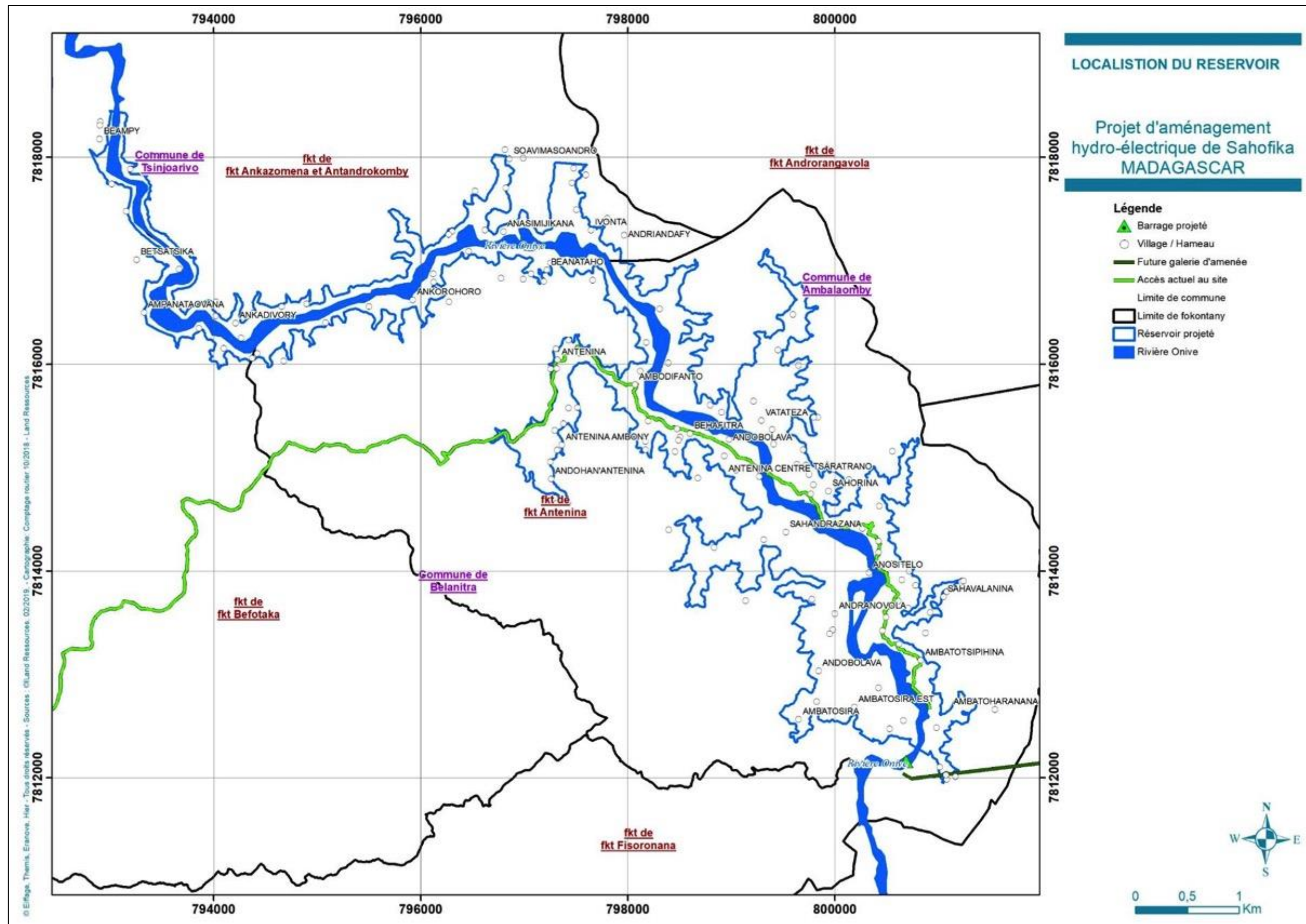




Figure 2: Dam and reservoir





## Key Project Displacement Impacts

Project displacement impacts (dam and reservoir) are summarized in the table below:

<b>1</b>	<b>PEOPLE</b>	
11	Physically displaced households	364
12	Physically displaced individuals	2,062
13	Economically displaced households	10
14	Economically displaced individuals	52
<b>2</b>	<b>LAND</b>	
	Total area of affected land	1005 hectares
	Of which:	
	- Farmed land	323 hectares
	- Pasture and fallow land	305 hectares
	- Forest land	378 hectares
<b>3</b>	<b>CROPS</b>	
<b>31</b>	<b>Annual crops</b>	<b>248 hectares</b>
	Of which:	
	- Rice	65 hectares
	- Vegetables	60 hectares
	- Manioc	42 hectares
	- Maize	34 hectares
	- Others	47 hectares
<b>32</b>	<b>Perennial crops</b>	<b>75 hectares</b>
<b>4</b>	<b>STRUCTURES</b>	
41	Total number of affected residential structures	364
42	Total number of affected non residential structures	258
<b>5</b>	<b>COMMUNITY, RELIGIOUS AND RELIGIOUS ASSETS</b>	
51	Government run primary schools	3
52	Privately run primary schools	3
53	Privately run secondary school	1
54	Sport pitches	3
55	Churches	3
56	Graves	14
57	Cultural sites	6

The concessionaire is seeking to minimize displacement as follows:

- By locating aggregate borrowing sites inside the reservoir area, such that no additional displacement impacts are experienced as a result of construction material needs;
- By routing the linear components of the Project such that displacement impacts are minimized;
- By handing back any land initially earmarked as potentially affected that might eventually end up being unaffected.



## RAP Preparation Participatory Process

The RAP preparation process has entailed the following key steps and milestones:

- July 2018:
  - o Consultant mobilization;
  - o Preliminary information to community and municipal authorities on project, RAP process and sponsor commitments,
  - o Participatory survey of land ownership and participatory delineation of family land (without detailed inventory at this stage);
- October and November 2018:
  - o Establishment of a grievance management mechanism, including a local grievance committee;
  - o Establishment of a consultative mechanism, including fielding two Community Liaison Officers sourced by the Consortium from Malagasy NGO ZiNa to convey messages from the Consortium and record community feedback (still in place at the time of submitting this RAP);
  - o Detailed socio-economic surveys, including participatory identification of key cultural features and focus groups on livelihoods, land tenure, compensation and resettlement preferences and priorities, gender issues, etc.;
  - o Detailed asset inventories, including delineation of all residential and agricultural land plots, and measurement and description of all crops and structures;
  - o Cadastral mapping of Project footprint (done by regional cadastral survey department from Ambatolampy);
- January and February 2019:
  - o Investigations at proposed resettlement sites (two options considered), including water resources, agricultural potential and consultation with municipal authorities and host communities;
- May 2019:
  - o Finalization of draft RAP for preliminary submission to potential lenders, including the African Development Bank and Malagasy government and consultation;
- June 2019:
  - o Consultation on ESIA and RAP with stakeholders per Stakeholder Engagement Plan (submitted separately).

## Current PAP socio-economic circumstances

Key features of the current socio-economic conditions of PAPs and their implications to the resettlement and compensation strategy are described below:

- The economy of affected households is predominantly agricultural. Losing agricultural land to the Project will entail significant economic displacement and put PAPs at risk of impoverishment should agricultural land not be replaced by similar agricultural opportunities.

- 
- PAPs generally have a low level of education, which has two implications:
    - o They will not be able to capture new economic opportunities arising from the Project unless a significant training effort is undertaken. The livelihoods of most PAPs will continue to depend on agriculture for the foreseeable future.
    - o Project messages, and particularly information in regards of compensation and resettlement measures need to be adapted to that relatively low level of education. For example, written material will not be understandable by many and the Project will have to dedicate specific resources to convey understandable messages in a culturally appropriate manner.
  - PAPs are concerned about the resettlement schedule and the implications on their agricultural calendar, and in general about the period of uncertainty. This is particularly relevant to the most vulnerable PAPs, including elderly individuals and women-headed households. Specific support will have to be provided and information on the schedule of relocation will have to be conveyed consistently and transparently.
  - While some households have indicated that they would prefer compensation to be delivered in cash rather than in kind, poverty and lack of education should lead to caution in this regard, as there is a significant risk of cash misuse, gender imbalance in access to cash, and ultimately impoverishment. Compensation will be proposed in-kind (full resettlement package) to all affected households, with strong safeguards to protect those willing to opt for cash.
  - Cultural dimensions are critical to the success of the relocation process. This applies not only to cultural features that need to be relocated (particularly graves) but also to cultural awareness required in consultation and in preparation to the process of selecting and developing a resettlement site.

## Compensation Strategy and Entitlements

Key principles of the compensation strategy are the following:

- Resettlement and compensation activities will be carried out in conformance with Malagasy law and international requirements. Where there is a discrepancy between these requirements, the most favorable to PAPs shall apply.
- Affected people will be eligible to compensation regardless of the formality of their land rights (or absence thereof). Most people in the area hold land informally but they will be eligible to compensation regardless.
- A cut-off date has been defined, broadly disclosed and posted locally. It is 20<sup>th</sup> November, 2018.
- Compensation will be offered at full replacement cost. In-kind compensation will be prioritized, particularly the provision of replacement residential or agricultural land. In general, the typical compensation package for physically displaced households will be as follows:
  - o Provision of a resettlement residential land plot at the resettlement site;
  - o Provision of a house meeting decent housing criteria;
  - o Provision of agricultural land of similar potential as that lost in the affected area;
  - o Compensation in cash for ancillary structures, trees and annual crops.

- A resettlement site will be developed to accommodate both residences and agricultural activities. The final selection of the resettlement site and its development principles, particularly in terms of community infrastructure, utilities, and amenities has been and will continue to be consulted upon with both the affected and the host communities. The site will include educational and health facilities to at least replace or improve the situation in the affected area. Drinking water, electricity and sanitation will be provided by the Project, with households further covering recurrent costs themselves.
- Affected households opting for the full resettlement package will be provided with appropriate security of tenure there.
- Grievances will be reviewed timely, fairly, free of charge, and without retaliation. Grievance management will be documented.
- Financial training will be provided to those PAPs receiving cash to minimize risks of cash misuse and associated impoverishment.

A detailed entitlement matrix has been prepared and is presented in the main report, together with all applicable compensation rates (land, structures, crops, other features).

A resettlement site has been identified at Fisoronana in Antanifotsy district, and compared to an alternative option in Soamanandrany in Ambatolampy district. It is suitable and preferable to the alternative option from the perspective of all key criteria:

- Potential presence of drinking water;
- Enough space;
- Acceptable to both affected and host communities;
- Relatively easy to access from the Project main road;
- Sufficient potential for agricultural development and irrigation (albeit subject to significant earthmoving works).

## Livelihood Restoration and Enhancement

The key driver to the compensation strategy (in-kind, including replacement of agricultural land) and the selection of the resettlement site (offering good potential for agriculture) is livelihood restoration and enhancement which has thereby been integrated into all strategic compensation options.

In addition, the Project will facilitate livelihood restoration and enhancement as follows:

- Support to the establishment of agricultural plots, particularly rice paddies, where the Project sponsor will provide earthmoving and support to the community in terms of land plot allocation;
- Support to the re-establishment of agriculture, through training, provision of inputs and tree and other seedlings and seeds;
- Financial training to avoid misuse of compensation;
- Support to the re-establishment of gold digging activities within the legal framework of the Republic of Madagascar (any activity supported by the Project for re-establishment will need to be fully legally permissible).

The Project will cooperate with existing initiatives, including both governmental and non-governmental, and may enhance some of these or provide facilitation.

## Assistance to Vulnerable Persons

In the context of the Project and in line with applicable standards, vulnerable groups, households and individuals are defined to include the following categories:

- Female heads of household;
- People living in poverty;
- People affected by a chronic disease, including, but not limited to those living with HIV/AIDS;
- Elderly people without family support;
- People with physical or mental handicaps without or with insufficient family support;
- Children heads of household;
- Widowed heads of household.

Potentially vulnerable PAPs have been identified during the census and socio-economic survey carried out in the third quarter of 2018. The Project sponsor will hire an NGO to carry out the following vulnerable people support activities;

- Support in the compensation negotiation and agreement process;
- Support during the construction and transition period, including assistance to moving;
- Specific support to livelihood restoration;
- Financial training to proper use of compensation and assistance to financial management (including opening and management of bank accounts) during the transition period;
- Medical care and food aid on an exceptional basis during the transition period;
- Psychosocial support before, during and after the move.

## Monitoring and Evaluation

Monitoring and evaluation will include a combination of internal monitoring, focusing on input, activity and output indicators, and external monitoring, focusing on outcome indicators and compliance. The RAP unit established by the Project sponsor in cooperation with the Government will gather input, activity and output indicators on a regular basis and as specified in the relevant chapter of the full RAP. These indicators will be collated in six-monthly internal monitoring reports that will be prepared by the Sponsor and potentially submitted to the lenders.

In addition, an independent consultant hired by the lenders, and whose duty of care is to the lenders, will check compliance of the RAP implementation on a six-monthly basis. Lastly, the Sponsor will organize a completion audit after livelihood restoration activities are deemed complete, i.e. potentially about three years after the completion of physical relocation.

## Implementation Arrangements and Schedule, Budget

The Project is a Public Private Partnership and the State and the Concessionaire will therefore cooperate in all its components, including in regards of the resettlement and compensation activities. Roles and responsibilities will be clearly allocated between both and cooperation will be organized with joint committees ensuring that adequate coordination takes place.

The Concession Agreement between the Government of Madagascar and the Concessionaire allocates the ultimate responsibility to clear land of occupation and rights to the State. The State is expected per this Agreement to make land available to the Concessionaire for the purpose of building and operating the Project. However, in practice the Concessionaire will facilitate the implementation of the RAP and will avail financial, human and material resources required for implementing the RAP within a dedicated implementation unit, while reporting on a regular basis to the Granting Authority (the State).

Two resettlement steering committees have already been put in place, one at the national level with the different central departments involved at Ministerial or Vice-Ministerial level, which will provide strategic guidance in key issues, and another one at the regional level, which will resolve day-to-day implementation issues and participate in grievance resolution. These committees will include representatives of both key State agencies involved under the chairmanship of the Ministry of Water, Energy and Hydrocarbons, and the Concessionaire.

Insofar as the Consortium will require international finance from lenders, it will take responsibility for implementation of the RAP vis-à-vis the lenders. This will particularly relate to conformance of implementation of the RAP to lenders requirements (OS2 and PS5). Conformance will be monitored by an independent Consultant hired by lenders and whose duty of care will be to the lenders.

The budget of the Sahofika HPP Project RAP is shown (in summary) in the table below:

#	Activity	Amount in MGA	Amount in USD
1	Compensation of affected household assets (land, crops, buildings)		
	Sub total	59,872,153,106	16,539,269
2	Compensation of affected community and other non-household owned assets		
	Sub-total	730,000,000	201,657
3	Resettlement site - Construction of community infrastructure		
	Sub total	1,520,400,000	420,000
4	Resettlement site - Acquisition and development		
	Sub total	18,317,200,000	5,060,000
5	Livelihood restoration		
	Sub total	2,099,600,000	580,000
6	Implementation		
	Sub total	8,307,900,000	,2,295,000,
	TOTAL	90,847,253,106	25,095,926
	Contingency (10 %)	9,084,725,311	2,509,593
	GRAND TOTAL	99,931,978,416	27,605,519

The RAP's implementation schedule is shown in the figure below.

Land Resources – F.Giovannetti

Eiffage Eranove HIER Themis Consortium  
Madagascar - Sahofika Hydropower Plant  
Resettlement Action Plan - Version C

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# 1 PROJECT DESCRIPTION

## 1.1 Presentation of the Project



*Photo 1 : Onive River*

The Hydropower Plant Project consists in providing approximately 130 MW of power at low water. It will be interconnected to the Antananarivo and Antsirabe power grids, thereby increasing the capacity and stability of these grids. In the long term, the Project aims to produce about 192 MW of power, with a production capacity of about 1,500 GWh per year. The Sahofika Project has been awarded to a concessionaire composed of EIFFAGE, ERANOVE, THEMIS and HIER, via a concession established in accordance with Article 23 of the Electricity Code 5.

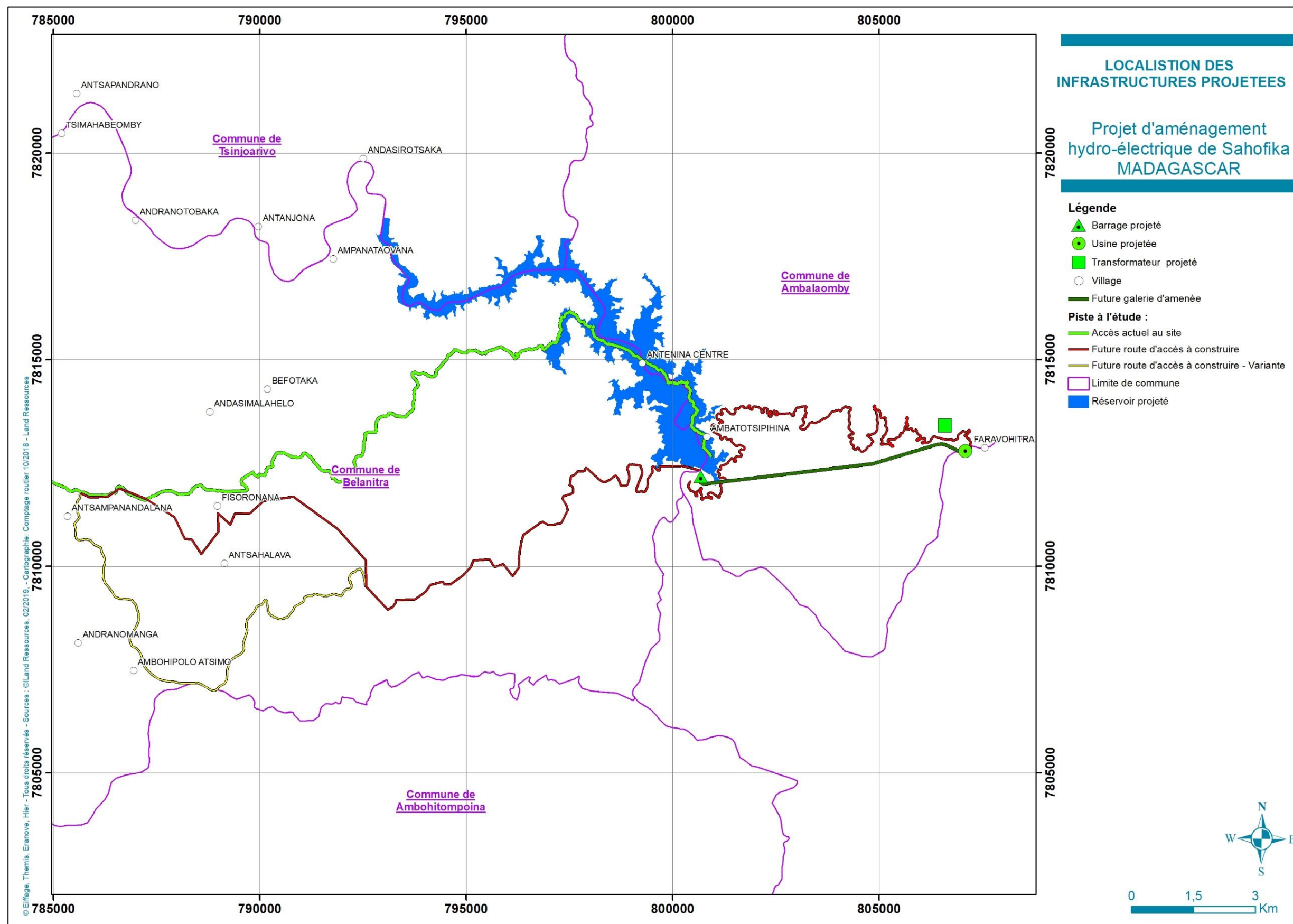
This project is part of a program called “Priority Hydroelectric Program” covering several parts of Madagascar. Its objective is to respond to the urgent need to increase electricity production in the capital Antananarivo. The four companies forming the Concessionaire are described below:

- **Eiffage:** an international group headquartered in France and operating the world over in construction, infrastructure, energy and concessions;
- **Eranove:** a leading industrial group operating in the management of public services and the production of electricity and drinking water in Africa;
- **Neo Themis:** a developer of energy projects belonging to the Denham Capital group, and a leader in investments in developing countries, including Africa;
- **HIER** (Hydro Ingénierie Études et Réalisations): a Malagasy company specializing in hydropower plant projects.

The plant will be operated directly by NEHO (Nouvelle Energie Hydroélectrique de l’Onive). The electrical energy produced by the plant will be transmitted to the grid managed by JIRAMA, which will be responsible for its distribution.



Figure 3: Map of the General Situation of the Project's Infrastructure



## 1.2 Main Components and Affected Areas

### 1.2.1 Project Components

The Sahofika Hydroelectric Dam Project has several components all of which will be implemented from 2020 to 2024.

The dam is a roller-compacted concrete structure with a maximum height of 53 m above the natural terrain. The crest of the dam is 100 m long, 6 m wide, and stands at an altitude of 1,329 m. The ecological flow release structure includes 700 mm hollow jet valves in the dam of the body, with a maximum flow rate of 8 m<sup>3</sup>/s.

The various components of the Project are as follows:

- The regulating dam and the saddle dike;
- The reservoir
- The various infrastructures: headrace, surge tank, water-pressure shafts, timbered gallery;
- The hydropower plant equipped with 6 units of 32MW each;
- The ancillary constructions of the hydropower plant;
- The switching yard and the transmission line;
- Trails and new access roads to the Project site;
- The site installation;
- The quarries dedicated to the Project and their access roads;
- The staff housing estate.

To limit the Project's impacts on the population and natural resources, a social and environmental component is also planned. Specifically, this component must manage the following:

- The displacement of affected populations, their compensation and resettlement;
- Actions to provide social support to communities;
- Environmental management of the construction and operation of the Project, including actions to manage impacts on biodiversity.

**At this stage, this RAP report only covers the “regulating dam, saddle dike and water impoundment” component.**

The main characteristics of the dam and main reservoir are presented below.

Consortium Eiffage Eranove HIER Themis  
Madagascar – Aménagement hydroélectrique de Sahofika  
Plan d'Action de Réinstallation – version C

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**Table 1: Description of the “Dam and Reservoir” Component**

Components	Description
Dam	<ul style="list-style-type: none"> <li>• Dam type: RCC gravity dam with central evacuation on the downstream face</li> <li>• Weir level: 1,328 m</li> <li>• Peak level: 1,340 m</li> <li>• Foundation level: 1,280 m</li> <li>• Max. height on foundation: 60 m</li> <li>• Length: 330 m</li> <li>• Foundation: Gneiss - Migmatite</li> <li>• Foundation treatment: Consolidation injections + waterproofing injection curtain + drainage</li> </ul>
Water impoundment (Reservoir)	<ul style="list-style-type: none"> <li>• Normal retention level (NRL): 1,328.00 m</li> <li>• Highest Water Level (HWL) for the design flood: 1,337.20 m</li> <li>• Maximum water level (MWL) in the impoundment for the safety flood: 1,338.95 m</li> <li>• Unusable storage : 11.5 hm<sup>3</sup></li> <li>• Active reservoir storage volume: 128.5 hm<sup>3</sup></li> <li>• Estimated area: about 8.9 km<sup>2</sup></li> <li>• Submerged river stretch (upstream): 10 km</li> <li>• Head: 700 m (max) - 670 m (min)</li> <li>• Captured watershed: 4,565 km<sup>2</sup></li> </ul>

### 1.3 Efforts to Minimize the Resettlement Process

As required by Performance Standard No. 05 (PS5) of the International Finance Corporation (IFC), resettlement should be carried out as a last resort, i.e. when it is no longer possible to avoid or minimize impacts.

In keeping with this principle, the Concessionaire undertook an evaluation of the technical, social and environmental optimization of the Project, the result of which is summarized below.

For the main sub-components, the various measures taken by the Concessionaire to limit resettlement are as follows:

- Materials borrow sites: The majority of the borrow sites will be located in the future flood area and, therefore, do not cause additional displacements compared to those caused by the impoundment of the future reservoir. For sites outside the impoundment area that cause involuntary displacements, the identification of new sites inside the future reservoir is advisable and should be given priority.
- Feeder and access roads: The majority of the roads will be built or rehabilitated on existing rights-of-way to limit the need for expropriating additional land.

In the event of lands defined by the study as floodable and forming part of the reservoir being found not flooded, they may be returned to their former owners/occupants if they are interested, or to nearby communities.

## 2 RAP OBJECTIVES

## 2.1 Specific Objectives of the RAP (Resettlement Action Plan)

The objective of any Resettlement Action Plan is to avoid harming affected populations as a result of the implementation of a project and to avoid impoverishing them.

Even if a project is undertaken in the interest of the general public, the Resettlement Action Plan assumes that a project cannot harm one population for the benefit of another and, therefore, all appropriate measures must be implemented to ensure that everyone benefits from the Project in one way or another.

The IFC recognizes that land acquisition in projects of the scale of the Sahofika Hydropower Plant Project can be a source of nuisance or negative impacts on populations; these impacts can be (i) physical in nature and related to restricted access to land and their property, but also (ii) changes and negative impacts on income sources and livelihoods, and (iii) a disruption of social cohesion or psychosocial shock caused by these significant changes.

To avoid, minimize or compensate for these negative impacts, the IFC recommends the implementation of a Resettlement Action Plan whose purpose is to **avoid the chronic impoverishment of the population and prevent social conflicts that could result from the implementation of the Project.**

Resettlement is defined as involuntary when the persons or groups of persons concerned can no longer use their land, dwellings, other property, etc., which applies to the Sahofika Hydropower Plant Project. The principle of resettlement therefore applies to all affected persons, whether or not they are physically displaced. It must be monitored regardless of the total number of people affected, the severity of the impacts or whether or not the affected people have a formal right to the land they occupy or exploit.

A second guiding principle of resettlement is that in cases where the acquisition of property or livelihoods cannot be avoided, the people affected are guaranteed improved livelihoods, or at least their restoration, in real terms, to their pre-resettlement or pre-project level, whichever is more beneficial to them.

In addition, as recommended by this resettlement policy, it is anticipated, in cases where resettlement and land acquisition cannot be avoided, that careful attention be paid to the needs of vulnerable groups among the people affected.

This process includes various steps, including planning, discussion and consultation with those affected, implementation of the resettlement process, and monitoring and evaluation. This is specifically addressed by PS5 on land acquisition and involuntary resettlement published in 2012.

In consideration of these issues, this Resettlement Action Plan aims to achieve the following specific objectives:

- Describe the applicable national laws and standards, international standards to be followed for the implementation of resettlement and the gaps between the two requirements and propose the approach applicable to this project;
- Describe the applicable national laws and standards, international standards to be followed for the implementation of the resettlement process and the gaps between the two requirements and propose the approach applicable to this project;
- Identify Project-affected people and project stakeholders;
- Identify losses and compensation measures relating to affected assets at their full replacement value using an equitable approach, regardless of the legitimacy of their land titles and tenure status;

- Minimize, to the extent possible, involuntary resettlement and land acquisition, by exploring all viable alternatives in the design phase of the Project;
- Ensure that those affected by the Project are consulted and have the opportunity to participate in the process of developing and implementing involuntary resettlement and compensation activities;
- Define the timetable, budget and monitoring and evaluation system of the RAP as well as the responsibility of the various actors involved in its implementation.
- Pay compensation for affected assets at their full replacement value without depreciation of the affected asset so that no PAPs are disproportionately penalized;
- Provide appropriate assistance to displaced populations, including the vulnerable, to enable them to improve their income and living standards, or, at a minimum, rebuild/maintain them through the implementation of economic rehabilitation programs;
- Design and implement resettlement activities as development programs to ensure that PAPs and host populations can benefit from them in a sustainable manner.

## 2.2 RAP Principles

- The implementation of this RAP must be consistent with the guiding principles of the IFC's PS5 and the AfDB's OS2:
- Physical or economic displacement must be avoided or minimized. A resettlement action plan and appropriate compensation measures must be developed to compensate for unavoidable physical or economic displacement;
- Those affected must receive compensation for the equivalent of the losses suffered;
- Resettlement must be seen as an opportunity to develop and improve the living standards of the affected population, in particular through supporting measures, especially in the economic and social fields;
- The resettlement process must be inclusive, transparent and participatory. The population must actively participate in the various planning and implementation activities of the RAP, including through socio-economic surveys and public consultations to ensure that they are sustainable and accepted and that affected households can participate in taking decisions that of relevance to them. Eligibility criteria and compensation scales must be developed to ensure that payments received are fair and equitable;
- All impacts identified in the resettlement impact assessment must be fully mitigated, and temporary assistance measures must be included.
- Impacts on housing and livelihoods must be reduced to initial or better conditions. Support/accompanying measures should make it possible to help households during the resettlement process in order to reduce the risk of them falling into poverty;
- Specific accompanying measures must be developed to assist vulnerable groups so that the impacts of resettlement do not increase their social and economic vulnerability. These support measures can take temporary or permanent forms, and must be suited to the context and needs of the persons concerned;
- A complaints management mechanism should be put in place and communicated to the population concerned to allow communities to communicate and report facts or concerns related to the process.

- The relocation process must be followed by an ongoing process and an independent evaluation should demonstrate that the process has been carried out in accordance with IFC standards and national legal requirements.



## 3 PROJECT IMPACTS

### 3.1 Impacts on Land

#### 3.1.1 Area of Impacted Land

- Total area of impacted land: 1,005 ha
- Total area of planted land: 323 ha
- Grazing area, fallow land, shrubland: 305 ha
- Total area of land with a forest cover (natural forest): 378 ha

#### 3.1.2 Number of Plot Owners

The table below describes the number and type of land use.

**Table 1: Distribution by Land Use Category**

LAND USE CATEGORY	NUMBER OF PEOPLE	%
Non-resident owner, non-operator	7	1.9
Non-resident owner, operator	1	0.3
Resident owner, non-operator	62	16.8
Resident owner, operator	226	61.4
Resident who does not own <sup>1</sup> a piece of land and does not engage in any agricultural activity	20	5.4
Resident who does not own a piece of land and is engaged in agricultural activities	40	10.9
Does not own land	12	3.3
<b>TOTAL</b>	<b>368</b>	<b>100</b>

*Source: Étude socio-économique PAR, October 2018, Land Resources*

Landowners represent 80.4% of the PAPs. Of these affected landowners, 10% are women and 90% are men.

### 3.2 Impacts on Crops

#### 3.2.1 Annual Crops

Rice is the subsistence crop of the Malagasy people. Approximately 64 ha of rice fields will be impacted by the Project, which in the short and medium term, may have an impact on income and livelihood sources. PAPs grow other crops such as cassava, taro, and maize, which are considered alternative foods, as well as various types of vegetables. The list of annual crops listed is in Section 7 of this document.

The table below describes land areas impacted by annual crop category:

<sup>1</sup> PAP occupying land from another PAP free of charge without any contribution

**Table 2: Area of Annual Crop Affected**

Annual Crops	Area Affected in ha
Rice field	65
Cassava	42
Corn	34
Taro	26
Vegetables	60
Others (sweet potato, tobacco, sugar cane, Bambara peas, soya, lentil, pineapple)	21
<b>Total area affected by annual crops</b>	<b>248</b>

*Source: Étude socio-économique PAR, October 2018, Land Resources*

**Photo 2: Form of Annual Crop in Antenina**



### 3.2.2 Perennial Crops

Twenty-nine (29) types of economic trees were listed, mainly banana trees and peach trees, which represent nearly 85% of all the perennial crops identified.

The list of perennial crops identified in the area is detailed in Section 7 of this document.

The impacts will be significant because it will take a long time to restore some species.

**Photo 3: Example of plantations inventoried in the area**



### 3.3 Impacts on Residential Houses and Ancillary Buildings

#### 3.3.1 Residential Houses

A total of **364<sup>2</sup>** residential houses have been inventoried. These houses vary from 8m<sup>2</sup> to 170m<sup>2</sup> in size. They are composed of zero to two floors with one to several rooms depending on the case and have one or two doors with several windows. In many cases, the houses have adjoining constructions such as outdoor kitchens, crop storehouses, showers and latrines, all of which are usually located in the vicinity of the residential house.

Affected houses in the area are mainly traditional-type houses with some exceptions. The main types of houses are as follows:

- **Clay wall**, base in clay/concrete/wood and a roof in straw/bamboo/sheet metal
- **Wooden or bamboo wall**, earth base and a roof made of sheet metal/bamboo/straw
- **Brick wall**, base in earth/wood/cement and a straw/bamboo/sheet metal roof
- **Stone wall**, earth/wood/cement base and sheet metal/straw roof (small number of people)

This diverse house typology also reflects disparities in the income and living standards of homeowners. The list of houses is described in Section 7 on eligibility for compensation

<sup>2</sup> Some PAPs do not live in the RAP area and others have several buildings, which explains the figures. Properties that are not located in the reservoir area were not inventoried during the socio-economic study.

**Photo 4: Types of Houses Affected**



### 3.3.2 Ancillary Buildings

The number and use of ancillary buildings are presented in the table below:

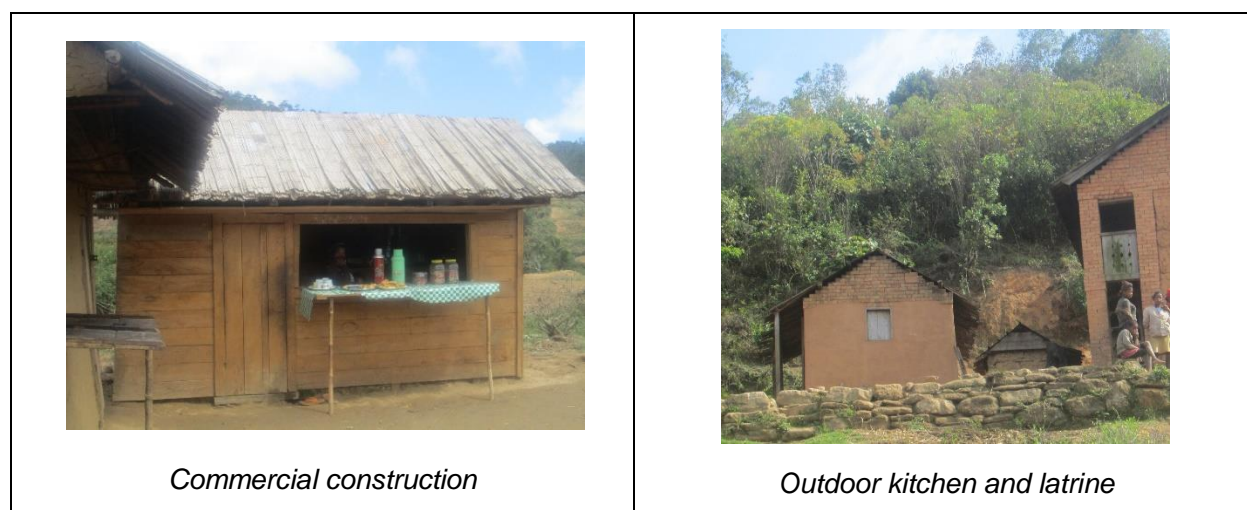
**Table 3: Number and Use of Ancillary Buildings**

Nature / Use	Number of People
Animal enclosure	129
Outdoor kitchen	39
Crop storehouse for agricultural use	35
Commercial construction	5
Other structures: animal cart shelter, Toka gasy (local rum) production.	3
Laundry room	2
Latrine	34
Shower room	7
Well	7

Source: *Étude socio-économique PAR*, October 2018, Land Resources

**Photo 5: Types of Ancillary Buildings**





### 3.3.3 Gender

Men are generally the owners and masters of the houses, with the exception of women heads of household (widow, divorced, single, etc.). Women manage businesses...

**Table 4: Distribution of Homeowners by Sex**

Sex	Proportion of Ownership
Female	9%
Male	91%

A house may be inhabited by several households. Conversely, a household may own several houses.

### 3.4 Impacts on Community Assets

Six (6) primary schools and one (1) middle school have been inventoried. More than 50% of these infrastructures are managed by non-State organizations. They have about 385 students. There are three (3) playgrounds, usually used for football / basketball or for village meetings / festivals.

The following infrastructures have been inventoried:

**Table 5: List of Community Assets Affected**

Type of Community Asset	Number of People	Fokontany	TOTAL
Public Primary School (PPS)	3	Antenina and Ankazomena	7
Catholic Private School	3	Antenina	
Catholic Private College	1	Antenina	
Playing fields	3	Antenina	3

Source: Étude socio-économique PAR, October 2018, Land Resources

**Photo 6: Affected Community Infrastructure**



3.5 Impact on Places of Worship

Places of worship called *Doany* (traditional place of worship) and *Vatomasina* (sacred stone), classified as sacred sites and tombs have been inventoried in the Project area.

The *doany* and *Vato masina* are traditional cult sanctuaries in Madagascar. They are usually made of stone, tree stumps or a mound.

Shrines are burial sites of very high importance for the Malagasy, who has deep respect for the deceased and ancestors.

The building materials and location of a shrine are almost the same, whether the shrine belongs to the Betsimisaraka (Eastern ethnic group) or is built in the Highlands (Merina ethnic group): the stone, cold materials dedicated to the dead, and location in the northern part of the village. However, financial constraints mean that tombs are built with less valuable and less expensive materials such as concrete and sometimes even bricks.

Photo 7: A *doany* located in Ankorohoro



Photo 8: A shrine in Ambatotsipihina



The number and locations of properties are described in the following table. All the sacred sites are located in Antenina’s Fokontany.

**Table 6: List of Religious Assets / Sacred Sites**

Type of Community Asset	Number of People	Village / Hamlet
Sacred site (Doany, Vato masina)	6	Ambatotsipihina
		Ankorohoro
		Ambodinifanto
		Antenina Ambony
Shrine	2	Sahandrazana (Antenina)
	3	Ankorohoro
	1	Ambodinifanto
	1	Anositelo
	1	Ivonta
	1	Andasinileboto
	3	Andobolava
	2	Ambatotsipihina

*Source: EIS, Inventaire des patrimoines, November 2018, Land Resources*



### 3.7 Impact on Cultural Sites and Assets

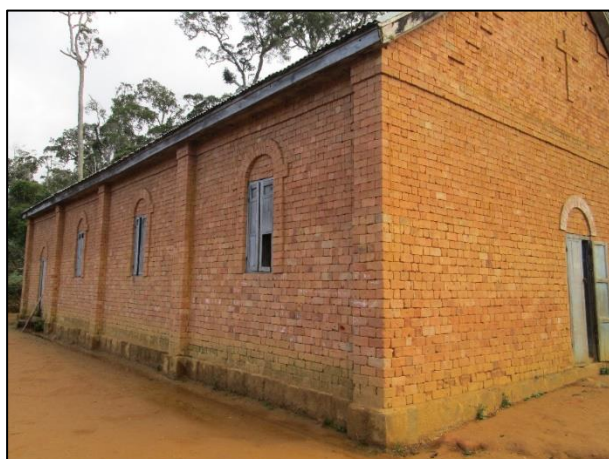
Three (3) churches have been inventoried in the area. They are all located in the Antenina Fokontany. The table below describes the number and locations of affected churches.

**Table 7: List of Affected Churches**

Type of Community Asset	Number of people	Islands	Fokontany
Church	1	Ankorohoro	Antenina
	1	Antenina Centre	
	1	Tsaratrano	

Source: *Étude socio-économique PAR, October 2018, Land Resources*

**Photo 9: A Catholic Church in Antenina**



### 3.8 Impact on Community Natural Resources

Resettlement leads to the loss of access to community natural resources. These resources consist mainly of the Onive River and the forest area of the protected areas (Tsinjoarivo and Marolambo), and grazing areas.

This loss of access impacts gold mining activities, daily river use (laundry, agriculture, etc.), grazing for livestock, and non-timber forest products (NTFPs) will also be affected. The loss of these wood resources is likely to increase anthropogenic pressure on the remaining forest areas and forested areas around the new resettlement sites.

According to PAP reports, a household uses an average of 25 logs every 10 years to build houses. Restricted access to these timber products could therefore lead to higher prices and taxes in the remaining forest areas. The following table describes the use of the identified natural resources.

The dam and reservoir area is located entirely within the following protected areas:

- The New Protected Area (NPA) of Tsinjoarivo;
- The Marolambo National Park (NP) (buffer zone);

- The Nosibe An'Ala KOLOALA.

Part of the Marolambo National Park's buffer zone is affected. The protection zone is located about 900 m from the dam (as the crow flies). The table above describes the extent of protected areas affected by the Project.

**Table 8: Project-affected Protected Areas**

Protected Area	Manager	Total Surface Area in Km <sup>2</sup> .	Area affected by the RAP in Km <sup>2</sup>	% Affected
Tsinjoarivo NPA	SADABE / DREEF	1,162.0	2.1	0.2%
The Marolambo NP (buffer zone)	MNP	1,944.7	4.5	0.2%
KOLOALA site of Nosibe An'Ala	DREEF	106.0	2.3	2.2%
<b>Total</b>		<b>3,213</b>	<b>9.8</b>	<b>2,6%</b>

Source: SAPM 2018

According to the environmental study, the reservoir area currently covers approximately 145 ha.

**Table 9: Use of Main Natural Resources**

Type of Resources	Number of Households	% of households	Usage
Onive	185	50.2%	Gold panning, fishing, daily use (laundry, watering,...), waterway
Forest	310	84.2%	Collection of firewood, construction wood, collection of honey, collection of medicinal plants
Grazing area	43	11.7%	Gold panning, Cattle grazing

Source: Étude socio-économique PAR, October 2018, Land Resources

### 3.9 Summary of Physical and Economic Displacements

The number of physical and economic displacements can be summarized as follows:

**Table 10: Summary of Physical and Economic Displacements**

	Number of People	Total Number
Number of physically displaced households	364	374
Number of economically displaced households	10	
Number of physically displaced individuals	2,062	2,114
Number of economically displaced individuals	52	

Source: Étude socio-économique PAR, October 2018, Land Resources

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Madagascar – Aménagement hydroélectrique de Sahofika  
Plan d'Action de Réinstallation – version C

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## 4 BASIC SOCIO-ECONOMIC CONDITIONS

## 4.1 Inventory Methodology

The socio-economic inventory of households conducted during the preparation of this RAP covered the entire dam and reservoir areas as well as the area downstream from the dam. A 100 m buffer zone was included around the PHE (Reservoir Boundary) zone for safety reasons and to avoid a problem related to the accuracy of the reservoir boundary and to list all households residing around the reservoir but owning assets affected within the impoundment area.

Socio-economic information about the households and people affected by this project was collected in several stages:

- Phase 1: A pre-survey was conducted in July 2018. An information and communication campaign involving consultation, focus group and individual interviews was run. This pre-survey also made it possible to define the various PAP-occupied areas and to delineate their lands in the presence of the Head of the household and their neighbor. All plots located at the boundary of the survey area were considered to be fully affected (total area).
- Phase 2: The detailed socio-economic household inventory was carried out in October and November 2018. It made it possible to identify and inventory all the properties and assets of the affected households as well as all the socio-economic data of each household. During this phase, surveys were conducted in each house and household. Between these two studies, the Ambatolampy survey team conducted a field trip to determine how the area was parceled out. Since the data collected did not cover the entire RAP area, the Concessionaire and the MEEH agreed to use the results of the parcel inventories carried out by Land Resources as part of this RAP.

The survey cards and focus group session guides are appended to this document.

To maintain the confidentiality of PAP information and avoid confusion, a unique code has been assigned to each household.

The following socio-economic information was collected through the surveys:

- The profile of the head of the household and members of their family,
- Economic activities and their source of income, as well as expenses
- The vulnerability of the household and its members,
- Household assets: agricultural and non-agricultural land and parcels, houses/additional buildings, livestock, miscellaneous (vehicle, appliance, etc.)
- Types of houses
- Social infrastructure impacted (church, school, tombs, etc.)
- Religious assets
- Use of and dependence on natural resources: in particular the Ony Ve River and the forest
- Their chosen type of compensation,
- Their opinion on possible resettlement.

All the houses have been listed and photographed. Photos of the various types of buildings are available in the attached report.

The populations concerned by the Project and the local authorities were informed and consulted at each stage of the process.

### Important notes:

- The official administrative boundaries do not reflect the actual situation in the field, which is why the commune of Ambalaomby (Anosibe An'Ala) was disregarded after the surveys because the area theoretically affected in this commune actually belongs to the Antenina Fokontany (Belanitra Commune).
- In the Antandrokomby Fokontany (Tsinjoarivo Commune) 3.5% of households are affected, but the delineation of this Fokontany is literally unclear, as it is merged on the map with the Ankazomena Fokontany (nearby Fokontany).
- A GPS mapping of the affected areas was not conducted. The delineation was performed only on a map since a household may have several parcels located at various locations within several kilometers of its place of residence. Considering how difficult it is to access the area (every place is accessible by foot, high relief area), it is impossible to visit all the lands of all the households within the planned timeframe.
- In relation to the above-mentioned constraint, crop data are based on PAP declarations, supported by a detailed analysis of land use visible in the image.
- Since the image was acquired in 2016, there were some discrepancies with the actual situation in the field in 2018. As a result, it was difficult to delineate the land on the map, as is the case with forest areas that became crop lands in 2018.

## 4.2 Results of the Survey and Inventory

The following table summarizes the results of the survey.

**Table 11: Summary of Survey Data**

Characteristics	Detail
Number of households identified	374
Number of households surveyed	368
Number of absent households	2
Number of households that refused to participate in the survey	4
Number of Project-affected people	2114
Duration of the survey	2 months
Total size of the survey area (reservoir +100m)	1,540 ha

Source: *Étude socio-économique PAR, October 2018, Land Resources*

- It is important to note that a household may be both vulnerable and a major concern in terms of its PAPs.
- Missing PAPs were identified and their parcels delineated with the help of neighbors and community leaders.
- The number of residential buildings affected is smaller than the number of households affected because not all land occupants are based in the future impoundment area.

## 4.3 General Geographical Context

#### **4.3.1 Brief Description of the Project Area**

The Sahofika Hydropower Plant Project is located about 100 km away from the Malagasy capital Antananarivo, and about 40 km away from Antsirabe, accessible from National Road #7. The hydropower plant project consists in providing approximately 130 MW of power at low water, and will be interconnected to the Antananarivo and Antsirabe power grids. The dam and its entire associated infrastructure will be installed in the communes of Belanitra and Tsinjoarivo. The transmission line will follow the access road to Antanifotsy and will continue along RN7 to Antananarivo.

The dam and reservoir area covered by this RAP are located in the fokontany of Antenina, Befotaka, Antandrokomby and Ankazomena, straddling the communes of Belanitra and Tsinjoarivo.

The total population of these 4 fokontany is estimated at 5,760 people (source: INSTAT 2009, updated by projection in 2019), including 2,062 who are affected by the Project (36%)

The following maps present the location and description of the Project area.



Figure 4: Regional Location Map of the Project Area

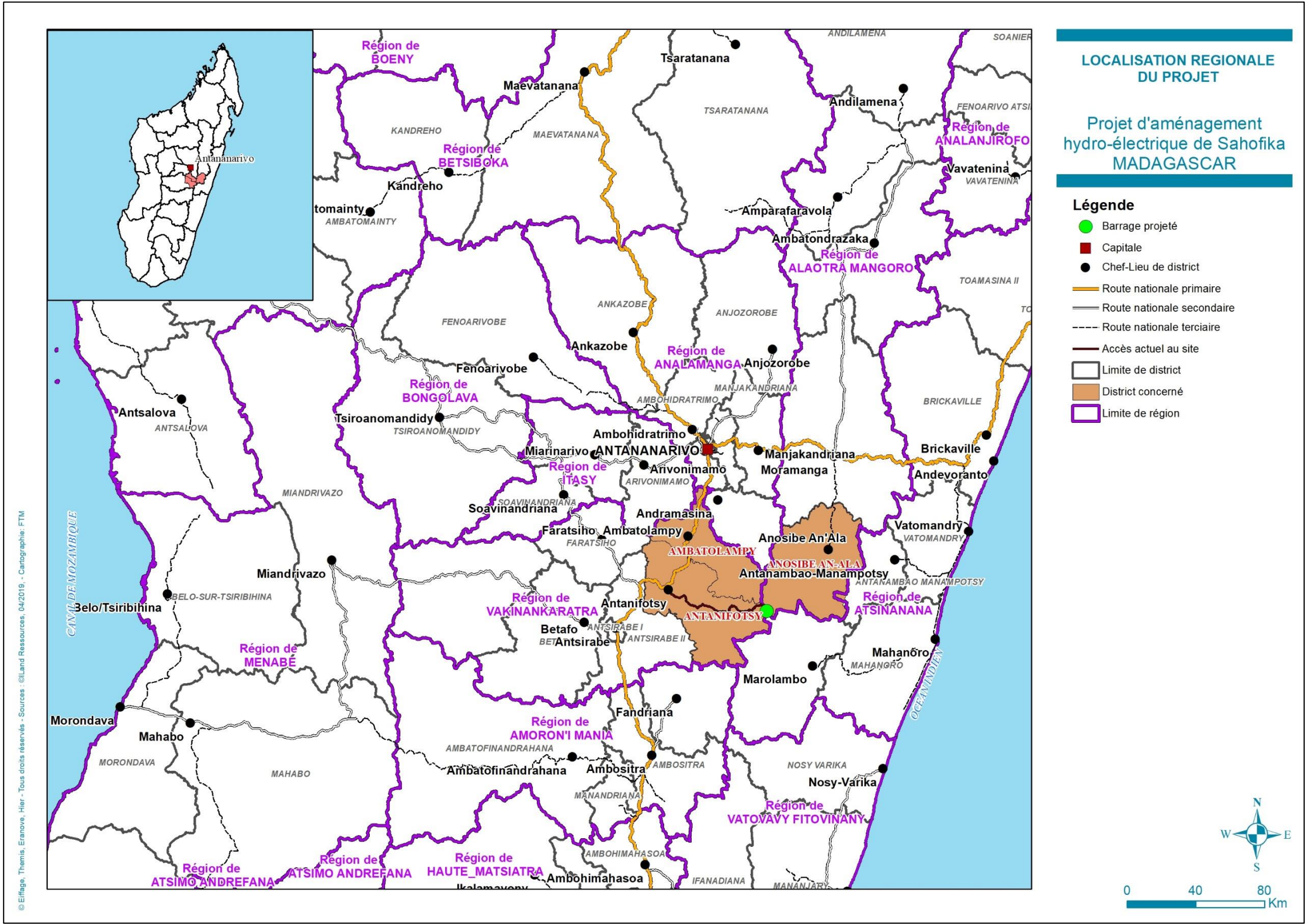
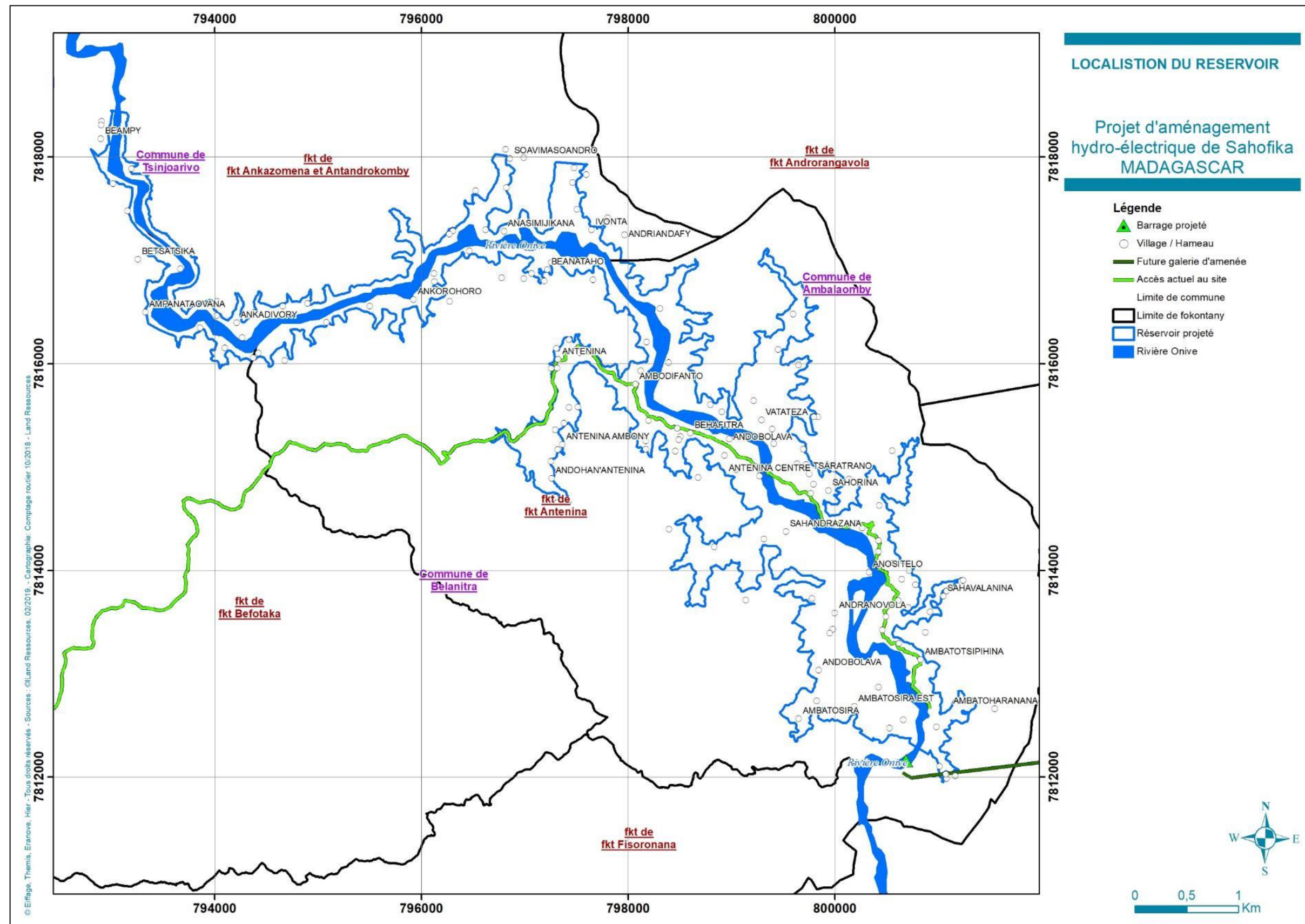




Figure 5: Map of the Reservoir Area



### 4.3.2 Administrative Structure

The RAP area covers two (2) districts in the Vakinankaratra region:

- **The district of Antanifotsy:** This district, one of 7 in the Vakinankaratra region, is located south of Antananarivo (80 km) and north-east of Antsirabe (40 km). It consists of 13 communes, including the commune **of Belanitra**. It is the most easterly commune in the Antanifotsy district and has ten (10) fokontany including the Antenina Fokontany, and Befotaka (Fokontany affected by the future impoundment). This commune is the most affected by the Project because it is where most of the future impoundment area is located.
- **The district of Ambatolampy:** It is composed of 18 communes, including the rural commune of Tsinjoarivo. The chief town of the commune is located about 1 h and 30 mn away from Ambatolampy (by car via an existing track in average condition) and about 1 h away from the commune of Belanitra (by motorcycle). The commune **of Tsinjoarivo** consists of fourteen (14) fokontany including Ankazomena and Antandrokomby (Fokontany affected by the future reservoir)

The table below shows the affected area by commune.

**Table 12: Administrative Entities Affected by this RAP**

Region	District	Commune	Fokontany	% affected in relation to the total surface area of the commune
VAKINANANKARATRA	ANTANIFOTSY	Belanitra	Antenina, Befotaka	3.5%
	AMBATOLAMPY	Tsinjoarivo	Ankazomena, Antandrokomby	0.2%

Source: FTM

### 4.3.3 Brief Geographical Description

The Onive River drains a basin of 3,200 km<sup>2</sup> and contributes to agricultural and economic activities in the area. The area from the reservoir to the Powerplant is crossed by this river which, along with its tributaries, forms small valleys where rice fields are generally concentrated.

The topographic sequence of land use in the reservoir and dam areas is as follows

- Presence of irrigated rice fields in the lowlands;
- Agricultural plots with boundaries that can be easily identified around dwellings and on the slopes using an aerial image;
- Presence of tavy (burnt crops) or fallow lands on the edge of the forest area
- Presence of natural forests on peaks (ridges) and slopes



**Figure 6: Topo-sequence Analysis of the Project Area**





### 4.3.4 History of the Population

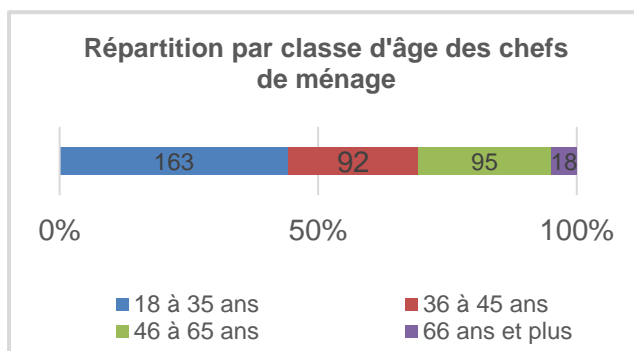
The area was unpopulated and was used mainly as grazing lands by the Betsimisaraka. Then, around 1947, a man named René, a Merina from Antsirabe arrived in the area to carry out gold exploration. With his two partners, he took up residence in the area and started bringing his family over. The descendants of these three people married amongst themselves and formed the Antenina fokontany.

The reservoir area currently consists of 24 villages and 127 hamlets. These people, who first came to the area as gold prospectors, grew in numbers over the years and started developing agricultural and other commercial activities around gold panning.

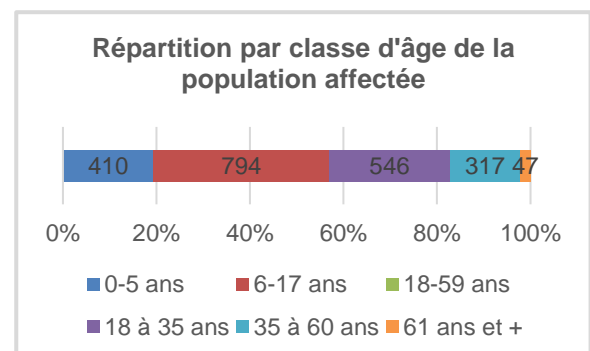
### 4.3.5 Population Structure

The social structure is based on kinship or lineage groups characterized by the prominent role of *Raimandreny* (dignitaries) and elders in decision-making. These groups are generally united by the same shrine, which is why some shrines are of considerable cultural importance in the Project area. The populations use the Malagasy dialect of the *highlands*, which is an official language.

The social structure of the current population reflects the same structure generally found in rural Madagascar: a household is composed of parents and their children, and sometimes grandparents living in the same household. “Wealthier” families may have helpers (people outside the family) living with them. A house can accommodate several families, usually siblings who stay in a family home with or without their parents.



**Figure 8: Distribution of heads of households by age category**



**Figure 7: Distribution of the affected population by age category**

## 4.4 Demographics

### 4.4.1 Household Size

The population is relatively young as 57% of it being under 18 years of age and 3% is over 60.

The average household size is **6 people**. The type of household in the study area is essentially characterized by the dominance of a “nuclear” type family (father, mother, and children). Almost 90% of household heads are male. The average age household heads is in the 18 to 35 age category (44%) and 5% of households are headed by people over 65.

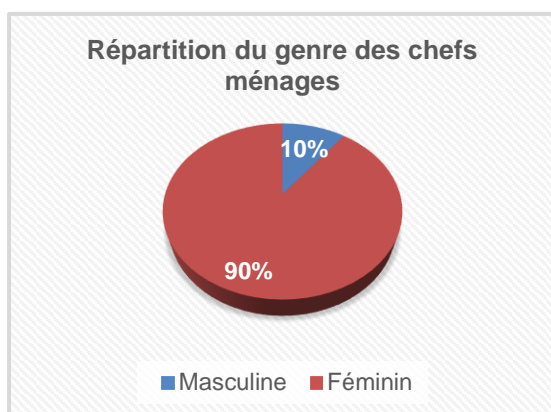
The average age of male heads of household is lower than that of women with a difference of 4.5 years. This gap is partly related to the various marital status of women (widowed, separated or

divorced and in a common-law union). The number of separated or divorced women is higher than that of men. Being married does not prevent a woman from running her own household; however, the proportion is small (7.2%) and concerns only married women who are traditionally married or in common-law partnership and whose men have migrated to other parts of the country, usually in search of work.

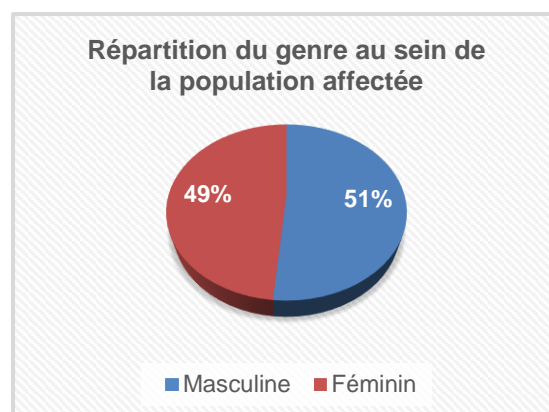
The proportion of single heads of household is very low (0.2%). This situation shows that a person only becomes head of the household when he or she is married and has a household. Similarly, in the study area, marriage is still at the heart of the family culture and model; the concept of family unit is generally based on marriage.

#### **4.4.2 Recent Trends**

Population trends were calculated on the basis of INSTAT data. It shows a population growth rate in 10 years averaging 43% in the entire project area.



**Figure 9 : Gender distribution of household heads**



**Figure 10 : Gender distribution of the affected population**

**Figure 11: Marital status of heads of households**

**Table 13: Population Trends and Density in the Communes of Tsinjoarivo and Belanitra**

Commune	Resident Population		Evolution in 10 years	Surface area	Density 2009	Projected Density 2019
	2009	2019 (projection)	2009-2019	km <sup>2</sup>	Hab./km <sup>2</sup> /km <sup>2</sup>	Hab./km <sup>2</sup> /km <sup>2</sup>
Tsinjoarivo	21,959	28,108	6,149	594	37	47
Belanitra	14,191	23,585	9,394	343	41	69
<b>Total</b>	<b>99,287</b>	<b>132,508</b>	<b>33,221</b>	<b>937</b>	<b>106</b>	<b>141</b>

Source: INSTAT 2009

#### 4.4.3 Ethnic Groups

The reservoir area is shared by the Merina and Betsimisaraka ethnic groups. The Betsimisaraka are in the minority and are located in the eastern part of the dam area and part of the right bank. The rest of the reservoir is occupied by the Merinas.

The “Merina” are generally located on the left bank of the Onive, on the side of the Vakinankaratra region; and the “Betsimisaraka”, occupy the right bank of the Onive, in the Alaotra Mangoro region (Nosibe An’Ala District).

#### 4.5 Economic Conditions of Affected Households

##### 4.5.1 Distribution of Heads of Household by Occupation

Agriculture is the main source of income for households (84.5% of households are dependent on the use of the land for their livelihoods) while gold panning is practiced by 7.6% of households.

These two activities can be combined throughout the year with other activities such as trade, small transportation and livestock.

The table below describes the main sources of household income based where they live.

**Table 14: Main Sources of Household Income Based on Location**

Activity	Antenina	Befotaka	Antandro-komby	Ankazo-mena	Outside the flood area	Total	%
Farmer	221	25	13	46	6	311	84.5
Fisherman	1	-	-	-	-	1	0.3
Carpenter	-	-	-	1	-	1	0.3
Mining operator	28	-	-	-	-	28	7.6
Trader	1	-	-	-	-	1	0.3
Breeder	1	--	-	1	-	2	0.5
Teacher	7	1	-	1	-	9	2.4
Others (security guard, driver, carrier...)	14	-	1	-	-	15	4.1
<b>Total</b>	<b>273</b>	<b>26</b>	<b>14</b>	<b>49</b>	<b>6</b>	<b>368</b>	

### 4.5.3 Type of Agriculture

#### 4.5.3.1 Crop Types

Figure 4 shows the topo-sequence of the small valleys; the area is mainly occupied by food crops:

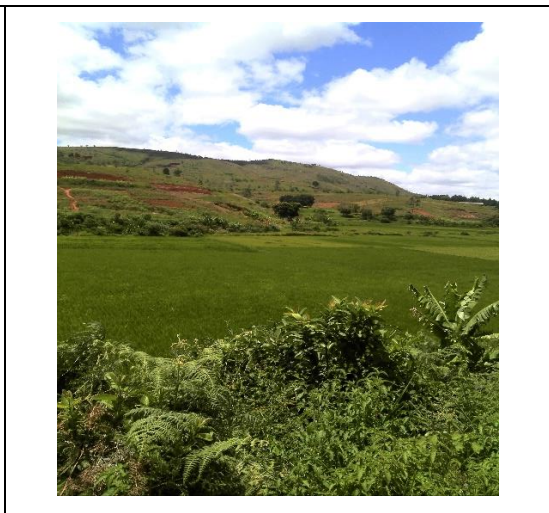
- **Lowlands:** Irrigated rice farming and off-season farming (beans, potatoes and various vegetables).
- **Down slope:** Market gardening and food crops (taro, maize, beans, peas, onions), cash crops (sugar cane; tobacco)
- **Slope :** Cultivation on Tavy of sweet potatoes, upland rice, maize, cassava

Fruit tree plantations are located around the houses and in the small valleys. Eucalyptus plantations are generally located on slopes. Banana, peach and eucalyptus trees are the most dominant.

**Photo 10: Growing and Planting around a House**



**Photo 11: Irrigated Rice Cultivation**



#### 4.5.3.2 Cropping Systems

Two (2) cropping methods are observed in the area: (i) *Tavy cultivation* (slash-and-burn, slope or tanety cultivation) and (ii) irrigated or Horaka cultivation.

The land is left in fallow for one (1) year. There is no longer any fallowing possibility on land left uncultivated for more than 5 years when there is shrub regeneration. It is also prohibited to clear forest areas again. VOIs may authorize the exploitation of a piece of land based on zoning (hard core, conservation area, controlled occupancy area, controlled use area) and usage rules. However, during the surveys, the members of the team observed recent clearings at the edge of primary forests, which explains the high rate of deforestation and non-compliance with the rules imposed by the VOIs.

#### Tavy Cropping

Slash-and-burn agriculture is practiced in humid tropical areas and in forest regions with accentuated relief, especially in the Alaotra Mangoro region, for the purpose of self-sufficiency in food. Tavy is a term that refers to this farming system that is characteristic of the forest areas of eastern Madagascar,



in which upland rice plays a predominant role. Tavy consists in clearing and burning an area of natural vegetation to cultivate it. This system is used near forests throughout the RAP area. The principle of the Tavy cropping system is as follows:

- Primary or secondary forest logging: (This type of forest is the most exposed to the practice of *Tavy*)
- Tilling: is an operation that consists in clearing, cutting, or cutting down vegetation before slash-and-burn.
- Tamaratsany: refers to both the plot that received a *Tavy* the previous year and the type of vegetation it supports, which consists of a grassy mat;
- Tramatrema: is the next stage (2 and 3 years after the *Tavy*). The vegetation is already much denser, with savannah formation and regrowth of trees and shrubs.

At the plot scale, the practice of *Tavy* results in the following chronological sequence:

### **Irrigated Farming**

Irrigation is commonly reserved for rice farming. Irrigated rice farming involves numerous operations. The soil is prepared in several stages:

- Plowing,
- Irrigation of the plot,
- Passage of a zebu-drawn harrow to prepare pricking out operations.
  - Rice is first sown in a nursery and transplanted about one (1) month after sowing.
  - Weeding is carried out around December, often with one (1) or two (2) weeding rounds followed by manual weeding.
  - The harvest takes place between March and April.
  - The straws are harvested and then threshed to obtain paddy rice.

### **4.5.4 Gold Panning**

Households generally engage in two or three activities: gold panning for half the year before turning to agriculture during the farming season.

Gold panning along the Onive River mainly concerns the RAP areas as well as other fokontany such as Belanitra, Ankadivory, Fisoronana, Ambohitampoina, Tsinjoarivo, Befotaka, Faravohitra (Mandroalina). 28 mining operators/workers have been listed in the reservoir area.

Gold panning is also practiced in dry areas (mining land) which can be in small valleys as well as in hills.

Day laborers are mainly young unemployed people, who work on a daily basis for large or small farmers. They earn MGA 4,000/day for a ten-hour working day. Products from these areas are destined for the local markets of Befotaka and Ambohitampoina.

**Photo 12: A gold panning couple on the Onive River**



**Photo 13: Mining Land in Antenina**



#### **4.5.5 Other Income-generating Activities**

Other service-related activities such as running small shops (small restaurants, grocery stores) are practiced largely thanks to the influx of people caused by gold panning activities and the considerable presence of rum transporters which are beneficial to small restaurants.

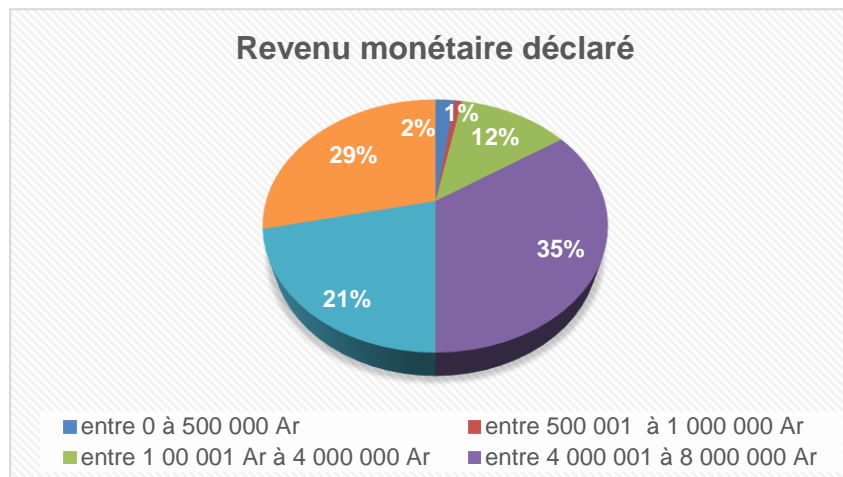
Very few households are involved in livestock farming or fishing. In total, 16% of the households surveyed say they do not practice agriculture as their main activity. These types of activities are presented in Table 14 above.

#### **4.5.6 Migration**

The inhabitants are mostly natives to the region and consider their territory as the land of their ancestors. Temporary migrants are present in the area at various stages of the gold panning season. They generally come from neighboring communes and move around in search of potential gold-bearing areas.

The prospect of finding employment encourages people in the project area to leave their villages to look for other opportunities, usually in the chief towns. Most of these migrants are men. Some children move to cities after completing their middle school education; 25 students who do not permanently reside in their villages have been listed.

#### 4.5.7 Monetary Income



The average annual monetary income reported by the PAPs is USD 2,000. This amount does not reflect reality if we compare this level of income to other social indicators such as the observed overall standard of living, access to basic health facilities, the quality and standard with which houses are built and levels of education.

Under- or overstated income tax returns are common in

this type of socio-economic study. People living in rural areas do not have any accounting culture and lack the ability to assess their income, which is irregular and generally comes from several sources.

Since women are generally occupied by household chores, it is men who engage in income-generating activities in the household. However, women contribute a small proportion to agricultural activities and gold panning depending on the season. Women mentioned that they have economic control over farms (crop management), but it is their husbands who have control over financial aspects. However, it is possible to use the term co-management of financial resources because women have a say in the overall household portfolio.

#### 4.5.8 Food Security

The area is characterized by the primacy of agriculture for self-consumption. Generally, people eat rice only in the morning and evening (whereas across the country rice is usually consumed three times a day), and is replaced by cassava, sweet potato or taro for lunch. People in the area import food from Belanitra or Tsinjoarivo, since farmers tend to abandon agriculture in favor of gold panning.

Food security in rural areas is based on agriculture and the use of natural resources. Lost access to land and natural resources will lead to a disruption of agricultural and other income-generating activities, specifically for a certain period of time. The populations will be supported by transitional support programs such as the provision of daily food rations and improved agricultural activities. During the implementation of the activities, the PAPs will be sensitized and supported to avoid dependence on the Project and transitional support.

#### 4.5.9 Gender

Daily life in the study area is based on agriculture. As the table below shows, women spend very little time on agricultural work and take care of household chores. During the agricultural season, women work about two to three times a week in the rice fields.

During non-agricultural seasons, women are engaged in gold panning activities with their husbands.

**Table 15 - Basic Daily Life Schedule**

Sex	4:00		8:00	12:00	02:00	04:00	05:00	07:00
	Morning		During the day		Afternoon		Evening	
During the agricultural season								
Man	Wake up		Work in rice fields	Lunch break	Work in rice fields		Dinner	Sleep
Woman	Wake up	Breakfast preparation	Work in rice fields.  Lunch preparation	Lunch break	Household chores  Work in the rice fields.	Dinner preparation	Dinner	Sleep
Outside the agricultural season								
Man	Wake up		Gold panning	Lunch break	Work in upland fields / Gold panning		Dinner	Sleep
Woman	Wake up	Breakfast preparation	Gold mining	Lunch break	Household chores Gold panning	Household chores	Dinner	Sleep

Overall, men and women participate in household income-generating activities, it is the proportion that makes the difference, since women are traditionally responsible for household chores or for looking after children..

Women are mainly involved in upland crops such as beans, maize and vegetables and in firewood collection.

Men are responsible for activities requiring significant physical effort such as plowing the land while women participate in pricking out and harvesting.

## 4.6 The Land System

### 4.6.1 Land Tenure Situation in the Project Area

All the lands affected by the project are part of the public domain. Therefore, all landholdings are de facto occupations, without formal property rights. There are various forms of land use:

- Land owner: non-formal but recognized by society
- Free occupation (beneficial owners): people occupy land belonging to another household for free until the latter claims it (this can be for years)..
- Tenant farmers: in a minority
- Landless farmers: these people generally focus on gold panning or trading

In protected areas, land use is authorized through community organizations called VOI (Vondron'olona Ifotony). Lands are then recorded in the fokontany. Several households have already started land title application procedures with the public district of Ambatolampy, but land these applications have been rejected due to the lands' proximity to protected areas.

The regional land service is based in Ambatolampy. There are communal land offices in the communes of Tsinjoarivo and Belanitra. The latter is no longer functional. These offices make it possible to initiate legal procedures for the recognition of occupancy rights through the issuance of Land Certificates (CF).

To limit the risk of land conflicts during resettlement, crop plots are delineated jointly by the occupant and their neighbor.

No major social and land conflicts were reported during the studies, but tensions may arise, especially with the displacement of populations looking for opportunities associated with the construction phase. Land searches for PAPs choosing cash compensation may occur. There could be land searches for PAPs opting for cash compensation. These tensions may be caused by difficulties in finding land and disregard for social organizations in host areas. The support measures proposed in the implementation of this RAP should help them overcome these challenges.

### 4.6.2 Land Tenure Patterns and Consequences in Terms of Vulnerability

Access to land is generally through inheritance or donation. Other forms have developed: (i) free occupation (for a short or long period, without any compensation whatsoever, whether in kind or in cash) and (ii) sharecropping (in-kind compensation for part of the production). The majority of landowners have been occupying lands for more than 10 years.

The main source of these forms of tenure is the lack of family land to support households and to be able to use their full potential in terms of work capacity. Of the 368 households surveyed, 296 are homeowners, 29 of them women and 267 men.

Ten households reside outside the flood area, but engage in economic activities in the area; 52 households are beneficial owners (free occupants) including 5 women and 47 men.

Three heads of household practice sharecropping. Sharecropping on a plot of land to grow annual crops generally lasts two years or more. The harvest is shared at a ratio of 1/3 for the farmer and 2/3 for the landowner.

Tenant farmers and beneficial owners will lose their means of production and will be particularly vulnerable economically.

## 4.7 Access to Basic Services

#### 4.7.1 Access to Water

Only 7 households have a traditional well. The rest uses spring water (mountain water or water in small valleys)

#### 4.7.2 Energy

Apart from and in addition to wood, some households use other energy sources, such as solar panels, cells or batteries, which are the main sources of energy in addition to wood.

**Table 16: Energy Sources Used by Households**

Source	Number of Households	%
Wood	368	100
Oil	20	5,4
Other type of combustible energy	3	0,8
Candle	2	0,5
Solar energy	81	22,0
Batteries	59	16,0
Cells	39	10,6
Electricity provided by a generator	4	1,1
<b>Total number of households surveyed</b>	<b>368</b>	<b>100</b>

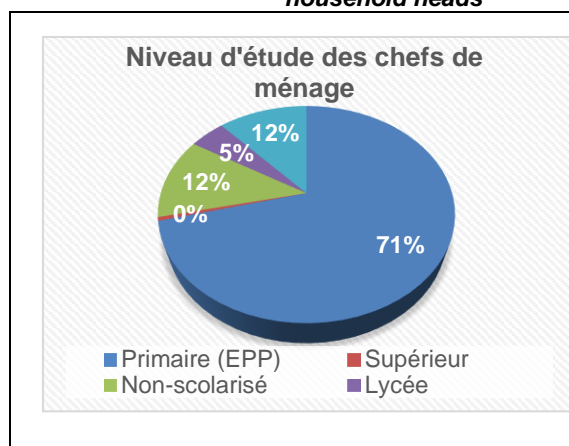
Source: Étude socio-économique PAR, October 2018, Land Resources

#### 4.7.3 Liquid and Solid Sanitation

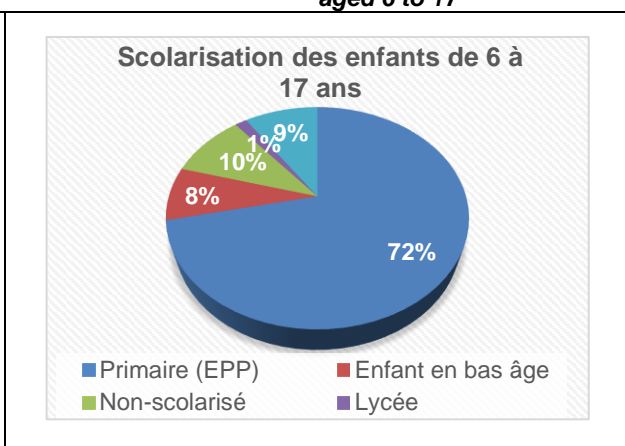
The hygiene and sanitation conditions in the affected area are still far from satisfactory. Only thirty-four (34) traditional latrines were inventoried during the socio-economic studies. This information reflects poor practices and non-compliance with hygiene and sanitation rules. Most people wash in the river or behind houses.

#### 4.7.4 Literacy and Training Level

**Figure 12: Education level of household heads**



**Figure 13: School enrolment of children aged 6 to 17**



The education level of heads of household is low, 71% dropping out of school at the primary level. Twelve percent (12%) of them are illiterate. This situation makes them vulnerable and can impede their understanding and ownership of all resettlement measures, as has already been observed during surveys, during which numerous households have had difficulty answering questions such as those related to the assessment of their income and to perspectives (opinions) on their resettlement.

Children's current enrolment rate reflects that of the heads of households. Increased and more sustainable follow-up and support is to be provided for these children in order to improve their level and the prospects of their society.

#### **4.7.5 Transportation**

The Project area is accessible via RN7 (asphalt road) all the way to Antanifotsy, which is a track in poor condition accessible by 4x4 vehicles or by a truck that connects the city of Antanifotsy to the commune of Belanitra. From Belanitra it is possible to reach the village of Antenina by motorcycle.

The means of transport used in the Project area include motorcycles, bicycles, and bareback porters and boats (on the Onive River).

The main reasons for the resettlement are as follows:

- Travel to surrounding areas for to take care of household chores: collection of water, wood and basic necessities,
- Travel to sell agricultural products and work in the fields,
- Travel to access basic infrastructure: hospitals, schools, municipal markets.
- The landlocked nature of the area is one of the main difficulties that make some areas totally isolated, especially on the right bank. Action must be taken to implement the project to avoid aggravating the situation when the reservoir is created.

The track must be renovated/created before resettlement to facilitate relocation. However, the Project should plan backpack transportation to reach inaccessible villages.

#### **4.7.6 Administration**

Territorial administrative management is the preserve of the Fokontany Chiefs. The Fokontany are made up of villages / hamlets or districts. Mobile districts work with the Fokontany Chiefs and organize village vigilance and security committees.

In addition, each village has its own elders or "Raiamandreny". They are responsible for upholding and perpetuating local traditions such as ritual ceremonies, traditional rules, giving advice and being consulted for the resolution of family or community conflicts. Affected households report participating in various community activities including meetings and dinas<sup>3</sup>.

#### **4.7.7 Health**

Access to health care is very limited and basic health centers are only available in chief towns. There is no health infrastructure in the area, with the exception of a privately managed medical store located in Befotaka. This facility will not be flooded. The nearest basic health center (CSB) is located in the communes of Tsinjoarivo and Belanitra a there is a district hospital center in Antanifotsy. People also use traditional medicine through healers and medicinal plants.

### **4.8 Local Socio-Political Aspects**

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<sup>3</sup> Customary agreements between villagers



#### 4.8.1 Social Organization

Elderly people play several roles at various levels: at the socio-cultural level, for example, they play a crucial role in introducing young people to local practices (slaughtering zebus, marriage proposal, speeches, rites, etc.). They also play an important role in decision-making processes.

The levels of responsibility in the villages, in increasing order, based on the importance of the cases to be treated, are as follows:

1. Elders, village chiefs and mobile neighborhoods, religious leaders (Catechist, Pastor)
2. Fokontany Chief
3. The Mayor
4. The District Chief

Women actively participate in community discussions and decision-making. All decisions related to the community are made during village meetings led by the village chiefs or the Fokontany Chief.

#### 4.8.2 Social Conflicts

The main sources of conflicts identified are as follows:

- Conjugal conflict: existence of legally married couples in the process of getting divorced (i. e. division of property). These couples do not agree on how to distribute compensation resulting from the resettlement process;
- Succession and inheritance conflicts between siblings (absence of a will or documents distributing inheritance);
- Adjacent boundary conflicts between neighbors: agricultural land and residential land.

In general, conflicts are first managed amicably between parents, then at the hamlet level and with the Fokontany Chief. Elders or religious leaders are involved if the conflict is not resolved at this stage. If the conflict persists, the parties will call request the intervention of the commune, the police forces and end up in court.

#### 4.8.3 VOI and Other Community Organizations

The Vondron'olona Ifotony (VOI) or grassroots community (in the fokontany) contributes to the local conservation of natural resources by raising awareness among villagers. The VOI coordinates actions, controls access to forest resources and issues prohibitions on the use of resources. This organization will be important during resettlement to maintain the sustainability of nearby forest resources.

### 4.9 Cultural and Religious Aspects

#### 4.9.1 Religions, religious buildings

- Three churches have been identified in the area. The majority of the villagers are Christians: 80% are Catholic and the remaining 20% consist of Protestant and Reformed churches.
- There are six (6) places of worship called *Doany*. Some of them such as those near Antenina Ambony (Left Bank) are half abandoned.
- Seven (7) shrines have been listed in the area

A detailed description of these buildings is available in the Social and Environmental Impact Assessment (ESIA) report, Heritage section.



#### **4.9.2 Cultural Practices and Related Sites**

The populations of Antenina belong to the Merina group (the Madagascar Highlands group), while the populations of the lowlands at the bottom of the escarpment, like the population of the island's eastern plain, belong to the Betsimisaraka group. Both groups belong to Austronesian cultures and are actually community groups rather than homogeneous ethnic groups. While they share common cultural characteristics, the two groups differ in a number of respects, including habitat (brick houses for the Merina, often with one floor, houses made of plant materials for the Betsimisaraka), the type of agriculture practiced and traditional land management.

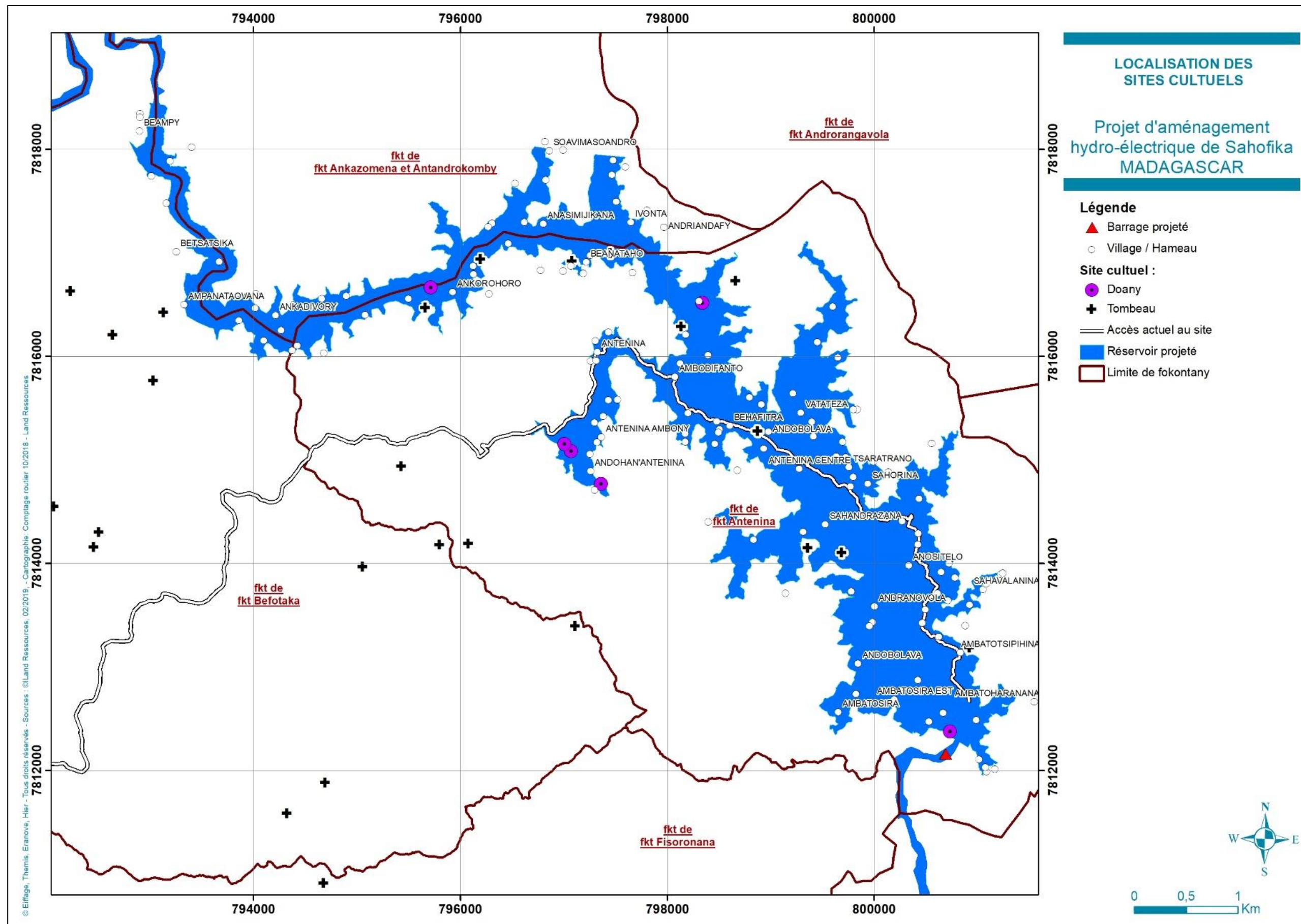
However, for both groups, the tombs of lineage leaders are essential cultural points of reference for all the people belonging to these lineages. Some traditional practices, which are characterized by sacred sites (Doany and the Sacred Stone), are still prevalent in the Project area, although villagers tend to gradually abandon traditional rituals and restrict themselves to Christian rites. However, moving these cultural sites will require an important ritual in the eyes of practitioners.

Famadihana (reversal of the dead) is one of the most important ceremonies for villagers. Relocating tombs to the resettlement site will also need to be organized.

These two rituals cannot be performed at the same time during the resettlement process. Therefore, the relocation process will need to be timed in close collaboration with the affected community to avoid any potentially harmful cultural implications. It should be noted that the proposed resettlement site (Fisoranana) is located in the Merina area (highlands) as is the village affected by the dam and reservoir (Antenina). Therefore, there is no cultural incompatibility, which has already been confirmed by the two communities during consultations prior to the resettlement site being decided upon and again in June 2019.

The following map shows the location of the cultural sites.

Figure 14: Worship Places Location Map



## 4.10 Wishes and Concerns Regarding Resettlement

Cultural property is of paramount importance to its holders. Their displacement must therefore respect appropriate traditional rites as described below.

With respect to bone transfers, families want arrangements to be made to avoid families sharing the same grave being dispersed.

During the resettlement process, the assistance of an anthropologist is required to help families make unanimous, fair and equitable decisions to maintain their solidarity and family ties, beyond the resettlement process.

### 4.10.1 Procedures for Property Transfer

Transfers of religious assets must be made in accordance with local customs and traditions, which may vary from one family to another, from one religion to another, from one village to another and, of course, from one ethnic group to another. It is therefore recommended to consult heads of families, as well as moral and religious authorities.

#### 1) For religious assets belonging to Christian churches:

- Consider administrative aspects (especially for FFKM member churches based in Antananarivo). It is indeed necessary to have the approval of the religious authorities in the Capital before transferring these assets. Some decisions cannot be made locally.
- Work in close collaboration with the members of the local Church and, in particular, with the first person in charge at the village, commune and district level.

#### 2) For Doany-type religious assets:

- Three families who are responsible for safeguarding the 6 *Doany* are located in the impoundment area. Each *Doany* has its own specificity in terms of rituals and procedures, which are generally dependent on astrological dates. However, the rituals are generally the same: sacrificing zebus (the number may vary according to the number / type of spirits in the Doany), supplying local alcohol, and money for traditional leaders.
- It is also necessary to provide a site for the relocation of these types of *Doany* based on the traditions to be respected and, in particular, in accordance with the needs and demands of the spirits. In Tromba (Trance), it is the Spirit who inhabits the place who chooses his new site, but negotiations with the Spirit are possible subject to the sacrifice of zebus and libations.

## 4.11 Practical Implications for the Resettlement Process

1. **Agricultural economy:** losses related to agricultural activities will have a major impact on PAPs' standards of living since agriculture is the main source of income. Agricultural sites must be developed on the resettlement site.
2. **Low level of education:** This is an indicator of vulnerability in relation to the resettlement process. Households with a low level of education are unlikely to fully benefit from the proposed development opportunities other than by engaging in low-skilled jobs during the construction phase. It is also necessary to take steps to make it easier to understand the resettlement process, such as calculation methods, resettlement conditions, etc. Malagasy version of this document is to be planned.
3. **Vulnerability - concerns:** PAPs are concerned about the timing of the resettlement process and how they will be compensated. Preferences regarding resettlement locations are unclear and demonstrate the PAPs' uncertainty about the process.
4. **Poverty and lack of education:** Although people are free to decide on the compensation arrangements they prefer, the Project will make an effort to raise the PAPs' awareness about financial management and the value of in-kind compensations.
5. **Cultural dimensions:** this is a fundamental aspect of the resettlement process that requires special consideration. Local rituals and traditions will be respected throughout the Project phase.

### Conclusions :

- a. The Project will provide replacement agricultural lands and houses. The PAPs' living conditions will be improved through the availability of community infrastructure.
- b. The Project will implement awareness-raising measures to help PAPs understand the proposed options, to avoid them systematically choosing monetary compensation. Migration to cities that would be risky, especially for women, should be avoided as much as possible. Information sessions should be organized in several stages so that each household has time to absorb all the information and proposed measures.
- c. The Project will establish payment systems that promote effective management and security of cash compensations. PAPs will be assisted in opening bank accounts. A system of payment by installments will make it possible to make good use of compensation payments and facilitate monitoring.
- d. Social and psycho-social support will be provided to reduce the impact of the resettlement operations on social cohesion, before and during the resettlement process.

- e. The Project will take into consideration the importance of local cultures and various traditions. PAPs' satisfaction with the measures taken will facilitate the resettlement process and the social integration of the Project. Observance of rituals in the relocation of religious assets is of paramount importance.
- f. Assistance will be provided to vulnerable people. This may include special training, financial and technical support or financial compensation.
- g. Support such as food rations will be provided for a six-month transitional period, during which replacement farmlands will not be productive. This will include awareness-raising activities to avoid dependency syndromes.
- h. Restoring and improving agricultural activities must be one of the Project's priorities

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## **5 BENCHMARKING OF NATIONAL RESETTLEMENT PRACTICES AND ANALYSIS OF DIFFERENCES BETWEEN MALAGASY LEGISLATION AND INTERNATIONAL STANDARDS**

## 5.1 Benchmarking of Resettlement Practices in Madagascar

### 5.1.1 RAPs Consulted and Analyzed

To conduct the Benchmarking analysis, six (06) RAP documents were collected:

1. The resettlement action plan for the implementation of the QMM mining project in Fort-Dauphin of March 2005
2. Amendments to the resettlement action plan for the implementation of the QMM mining project in Fort-Dauphin, July 2007
3. The resettlement plan for the Integrated Urban Development and Resilience Project known as PRODUIR, dated April 2018.
4. The RAP for the Ankarefo landfill site project, Tolagnaro, February 2008
5. The resettlement policy framework for the electricity sector governance and operations improvement project, December 2015
6. Population resettlement policy framework for the Emergency Support for Education for All Project (PAUET), November 2015

Two of the 6 RAP documents collected were selected for benchmarking: the resettlement plan for the implementation of the QMM mining project in Fort-Dauphin of March 2005, amended in July 2007, and the resettlement plan for the Integrated Urban Development and Resilience Project known as PRODUIR, dated April 2018.

**RAP 1-** The RAP of the QMM implementation project was selected because it presents a similarity in profile both with respect to the typology of the people affected by the Project and with respect to the characteristics of the PAPs' land requirements and resettlement activities.

This QMM document presents a rational approach and closely matches RAP presentation standards. The number of individuals impacted in a rural area totaled 988. The agricultural area expected to be affected is 220 ha. The method used to assess the significance of the impacts of the changes on the PAPs is straightforward and logical and reflects the actual situation. A well-defined formula for calculating the compensation cost is included. Some specific information is also provided for lost land compensation. There are detailed measures to support the PAPs, with compelling technical arguments.

**RAP 2-** The second RAP document selected is the Integrated Urban Development and Resilience Project known as PRODUIR, dated April 2018. While this project is implemented in an urban environment, the technical information on PAP resettlement can be transposed to a Project being implemented in a rural setting such as the Sahofika Project. The Project consists in the rehabilitation of the C3 canal to improve rainwater drainage at the heart of three districts of Antananarivo and (ii) dike reinforcement on two rivers, the Ikopa and the Sisaony, to counter river



flooding in the plain of the Malagasy capital. The Project's focus areas cover 30 km<sup>2</sup>, including the 1<sup>st</sup>, 4<sup>th</sup> and 6<sup>th</sup> districts of the Antananarivo Urban Commune (AUC), mainly the districts of the Antananarivo South Plain and 3 peripheral communes: Bemasoandro, Andranonahoatra and Ampitatafika. It is also very recent and therefore presents more up-to-date information and data.

To conduct the comparative analysis, all the documents collected were consulted to feed into the reflection process.

### **5.1.2 Comparative Analysis of RAP Documents**

This analysis aims to highlight the following:

- Land acquisition process;
- Compensation arrangements (cash or in-kind compensation);
- Selection and development of resettlement sites and housing;
- Consultation and representation arrangements (resettlement committees or other);
- Participation of government and local authorities;

The full comparative analysis is included in the appendix to this report.

### **5.1.3 Relevant Recommendations for the Sahofika Project Resettlement Process**

- **Concerning the land acquisition process for the implementation of the project**
  - The use of the DUP makes it possible to enforce constitutional provisions on the protection of individual property rights (Art. 34 of the Constitution: only the public interest justification which may result in the deprivation of property rights in exchange for compensation).
  - One of the problems faced in the implementation of the expropriation procedure in the public interest is the relevance of the project if it really meets this public interest requirement".
  - Thus, the assessment and explanation of the public interest nature of the Project must be taken into consideration as one of the important elements that should be included in the RAP.
  - The DUP is only applied as a last resort. Amicable negotiations are therefore recommended for this RAP.
  - A more detailed procedure is proposed in the subsection on the gap analysis between Malagasy law and IFC and AfDB standards.
- **Regarding compensation arrangements:**
  - The options for cash and in-kind compensation should be proposed, while stressing the advantages and interests of in-kind compensation so that PAPs can make their choice

in an informed manner.

- Price indexes must consider local and national market prices. The relocation committee can play a role in validating price indexes if prices are not available.
- **Regarding the selection and development of resettlement sites and habitat:**
  - For people choosing their own resettlement site, the communes should be involved in accompanying the PAPs in field research and in facilitating procurement procedures. The latter have knowledge of their commune's land reserves and can facilitate the identification process with the land registry services.
  - In-kind replacement of lands and buildings will be given priority over cash compensations.
- **Regarding the participation of the government and local authorities in the RAP process:**
  - The involvement of the State and decentralized territorial communities in the implementation of the RAP is effective to the extent that their representatives work selflessly and protect the public interest effectively.
  - In mining areas such as Taolagnaro, experience shows that once local administrative authorities, civil servants and politicians act mainly in their own self-interest, the resettlement process is always doomed to failure and it is always the company promoting the project that has to bear the brunt of such practices.
  - To avoid these practices, it is necessary to sign a commitment and transparency charter. Civil society involvement is also recommended to support people in defending their land rights. The involvement of the anti-corruption body from upstream to downstream of the process also seems necessary. Building the capacity of the association of people assigned to the project is also a positive approach.
  - It is strongly recommended to establish a resettlement committee whose TORs should be clear and validated by the ministry responsible for the Project.

## **5.2 Analysis of the Differences between Malagasy Law and the IFC and AfDB Resettlement Standards**

### **5.2.1 Table Analyzing Gaps in Malagasy Law and Recommendations**

The table below lists the various directives issued by PS5 and the AfDB's OS2 and analyzes gaps in relation to Malagasy law. When deficiencies are identified, recommendations are proposed in the last column.

**Table 17: Guidelines of PS5 and OS2 of the AfDB and Gap Analysis in Relation to Malagasy Law**

Guidelines and Requirements	Malagasy Law	PS5 and AfDB's OS2 Requirements and Guidelines	Identified Gap	Recommendations for the RAP
Eligibility for compensation	<ul style="list-style-type: none"> <li>People whose rights are recognized by proof of ownership: land certificate and land title;</li> <li>Land occupations without proof of ownership of the status of untitled private land ownership. Here, the occupants are legally presumed owners;</li> <li>Intransigence of the law against illegal private land occupants and unauthorized occupations of public property.</li> </ul>	<ul style="list-style-type: none"> <li>People who have formal legal rights to the land or property they occupy or use;</li> <li>People who do not have formal legal rights to land or property, but have a claim to land that is or may be recognized by national law</li> <li>People who have no legal rights or claims that could be recognized on the land or property they occupy or use.</li> <li>Assets not related to land should be kept, replaced or compensated for, whether these people are resettled with security of tenure and whether they are paid compensation for the loss of their livelihoods.</li> </ul>	<ul style="list-style-type: none"> <li>Malagasy law does not address people who do not have a legal right to land</li> <li>Land use-related livelihood activities are not covered by Malagasy law</li> </ul>	<ul style="list-style-type: none"> <li>Follow the AfDB policy and PS5 which are more stringent regarding people and losses eligible for asset loss compensation</li> </ul>
Eligibility cut-off date	<ul style="list-style-type: none"> <li>The date on which the administrative evaluation committee closes the evaluation is generally a month from the date on which the survey notice is posted, filed at the district and commune levels; in practice, it corresponds to the date on which the census conducted by the CAE ends.</li> </ul>	<ul style="list-style-type: none"> <li>PS5 paragraph 12: <i>In the absence of host government procedures, the client will establish a cut-off date for eligibility. Information regarding the cut-off date will be well documented and disseminated throughout the project area.</i></li> </ul>	<ul style="list-style-type: none"> <li>No gaps identified but in practice, these two evaluations take place over different periods of time. The evaluation date with more stringent criteria is considered as the cut-off date.</li> </ul>	<ul style="list-style-type: none"> <li>Consider the census date as the cut-off date</li> <li>In the case of a DUP, consider a one-month time limit after the publication of the expropriation order or the announcement of the results of the assessments to be taken into account.</li> </ul>
Eligibility and compensation terms and conditions	<ul style="list-style-type: none"> <li>Real estate properties or real estate rights. Art. 1 to 12 of Ordinance No. 62-023</li> <li>Financial compensation (eviction or expropriation). Articles 17 to 48. N°62-023</li> <li>Fair compensation paid prior to</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for lost assets (building, crop and land) at full replacement cost,</li> <li>Payment of other assistance to improve or, at least, restore their standards of living or livelihood</li> <li>Compensation for structures and</li> </ul>	<ul style="list-style-type: none"> <li>Malagasy law promotes monetary compensation and is limited to compensation for land and its dependencies</li> <li>Calculated compensation based on the current value of the</li> </ul>	<ul style="list-style-type: none"> <li>Avoid monetary payments, comply with the PS5 and OS2 guidelines for eligibility and compensation arrangements.</li> </ul>

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Guidelines and Requirements	Malagasy Law	PS5 and AfDB's OS2 Requirements and Guidelines	Identified Gap	Recommendations for the RAP
	<p>displacement travel. Fair means that the compensation makes it possible to repair the entire prejudice.</p> <ul style="list-style-type: none"> <li>In the event of expropriation for public utility reasons, "expropriation compensation is in principle determined in cash". Any other contractual compensation may be accepted.</li> </ul>	<p>crops paid to informal owners without ownership rights.</p> <ul style="list-style-type: none"> <li>Support for the restoration of livelihoods</li> <li>Support for vulnerable people</li> <li>Payment before their actual relocation, before the takeover of land and related assets, or before the start of the project's activities when the project is implemented in several phases.</li> <li>Recommendation of in-kind compensation</li> </ul>	<p>asset, whereas for PS5, the asset must be assessed at the full replacement value based on its current market price.</p>	
Participation and consultation	<ul style="list-style-type: none"> <li>Public consultation organized to validate and complete the identification of lands and their owners carried out during the Commodo Incommodo survey.</li> <li>The administrative survey is preceded by a notification and filing procedure</li> <li>Once the assessment process has been validated by the Minister of Finance, the households concerned are notified in order to announce compensation payments (Art 17)</li> </ul>	<ul style="list-style-type: none"> <li>Public consultation to publicize the various options available to affected people and to gather their opinions and suggestions,</li> <li>Interaction through a stakeholder engagement process during all the relocation stages (restoration of livelihoods, payment of compensation, monitoring and evaluation)</li> <li>Implementation of a complaints management system</li> </ul>	<ul style="list-style-type: none"> <li>For Malagasy law, PAP consultation is limited to public consultation and inventories</li> </ul>	<ul style="list-style-type: none"> <li>Follow the guidelines of PS5 and OS2 for effective participation and consultation of PAPs throughout the RAP process</li> <li>The consultation process should allow women to express their views and ensure that their interests are taken into account in all aspects of the planning and implementation of the resettlement process</li> </ul>
Data collection requirements and impact assessment	<ul style="list-style-type: none"> <li>Public consultation to validate and complete identification through the commodo and incommodo survey</li> <li>Inventory of assets by members of an administrative evaluation committee</li> </ul>	<ul style="list-style-type: none"> <li>Public consultation to validate and complete preliminary identification</li> <li>Basic socio-economic study to understand the characteristics of the livelihoods of the people concerned and to identify the people affected.</li> </ul>	<ul style="list-style-type: none"> <li>Malagasy law only covers the identification of heads of households and asset inventories and does not carry out a basic socio-economic study of the affected population</li> </ul>	<ul style="list-style-type: none"> <li>A baseline socio-economic study was carried out as part of the preparation of this RAP, in accordance with international standards</li> </ul>
Vulnerable individuals and groups	<ul style="list-style-type: none"> <li>The Malagasy legislation has no special provisions for vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>Recognizing that the effects of resettlement may be greater on</li> </ul>	<ul style="list-style-type: none"> <li>Malagasy legislation has no special provisions for</li> </ul>	<ul style="list-style-type: none"> <li>Identification and support of vulnerable persons during</li> </ul>

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Guidelines and Requirements	Malagasy Law	PS5 and AfDB's OS2 Requirements and Guidelines	Identified Gap	Recommendations for the RAP
	groups	vulnerable people and that this may result in their impoverishment, the IFC requires the proponent to take the needs of these groups into consideration by taking technical, financial and in-kind measures to support them through the various phases of the process.	vulnerable groups.	the physical resettlement phase and during the various phases of the project, according to their level of vulnerability
Restoration of livelihoods	<ul style="list-style-type: none"> <li>There is no provision for the restoration of the livelihoods of the population affected.</li> </ul>	<ul style="list-style-type: none"> <li>Requirement to put in place a livelihood restoration plan for eligible people: people who have suffered restrictions on land use, commercial structures, the owner of the business concerned</li> </ul>	<ul style="list-style-type: none"> <li>Malagasy law has no provisions related to the restoration of livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>Adopt the relevant PS5 and AfDB guidelines for international good practices</li> </ul>
Monitoring and evaluation	<ul style="list-style-type: none"> <li>The MECIE decree imposes a monitoring and evaluation mechanism through the various reports mentioned in the environmental impact assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Regular monitoring and verification of completion with specific indicators such as physical resettlement progress, complaints and livelihood restoration efforts) and any necessary adjustments</li> <li>Organization of independent assessment to determine compliance and restoration of livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>Gap identified in terms of the extent and frequency of monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Adopt the relevant PS5 and AfDB guidelines</li> <li>Establish a monitoring and evaluation system</li> </ul>
Complaint management	<ul style="list-style-type: none"> <li>The implementation of a complaints management process is required by any project subject to the MECIE decree</li> <li>A complaints file must be submitted for this purpose in the various Fokontany offices affected by the Project</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of a complaints management system to report concerns and complaints related to the resettlement process and compensation.</li> <li>The mechanism must not prevent the search for judicial or administrative remedies.</li> <li>The complaints management mechanism should be widely communicated to stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>No formalization of the complaints management process with the various appeal levels</li> <li>Limited communication and disclosure of the complaints management process to PAPs</li> </ul>	<ul style="list-style-type: none"> <li>Adopt the relevant PS5 and AfDB guidelines</li> <li>Integrate the process required by law into the process adopted by the Concessionaire to the extent possible</li> <li>Establish a complaints management mechanism</li> </ul>
Determination of the end point of the resettlement process	<ul style="list-style-type: none"> <li>The resettlement process ends once compensation has been paid and households have successfully moved.</li> </ul>	<ul style="list-style-type: none"> <li>The resettlement process is considered closed when the livelihoods and standard of living of the resettled persons are restored or</li> </ul>	<ul style="list-style-type: none"> <li>Under the law the resettlement process ends with the physical relocation</li> </ul>	<ul style="list-style-type: none"> <li>Consider other aspects such as livelihood restoration, social integration before</li> </ul>

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Guidelines and Requirements	Malagasy Law	PS5 and AfDB's OS2 Requirements and Guidelines	Identified Gap	Recommendations for the RAP
		improved. An evaluation by an independent auditor will confirm the effective end of the process		concluding the resettlement process.

## 5.2.2 Summary of the Analysis of Directives and Laws from the Perspective of their Applicability to Sahofika

At this stage, the Sahofika Project resettlement process will be based on a negotiated process and there are no plans to use expropriation for public purposes. The Public Utility Declaration would only be necessary in the event of resistance to or refusal of the compensation measures negotiated under this RAP. This has been confirmed by the legal department of the Ministry of Water, Energy and Hydrocarbons.

In addition, paragraph 13 of PS5 states that: *“In cases where affected persons reject compensation offers that meet the requirements of this Performance Standard and, as a result, expropriation or other legal procedures are initiated, the client will explore opportunities to collaborate with the responsible government agency, and if permitted by the agency, play an active role in the resettlement planning, implementation, and monitoring”.*

## 5.3 Proposed Land Acquisition Procedure for the Sahofika Project

### 5.3.1 Priority to Amicably Negotiated Resettlement

Based on the above analysis, the following steps will be taken. The consultation details for each step are described in the chapter on consultations:

1. Announcement of the launch of the RAP through a public consultation in the presence of the members of the national RAP steering committee: the Concessionaire announces the various compensation measures and proposes an amicable negotiation on the basis of these measures. During this consultation, the Concessionaire presents the various resettlement options and explains interests:
  - Choosing reconstruction on the resettlement village or cash compensation.
  - Presentation of a model of the resettlement village and all community infrastructure
  - Announcement of measures to support and restore livelihoods
  - Announcement of the resettlement schedule and support arrangements
  - Announcement of the Complaints Management Mechanism
  - Each PAP will have 10 days of reflection before informing the Consortium of their decision, i.e. whether or not they accept amicable resettlement or whether they choose reconstruction or monetary compensation.
2. If there is no resistance, the Concessionaire, with the support of the local resettlement committee, will propose a resettlement contract to each PAP by offering them the option to make a counter-proposal within a minimum of two weeks. The PAP and a committee member will review and discuss the various clauses of the contract.
  - This contract shall include: accompanying measures such as relocation and settlement costs, the selection of a relocation site and a compensation form shall be attached to the contract. It shall include a detailed list of all losses and related compensation
  - The contract shall specify the construction period, payment schedule and deadlines for the vacation of the site.
  - The contract shall be amended if the PAP's objections are based on sound arguments. Then, the contract shall be signed by the Concessionaire, the representative of the national steering



committee as well as the PAP and their spouse. The PAP has the option of choosing a witness who will sign the contract.

- If there are people who are unwilling to relocate, the resettlement committee will negotiate with them.
- 3. The Concessionaire shall prepare the resettlement site and various compensation measures.
- 4. The Concessionaire, with the support of the communes and the Land Administration, shall help the PAPs who have chosen cash compensation to find lands. During the same period, arrangements will be made to prepare for the payment of the compensations: raising awareness on financial management, opening a bank account for each PAP.
- 5. Once the resettlement site is ready to be made available, the resettlement process will be officially announced along with its timeline. The first installments will then be paid.
- 6. The Granting Authority, with the Concessionaire, will ensure the site is effectively vacated within the timeframe agreed with the PAPs. Once free of any occupation, the land will be granted to the Concessionaire for a specified period of time. The land shall remain the property of the State throughout this period.

### 5.3.2 Public Utility Declaration

Should amicable negotiations fail, the Project shall proceed to expropriation through a DUP with the following procedure. In accordance with this constitutional provision, Order No. 62-023 of September 19, 1962 and its implementing decree No. 63-030 of January 16, 1963, outline principles aimed at respecting individual property rights, including:

- The public utility qualification of the operations or works to be undertaken;
- Compliance with the principle of separation of powers, which requires that decisions infringing individual property rights be the preserve of the judiciary.
- The Executive Branch, which is responsible for managing evidence of land ownership rights, through the land services, may not allege its own turpitude. Otherwise, it will be considered as both judge and party. For this reason, under Article 02 of the above-mentioned Order, expropriation may not be carried out solely through a legal process, by means of a Court of First Instance order on the situation on site. Thus, the executive power only takes a declaratory expropriation act through a decree issued by the Council of Ministers. As its name suggests, this only has a declaratory effect and no legal basis;
- Expropriation in the public interest must entail fair compensation for the expropriated, i.e. the compensation must cover the entire loss;
- The interested parties may seek legal assistance both with respect to the expropriation order and in determining compensation levels;
- Ancillary property rights are also subject to compensation in the context of expropriation for public utility purposes, i. e. rights in rem and rights of use and in particular the rights of use provided for by Act No. 66-025 of December 19, 1966 on the cultivation of agricultural land.

Based on these principles, expropriation for public utility purposes follows certain procedures that require completion of the following steps:

- i. Commodo/Incommodo surveys, which involves determining whether or not land occupations are in conformity with the law that is launched by decree to be published in the Official Gazette. The Minister in charge of the works to be carried out, i.e. the MEEH, is responsible for launching the survey. The purpose of the survey is to identify plots of land concerned by the future works, their owners and any persons likely to claim compensation on various grounds.
- ii. Declaration of public utility through a decree issued by the Council of Ministers and to be published in the Official Gazette. The DUP is discussed by the Council of Ministers chaired by the President of the Republic, preceded by the proposal of the Minister responsible for the works and the opinion of the Minister in charge of the State Lands Department. The purpose of the DUP decree is to inform the interested parties of properties concerned by the expropriation process and identify the properties and/or rights in rem affected by the expropriation process.
- iii. Assessment of compensation for expropriations or amicable transfers: The administrative commission headed by the head of the land administration or the Sub-prefect, Prefect or Head of Province or their respective delegates based on the geographical scale of the expropriation in the local administrative district shall be responsible for the following:
  - o Determination of compensation for expropriations or amicable transfers,
  - o Interview and convening of the parties concerned,
  - o Amicable negotiation with the parties concerned; otherwise, the parties concerned may lodge an appeal with the court of first instance which has the authority to determine compensation by judicial decision.

The commission is composed of the mayor of the commune where the property is located, a representative of the Land Department: a representative of the Director General of Finance; a local representative of the Ministry of Public Works; an official of the Ministry of Agriculture; a representative of the expropriating department.

- iv. Approval of the compensation rates set by the evaluation committee of the Minister of Finance
- v. Payment of compensation to the Treasury by the expropriator;
- vi. Payment of compensation to the persons concerned if they accept it before the order is issued;
- vii. Decision by the judiciary to proceed with the expropriation by order of the Court of First Instance which has jurisdiction over the area: After the declaration of public utility by the Executive, it is necessary to proceed to the expropriation decision, which is the preserve of the Judiciary.
- viii. Payment of compensations and transfer of property to the expropriator for people awaiting the release of the legal decision

## **6 COMMUNITY PARTICIPATION AND PAP CONSULTATION HISTORY**

The preparation, development and implementation of the Resettlement Action Plan require consultation with various stakeholders. This consultation process has several specific objectives:

- Ensure the Project and this Resettlement Action Plan (RAP) are socially acceptable;
- Identify and prevent potential sources of social conflict in the implementation of the RAP;
- Work with PAPs to identify and discuss their concerns and expectations regarding resettlement;
- Establish a mechanism to manage complaints and conflicts that may arise during the preparation of the RAP and its implementation.

Project Affected People (PAPs) were therefore consulted during the RAP preparation process. This section provides a history of consultations and general impressions on the resettlement process.

## 6.1 History of Consultations Undertaken

The following actions have been taken:

- Stakeholder consultation carried out by ERM as part of the initial RAP scoping study;
- Preliminary consultations in Antenina by the Concessionaire's ESIA experts in May 2018;
- Preliminary reconnaissance field trip for the purpose of the socio-economic study, carried out by the Land Resources team in July 2018;
- Series of consultations during the Project launch field trip by the MEEH in August and September 2018;
- Consultation with communities as part of the topographical studies undertaken in August 2018 by the Ambatolampy Topographical Circumscription (CIRTOPO);
- Public consultations and PAP awareness raising carried out during a joint field activity by Land Resources and NGO Zina as part of the Sahofika Project in September 2018. These field trips have always been assisted by a representative of the MEEH (see attendance sheet in the annex to this report);
- Socio-economic surveys (household survey and focus group) as well as the census of each affected household as part of the inventory of persons and assets affected by the Project.

## 6.2 Stakeholder Consultation as Part of the Implementation of the Resettlement Framework Plan

To develop the RAP Framework, two field trips and consultations were conducted by ERM in partnership with Aquaterre (CPAR) between October and November 2017. These field trips missions made it possible to:

- Collect data on the main socio-economic aspects of the study area;
- Identify the main issues related to physical and economic displacements;
- Launch the Stakeholder Engagement Process (SEP).

The following various stakeholder groups were interviewed during the study:

- Local authorities: Antanifotsy district and Ambatolampy district;
- Land services: (i) One-stop shop for the topographical districts and land services of Ambatolampy (which also cover the district of Antanifotsy), (ii) Belanitra Land Bank (BIF), (iii) One-stop shop for the topographical districts and land services of Moramanga (which also covers the district of Anosibe An'Ala) - One-stop shop for the district of Anosibe An'Ala (the representative went to Moramanga) - One-stop shop for the district of Marolambo (the representative went to Mahanoro), (iv) One-stop shop for the topographical districts and land services of Marolambo (which also covers the district of Marolambo);

- Agricultural area: Rural commune of Ambohitompoina, Rural commune of Belanitra;
- Head of the Antenina Fokontany;
- Meeting and consultation with stakeholders in Antananarivo: i) Ministry of Environment and Forestry, ii) Madagascar National Park, iii) Ministry of Water, Energy and Hydrocarbons, iv) Madagascar Road Authority (resettlement experiences), v) Ambatovy Project (resettlement experiences), vi) National Environment Office, vii) Madagascar Mining Registry Office.

### **6.2.1 Stakeholder Consultation during the Preparation of the RAP**

Land Resources consulted various stakeholders as part of the development of the RAP:

- A preliminary reconnaissance field trip was conducted in July 2018 to visually identify, using a large-scale field map, the major areas of occupation to be surveyed, but also to identify areas of sparse occupation. The trip took place mainly in the Antenina Fokontany, where more than 70% of the affected people live, which is representative of the study area.
- A field trip was organized as part of efforts to consult with the populations, present the Project and prepare socio-economic studies

These series of meetings made it possible to collect information relating to the human environment, especially in: demography, public infrastructure and services, land tenure, main economic and subsistence activities, cultural heritage and also to hear about the concerns /expectations of local stakeholders.

In this context, the team conducted focus group discussions with local communities and semi-structured individual interviews. Mass meetings with communities were avoided to prevent frustration and manage community expectations, since the team was yet to have all the finalized technical elements of the Project.

The following table describes consultation carried out during this reconnaissance field trip.

**Table 18: Summary of Activities conducted during the Preliminary Reconnaissance Filed Trip**

Location	Consultation / Activity
Ambatolampy	<ul style="list-style-type: none"> <li>Visit to and meeting with the Ambatolampy CIRTOPO</li> <li>Visit to and meeting with the 2<sup>nd</sup> Deputy Chief of the Ambatolampy District</li> </ul>
Antanifotsy	<ul style="list-style-type: none"> <li>Visit to and meeting with the Antanifotsy District Chief</li> </ul>
Antsirabe	<ul style="list-style-type: none"> <li>Visit to and meeting with the Chief of Staff of the of the Vakinankaratra Region Chief</li> </ul>
Belanitra	<ul style="list-style-type: none"> <li>Visit to and meeting with the Mayor of the Rural Commune of Belanitra</li> </ul>
Antenina Antsaratrano Vatateza- Amatotsipihina	<ul style="list-style-type: none"> <li>Identification of hamlets in the village of Antenina (Antsaratrano Vatateza-Antenina Centre)</li> <li>Identification of the various types of constructions</li> <li>Observation of land use (rice fields, various crop fields, fallow, burnt crops, etc.)</li> <li>Identification of the various possible “GSM spots</li> <li>Visit to and interview with the “elder” of the village of Amatotsipihina</li> <li>Testing the questionnaire on a tablet</li> <li>Visit to and presentation with the Eiffage team on site</li> </ul>
Ambatotsipihina- Anositelo- Sahandrazana Antenina Centre	<ul style="list-style-type: none"> <li>Identification of hamlets in the village of Antenina (Anositelo Sahandrazana)</li> <li>Identification of the various types of constructions</li> <li>Observation of land use (rice fields, various crop fields, fallow, burnt crops, etc.)</li> <li>Interview with the President of Fokontany and some village elders</li> </ul>
Antenina Centre- Ankorohoro-Antenina Centre	<ul style="list-style-type: none"> <li>Identification of hamlets in the village of Antenina (Ankorohoro)</li> <li>Identification of the various types of constructions</li> <li>Observation of land use (rice fields, various crop fields, fallow, burnt crops, etc.)</li> <li>Interview with the “village elders”</li> <li>Interview with the Head of the Fondation Avenir de Madagascar</li> <li>Pre-test of the questionnaire</li> <li>Focus group on the identification of crop calendars</li> </ul>
Between the dam and Antanifotsy	<ul style="list-style-type: none"> <li>Identification of the various possible “GSM spots” near the “motorcycle stop point”.</li> </ul>

### 6.2.2 RAP Consultations (June 2019)

A series of consultations on the ESIA and RAP were organized in late May and June 2019 by the Concessionaire with the support of ZiNa and Land Resources. Regarding the RAP, the consultations focused on the affected area and included meetings and participation of the population:

- Antenina Fokontany, Ankazomena: 184 people (141 men, 43 women)
- Fokontany Befotaka, Antandrokomby: 168 people (127 men, 41 women)
- Fokontany Fisoronana: 100 people (80 men, 20 women)
- Fokontany Sahofika: 68 people (63 men, 5 women)
- Tsinjoarivo commune: 11 people (11 men),
- Commune Belanitra: 4 people (3 men, 1 woman)

The following set of photos illustrate progress made during these consultations, which included public meetings and open days over two days for the Antenina fokontany, which is the most affected area where the PAPs were able to meet individually with the Project team to seek individualized answers to their questions. Adapted documents, including a summary guide in Malagasy, had been made available in advance to participants. All interactions were held in the local language





Antenina, June 2019, public meeting on the RAP in one of the village churches



Befotaka, June 2019, public meeting on the RAP



Antenina, June 2019, open house day on the RAP with individual interviews between the Project team and the PAPs who came to seek additional explanations

## **6.3 Perception at the Beginning of the Consultations**

### **6.3.1 PAP Impressions and Perception**

The perceptions of the PAPs at the start of Land Resources' field trips can be summarized as follows:

- Insufficient information regarding the Project, its schedule and the delineation and size of the impoundment area; these points were addressed throughout the Land Resources field trip and the level information at the end of the process is now satisfactory;
- Incomprehension at the outset about the various stakeholders and about the roles and responsibilities of each. These stakeholders are: Land Resources, Fondation Avenir Madagascar, the ZINA association, Aquaterre and the Ambatolampy topography service. This was clarified throughout the RAP preparation field trip and during formal consultations held in June 2019;
- Uncertainties about technical details on the height of the dam, various technical aspects, and the Project's implementation schedule;
- Fears of expropriation under conditions that are unfair to the population.

To address this issue, information and awareness activities were conducted and will be strengthened during the validation and implementation of the RAP.

NGO Zina is the representative of the Concessionaire, is permanently present on the site and is in charge of all aspects related to consultations with PAPs.

### **6.3.2 Perception of Local Authorities and Decentralized Services**

The perceptions of administrative authorities and decentralized services can be summarized as follows:

- A lack of coordination between the various stakeholders involved in the Project: socio-economic studies were entrusted to the Land Resources design office, public consultations to NGO Zina and topographic surveys to the Ambatolampy Topographical Circumscription (CIRTOPO).
- The Land Resources teams consulted with topography and communication teams, but generally speaking, each party undertook its actions separately.
- This lack of coordination and the involvement of decentralized services locally could have an impact on the implementation of the RAP. The Ambatolampy Lands Division also regretted they had not been involved in the Project.
- The roles and responsibilities of the various stakeholders are detailed in this RAP in order to facilitate its management and coordination in future. A resettlement committee will also be established to make sure all stakeholders have the same levels of information.

### **6.3.3 Perceptions of civil Society Organizations**

The studies identified some NGOs and associations working in the affected area and the Project's area of influence.

- **Fondation Madagascar Avenir :**



- This foundation provides support in the education and health sectors through the establishment of basic infrastructure such as schools and health centers. PAPs are concerned about what may happen to these forms of assistance and support once they have been relocated. The PAPs place a great deal of trust in this foundation, which is the only community development actor in the area.
  - The foundation's officials have not expressed any grievances or major concerns about the resettlement process, but they wish to be informed of progress made by the Project and to be involved in the involuntary resettlement process.
  - Considering the influence and importance of the foundation for the PAPs, it is recommended that it be involved in the implementation process and in consultations to be undertaken with the PAPs. This would also make the Project credible and trustworthy in the eyes of various stakeholders, as it works working with an independent and non-state entity.
- **NGO SADABE and Madagascar National Park (MNP):**
- There are protected areas in the affected area as well as in the Project's area of influence. The Marolambo National Park is managed by MNP.
  - Another protected area managed by NGO Sadabé and located downstream from the dam will be affected by the construction of tracks leading to the dam. The NGO's manager is therefore urging the project to do everything in its power to reduce the impacts and size of the impoundment area.
  - The NGO calls for strict measures to be implemented to ensure that resettlement does not increase pressure on protected areas and recommends, in particular, the implementation of the following measures: (i) development of resettlement sites, (ii) establishment of a management and control plan for the access roads, (iii) avoid proposing livelihood restoration measures based on forestry resources.
  - MNP and Sabade wish to participate in public consultations and be part of the relocation committee.

According to Sadabe's manager, the Tsinjoarivo NAP is currently being prepared, operating with temporary protection status. The site development plan can only be made after final status has been granted, which will initiate the process of preparing the development plan as well as the socio-economic studies and biological inventories of the area. At this stage, it is therefore recommended that an agreement be reached with the manager of the NPA to ensure that the development plan is optimized with the project design. The NPA's manager also shared several expectations, including:

- Providing more detailed information on the technical aspects of the Project as well as feedback from the environmental and social impact assessment;
- Implementing measures to monitor and control logging. As mentioned by the NGO's manager, the neighboring communities of the NPA, including the Antenina Fokontany, practice illegal logging of woods such as rosewood (It should be noted that this information was not cross-checked during the surveys undertaken with the PAPs),
- The Concessionaire taking responsibility in relation to implementing VOIs, in particular through the design of the development plan, the transfer of management and support to VOIs.

## 6.4 Main Results of the Consultations

The June 2019 consultations took place in a peaceful atmosphere with a strong interest from participants. They have effectively identified the views and observations of affected and interested stakeholders, and have also provided the necessary answers and clarifications. It should be noted that the individual interviews conducted during the open house days were very interesting and beneficial for the affected population; the affected people came as a family, a group or as individuals (head of household) to express themselves. A 3D film was prepared to allow PAPs and other stakeholders to visualize the reservoir and the resettlement site.

The following table summarizes the main issues and comments raised during the June 2019 consultations on the RAP.

**Table 19: Issues Raised in RAP Consultations (June 2019)**

N°	Question, Comment, Suggestion	Response given
1.	Where are the resettlement sites of the people of Antenina affected by the reservoir located?	Two locations have been identified by Land Resources. The Sahofika Fokontany is not affected by this resettlement site.
2.	We have been informed that the plant will be located in Tsiazomborona. So far, no one has come to us to talk about compensation.	All affected assets will be subject to compensation. At present, we do not know which lands will be affected (we have to wait for the results of the detailed studies).
3.	Will the commune have a specific responsibility in the construction of the Project's infrastructure? How about land tenure security?	The commune will have no specific responsibility in the construction The commune, through the Communal Land Office, will contribute to the issuance of land certificates for persons concerned by the resettlement process, if the resettlement site is located in the commune's district.
4.	In which part of the Tsinjoarivo Commune is the resettlement site located?	Following the surveys, it is likely that the resettlement site will be in Fisoronana, Belanitra Commune. However, there will still be discussions with the affected people to decide on the final resettlement site. In addition, a discussion with the commune will be held to make the final decision and see the resettlement process.
5.	Will the commune of Tsinjoarivo be electrified?	Electrification will concern Antananarivo and Antsirabe. The resettlement site will be electrified, but its use will not be free of charge.
6.	The value of compensation for affected assets must be the same for all those affected, and must be better in relation to the current situation.	There will be improved huts in the resettlement site, There will be no difference in compensation; compensation will be based on the value of the assets
7.	What about households that do not want to move to Fisoronana?	Everyone has the right to choose their resettlement site. People who do not wish to live in Fisoronana will receive cash compensation, corresponding to the value of their land and constructions, However, it is recommended that all affected households move to Fisoronana so that the Project can closely monitor them with a view to improving living conditions; all infrastructure for public use will be installed on the site
8.	Who makes the decisions on compensation?	Land compensation is determined on the basis of the current prices of the various types of land locally and at the commune's tax center.

N°	Question, Comment, Suggestion	Response given
9.	Are the commune's infrastructures required to be installed in the resettlement site or is it possible to build a church in another place, for example?	There will be no infrastructure built outside the resettlement site.
10.	How will the sacred sites be displaced?	The Project will cover all costs related to the displacements of all the sacred sites impacted; it is up to the parties concerned to make arrangements and provide information
11.	Produce a development plan and an infrastructure plan for the resettlement site	This will be completed during the implementation of the RAP
12.	Inform the commune about the tasks it is responsible for in organizing the resettlement process	This is explained in the procedures.
13.	Conduct surveys among people who were not present during RAP surveys	This is already planned; the Project RAP team will return after the list of properties has been posted
14.	Can we continue farming activities before the resettlement process?	Yes
15.	If the track crosses crop fields, homes or other property, what actions will the Project take?	All affected assets will be compensated for.
16.	Where exactly is the resettlement site located?	The final decision has not yet been taken, but probably in Bedanaka (Fisoronana)
17.	What about compensation for land belonging to people living at the resettlement site	See reply to paragraph <b>Erreur ! Source du renvoi introuvable.</b>
18.	Is there a need for a land certificate to justify ownership of a piece of land?	No. The Project considers such ownership legitimate.
19.	Will the land in Fisoronana be secured on behalf of those displaced?	Yes
20.	Can we continue to carry out our current activities in the resettlement site or are there other activities we can engage in as well?	Yes, activities that cannot be carried out in Fisoronana will be replaced by other economic activities
21.	After the RAP surveys, we developed other pieces of land. Will these works be compensated for?	There will be no compensation for the works. There will be compensation for the lands only.
22.	Is the exact location of the resettlement site known?	See answer above
23.	How about the Antenina's Fokontany, as an administrative division, after the resettlement process?	Response provided by the SG of the prefecture: This decision is the responsibility of the administrative authorities. The administrative division is managed by law; the creation of a fokontany depends on the size of the population.
24.	It will be necessary to analyze the percentage of VOI members who will be displaced, as this will affect how the transfer contract is managed; this is about reviewing the management system. It will be necessary to activate an emergency plan to revitalize the VOIs that are currently abandoning management activities.	This item will be discussed with MNP and DREDD as part of the implementation of the ESIA and RAP

N°	Question, Comment, Suggestion	Response given
25.	Is there a possibility of land extension at the resettlement site, considering population growth?	The surface areas of the resettlement site considered in Fisoronana exceed the current needs of the populations to be displaced.
26.	The creation of a new fokontany on the resettlement site is possible taking into account the number of people to be relocated (suggestion of the SG of the Vakinankaratra prefecture)	It is a good idea to anticipate a possible conflict situation between the host fokontany and the fokontany that will be moved.
27.	Establish a communal and/or intermunicipal development plan in anticipation of new migration and extension	See reply to paragraph <b>Erreur ! Source du renvoi introuvable.</b>
28.	Teachers at the Antenina private school are paid by means of agricultural products. How will they be paid at the beginning of the resettlement process?	In general, there will be specific support for jobs, including teachers.
29.	It is necessary to secure the lands (land certificates) now so that people have an official document to start with and officially register the resettlement site and facilitate transfer to communities afterwards.	Titling or issuance of land certificates is not possible in management transfer areas, in particular in Antenina (specific status of management transfer) The Project is currently in the process of publishing the list of affected assets. After the publication of a definitive list of people who wish to settle in Fisoronana, we can start the process of issuing land titles.
30.	A commission must be established for expropriation procedures.	Expropriation procedures are dictated by Malagasy legislation and AfDB and IFC standards. A local resettlement committee has already been set up. It is composed of fokontany leaders and the populations to be displaced, At the national level, a committee is being set up. This committee will be composed of the institutions concerned.
31.	The Antanifotsy Topographic Service requests collaboration with the Project to support the Belanitra BIF to make sure it has the capacity to manage land outside the forest domains, but also the Antanifotsy domain and topographic services.	Support at the level of land services is provided for in the RAP for the issuance of land certificates or titling of affected land
32.	Will new irrigation dams be built in the resettlement site? Collaboration with DRAEP is needed for the management of irrigation infrastructure.	A more detailed technical study will be carried out at site level: soil analysis, topographic analysis, water, etc. A preliminary analysis of the site's viability has already been carried out: water availability for irrigation, access to drinking water, etc. Collaboration with all relevant government departments is provided for in the procedure.
33.	Are there any problems identified in the field so that we can manage them together?	The problems identified (rumors) were solved at the various stages of consultations carried out. Nevertheless, the Project has plans to provide Opsychosocial support to the population affected process before, during and after the resettlement process.
34.	People do not necessarily have official documents: identity cards. This is perhaps an opportunity to work with the commune, district and courts to issue these documents.	This approach is planned during land tenure security.

N°	Question, Comment, Suggestion	Response given
35.	How will the risk of conflict of interest between displaced populations and residents at the resettlement site be managed?	See answer above
36.	What does the Project plan for the population of Fisoronana who will be affected by various changes related to the resettlement process?	See answer to the above point
37.	Does the Fisoronana site meet the conditions for the installation of the various necessary activities?	The construction will take 4.5 years to complete. During this period the resettlement site will be developed and provided with utilities: agricultural development, water access for irrigation. Additional studies and accompanying measures are planned: training, financing and technical support. The objective of the Project is to maintain or even improve the living conditions of PAPs
38.	How about people, other than those affected, who want to settle at the resettlement site? How about people who want to sell their land at the resettlement site?	Regulations will be put in place to manage the settlement of new people. The Project will not provide land for these people. A collaboration agreement will be signed between households regarding authorizations to sell land and houses.
39.	As far as their standards of living are concerned, the displaced populations will have at least twice as much.	The objective is to improve standards of living.
40.	Can the population transport assets they consider valuable in their churches, shrines, etc.	Yes.

## **7 ELIGIBILITY AND ENTITLEMENT TO COMPENSATION AND/OR RESETTLEMENT**

## **7.1 Eligibility Cut-off Date**

The end of the socio-economic studies marks the cut-off date for eligibility for resettlement. November 20, 2018 was announced and posted in the fokontany offices. From that date, any new occupation of land or resources located in the Project area will no longer be eligible for compensation.

## **7.2 Eligibility for Compensation**

The categories listed below will be considered:

- Eligibility for physical resettlement
- Eligibility for economic resettlement,
- Eligibility for compensation of religious/cultural assets,
- Eligibility for other support in the context of resettlement,
- Eligibility for community compensation.

### **7.2.1 Eligibility for Physical Displacement**

In accordance with the guidelines set out in the resettlement legal framework section, the following categories of affected persons and organizations were identified based on the eligibility criteria:

1. Persons or organizations with affected property whose land ownership is recognized by customary law;
2. People who do not have formal legal rights to land or other property at the time of the census, but who can prove their rights under the country's customary laws;
3. People who do not have any rights, legal or otherwise, that could be recognized on the land they occupy, and who are not included in the two categories described above.

The persons forming the above groups (1) and (2) shall receive full compensation for the land, structures and property they lose. Compensation for land must be accompanied by land security and administrative costs related to the acquisition of the land. Compensation for community assets is included in this category.

Community compensation for the Sahofika Project applies to the construction of schools, churches, access roads, fokontany offices and playing fields. Compensation will be provided in the form of reconstruction to the entity concerned or in cash depending on negotiations.

Regarding the third group (3), i.e. beneficiaries who are occupants and/or users of land or resources or property, but who do not have recognized customary titles or rights; these persons are entitled to resettlement assistance to enable them to improve their living conditions (compensation for the loss of income-generating activities, means of subsistence, property over common resources, crops, etc.), provided that they have occupied the Project site before the eligibility cut-off date.

In other words, informal occupants and free occupants (category above) are recognized by PS5, not as compensation for the land they occupy, but as resettlement assistance. However, people who come to occupy the areas to be moved/compensated for after the cut-off date are not eligible for compensation or other forms of assistance.

### **7.2.2 Eligibility for Compensation for Property Other Than Land**

All persons who belong to the three categories listed above (i.e. occupants present before the eligibility cut-off date) shall receive compensation for the loss of property other than land. These are cultural assets and



heritages inventoried under the RAP and will also be compensated for and returned to the community/individual who owns them. These are tombs and religious sites.

### 7.2.3 Eligibility for Livelihood Restoration

If the impact on land is such that people are affected in their livelihoods, the loss of land and property they occupy must be compensated for. This concerns all people who have lost their means of production and income-generating activities, whether or not they are owners.

Several categories of people are eligible for this compensation: tenant farmers, farm workers, farmers, gold panners, mining operators, and teachers.

Compensation for economic and physical losses is defined as follows:

- Compensation must begin before the displacement or occupation of the new land;
- Production losses are compensated for and transitional support equivalent to lost income is provided for a reasonable period of time (see compensation matrix)
- Compensation shall be paid at the full replacement value

### 7.2.4 Consultation

The AfDB and IFC requirements in this area go beyond the provisions of national regulations. Therefore, the Consortium shall have to comply with this standard, which stipulates that:

- Information and consultation campaigns are undertaken before the compensation or resettlement process is launched, at each site likely to be affected, and then continue throughout the implementation and monitoring process
- A specific mechanism for recording complaints should be put in place.

## 7.3 Compensation Terms and Conditions

Three forms of compensation will generally be adopted in the implementation of this type of project:

- i. In-kind compensation: the Project will offer the option of replacing land with land, and buildings with buildings. The replacement of community infrastructure will follow the same principle, rather than be operated through cash compensation. This compensation method is strongly recommended for the RAP's objectives to be achieved successfully.
- ii. Payment in cash (cash and/or check depending on the total amount of compensation to be allocated): consists in replacing the cost of replacing lost property. For security reasons and to ensure funds are properly used, payment through a bank account with a financial education program will be considered. Under this project, the Proponent will support people who wish to open a bank account or develop some degree of collaboration with a financial institution to facilitate the management of various payments.
- iii. Temporary assistance: this is a bonus or a boost in addition to compensation, in order to compensate for non-market losses.

### 7.3.1 Conditional Payment of Compensation

In addition, to avoid any risk of compensation money being spent for purposes other than the resettlement process, conditional payment measures should be put in place. However, PAPs will have the option of refusing these measures:

- All PAPs will receive an initial payment of 34% of the amount of their compensation.
- For PAPs who become owners, regardless of their initial status, the remaining 66% will be paid into a trust account with the help of a notary. The costs of registering the property will be borne by the Project, except for owners whose payment for the lost land already includes all these charges. This arrangement does not apply to people who accept in-kind compensation for land and buildings.
- For PAPs who wish to become or remain tenants/sharecropper, the remaining 66% will be paid after they have provided proof of a lease of land whose size is large enough to meet the needs of their household, which will be duly registered.
- For PAP owners wishing to invest in something other than land, the remaining 66% will be deposited in a bank account or a microcredit institution, after verifying that family members (if applicable) have received proper accommodation, and based on the demonstration of a sustainable investment project.
- For PAPs who will remain occupants/operators or want to become tenant farmers:
  - (i) Two options may appear: (i) first option, with a written contract (very rare) and (ii) second option, without a written contract, which is the norm. The Project will raise awareness among occupants/users and owners of the benefits of the contract, which will be established on the same basis as a rental contract but with payment in kind or in cash based on the results of the harvest.
  - (ii) Contractualized sharecropping: in the event that of tenant farmer and the owner agreeing on a contractualized sharecropping arrangement, the Project will support the process and pay the remaining 66% as soon as the contract has been signed by the parties.
  - (iii) Non-contractualized sharecropping: this type of agreement will restore tenant farmer PAPs' their original situation, which will not be the Project's preference. However, tenant farmers may want to use other land owned by the same owner or do not see themselves working differently because they receive non-accountable benefits.

In these cases, after the Project has ensured that the PAPs have found new cultivation areas, another third will be paid to allow them to start developing their crop fields.

A third installment will be paid when it is found that the PAP is in a position to start building their home. This third installment may be paid later, since according to usual practices, when a foreigner arrives in a village to solicit land for cultivation, they are informed of the rules and conditions for the use of such land. After agreement, the owner of the land then lends them, as a first step, a hut for their accommodation.

Thus, with the traditional approach of “verbal contractualization” of sharecropping, the owner observes the tenant farmer's way of life and working methods for a few months and, if satisfied, then gives them a place where to build their house. Generally, it is only after the harvests and especially from December to February that they will be able to start building their hut. It is also during this period that all the farmers are observing a rest period and, therefore, will be able to help build a house. In fact, in rural areas, no one builds their own house. If a foreigner is well liked, other landowners may ask them to bring in other people from their family or acquaintances who are serious and good workers.

In the event of the owner not being satisfied with the person's work or seriousness, they can terminate their tacit contract. The person, as a land applicant, is familiar with these rules and ensures that they are accepted by the owner.

A final installment of compensation will be granted after the actual construction of the house has been completed.

This installment payment procedure should ensure that PAPs, regardless of their category, do not squander these funds, by obtaining in a single payment all their compensation. However, the principle remains the same; the PAP has the right to accept or not accept this proposal.

### **7.3.2 Compensation Payment Procedure**

A cash payment of PAPs involves numerous risks (loss, theft, robbery, assault and violence of all kinds, etc.). As a result, PAPs could suddenly find themselves without money and fall back into even greater poverty. Considering the threats associated with the circulation of such a large volume of money when compensation is paid, it is therefore not recommended that PAPs receive all their compensation in cash.

Therefore, the following actions will be taken:

- The compensation money may be paid by transfer to the bank account of the PAPs that already have one. Training on how to use a current account and a savings account will be offered.
- For those who do not have one, the Project will take the following steps to help them open an account with banks in the local area.
- Some PAPs will be able to open an account without the Project's assistance, but for the majority, it will be essential to have assistance to do so. To this end, the Project will set up the following system:
- The Concessionaire may, with the support of a service provider, enter into agreements with one or more financial institutions in the Project area. The Concessionaire will work with the Ministry of Economy and Finance to discuss the best payment terms since, in principle the funds will be paid into the public treasury account.
- Arrangements will be made with the local authorities in the main cities or fokontany to make a room available for payments to the PAPs. Financial institutions may also travel to the Project area to make the payments. In this case, the RAP budget will be channeled through the Treasury office and managed by the Concessionaire, or managed directly by the Treasury. Another possibility is to create a joint management unit in which the Concessionaire will have to provide technical support and expertise to align the various procedures with the required standards and the activities planned under the RAP.
- Partner banks with which the Concessionaire has contracted will set up "counters" (stands) to host PAPs. It is the banks that, directly, will sensitize the PAPs on the importance of having a bank account and explain the opening procedures to them. The opening procedures will be simplified (already negotiated with the Concessionaire, including without the need for initial trust funds) and it people will only be requested to have their "PAP identity card" with them. The necessary additional items (photo, etc.) will be collected on site and the account opening forms will be completed by the bank's agents.
- Once the account has been opened, PAPs may receive a portion in cash (up to USD 100) to cover urgent expenses and the remainder of the payment will be deposited into their bank accounts (check deposit issued by the Concessionaire's financial management unit or the resettlement management unit). A representative of the Ministry of Economy and Finance and the members of the resettlement committee will work with the Concessionaire's finance department to make the payments.
- Thereafter, in a timely manner and based on their needs, the PAP may go to the bank to make withdrawals from their account in order to finance expenses necessary for their resettlement.

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The following table summarizes all the impacts identified and the respective eligibility criteria.

**Table 20: Eligibility and Compensation Matrix**

Type of Loss	Impact	Categories of PAPs Concerned	Compensation
<b>Loss of land</b>	Loss of land cultivated or Cultivable on property	<ul style="list-style-type: none"> <li>Owner of land not residing in the affected area and not directly exploiting their land</li> <li>Owner of land not residing in the affected area, direct operator of their land</li> </ul>	<ul style="list-style-type: none"> <li>In-kind compensation m<sup>2</sup> per m<sup>2</sup> of the plot for PAPs choosing the proposed resettlement site</li> <li>OR, only for PAPs who choose not to move to the resettlement site: Cash compensation at full replacement value</li> </ul>
	Loss of leased farmland / free occupancy	<ul style="list-style-type: none"> <li>Tenant/sharecropper residing in the affected area<sup>4</sup></li> <li>Beneficial owner and/or natural resource operator (mining, fishing, timber)</li> </ul>	<ul style="list-style-type: none"> <li>No compensation for the land itself</li> <li>Support in finding a resettlement site of equivalent potential in his or her area of residence.</li> <li>Compensation for adjustments made by the tenant farmer, if applicable (rice farm in particular)</li> </ul>
	Loss of uncultivated land	Landowner residing or not residing in the affected area, direct operator of the land	<ul style="list-style-type: none"> <li>Development of land for community use in the vicinity of the resettlement site</li> <li>Support in the search for new grazing areas (sedentary breeder) and new transhumance corridors (transhumant breeder)</li> <li>Support for livestock intensification</li> </ul>
<b>Crop loss</b>	Annual crop	Landowner residing in the affected area, Direct operator of his land	<ul style="list-style-type: none"> <li>Compensation for crop loss at full replacement value (based on current local market prices)</li> </ul>
			Compensation for crop loss at full replacement value (based on current local market price) <ul style="list-style-type: none"> <li>Tenant / Occupant: 100% of the market value</li> <li>Owner: 30% of the market value</li> </ul> this rate is defined as follows because in the sharing of productions on tenant farms, the distribution is as follows: 2/3 for the owner and 1/3 for the tenant farmer
	Sustainable crops	<ul style="list-style-type: none"> <li>Landowner residing in the affected area,</li> <li>Direct operator of the land</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for the plantation at its full replacement value including the cost of re-establishing the plantation on a new site and income lost during the period between the destruction and the start of production on the new site.</li> <li>Compensation for the plantation at its full replacement value including the cost of re-establishing the plantation on a new site and the income lost during the period between the destruction and the start of production on the new site.               <ul style="list-style-type: none"> <li>Tenant: 100% of the market value</li> <li>Owner: 30% of the market value</li> </ul> </li> </ul>

<sup>4</sup> Owner of at least one affected dwelling

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Type of Loss	Impact	Categories of PAPs Concerned	Compensation
	Permanent residence (Dwelling house used all year round.)		<ul style="list-style-type: none"> <li>Reconstruction of a dwelling on the resettlement site</li> <li>OR, only for PAPs that choose not to move to the resettlement site: Lump sum compensation at full replacement value without depreciation of the affected asset based on building classification.</li> </ul>
Loss of building and infrastructure	Temporary housing (dwelling house used only during farm periods)	<ul style="list-style-type: none"> <li>Resident or non-resident owner in the affected area (dwelling, hangar, store)</li> </ul>	<ul style="list-style-type: none"> <li>Flat-rate compensation at full replacement value without depreciation of the assets allocated based on building classification.</li> <li>Compensation for loss of rental income for a period of 6 months if the building is rented</li> </ul>
		<ul style="list-style-type: none"> <li>Operator</li> </ul>	<ul style="list-style-type: none"> <li>Payment of 6 months' income if used for economic purposes/sharecropping</li> </ul>
	Losses to infrastructure such as wells, household latrines	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Reconstruction at the resettlement site</li> <li>OR, only for PAPs that choose not to move to the resettlement site: Cash compensation at full replacement value of the property concerned</li> </ul>
	Commercial building (store, hangar)	Owner	<ul style="list-style-type: none"> <li>Payment of 6 months' rent to help find a building</li> </ul>
		Occupant, operator	<ul style="list-style-type: none"> <li>Payment of 6 months' rent for compensation for loss of rental income</li> </ul>
	Building for community or religious use (church, PPS, playgrounds, fokontany offices)	<ul style="list-style-type: none"> <li>Owner of a non-profit community structure</li> </ul>	<ul style="list-style-type: none"> <li>Reconstruction at the resettlement site</li> <li>Implementation of transitional support for beneficiaries of services during the actual resettlement (case of private schools if activities/rebuilding take time to restart on new resettlement sites)</li> </ul>
	For-profit community building	<ul style="list-style-type: none"> <li>Owner of a for-profit community facility (private schools, medical store)</li> </ul>	<ul style="list-style-type: none"> <li>100% of market value (price based on market value including miscellaneous costs/registrations) including land security</li> <li>Value equivalent to three (3) months of revenue generated by the activities</li> <li>Provision of a transitional space pending reconstruction</li> </ul>
Loss of agricultural income	Loss of non-agricultural economic activities (gold panning, trade, transport)	<ul style="list-style-type: none"> <li>Agricultural, mining and other operators</li> </ul>	<ul style="list-style-type: none"> <li>Flat-rate compensation for loss of income during a transition period (6 months' income)</li> <li>Support for the restoration of livelihoods</li> </ul>
	Change in the conditions in which the profession is exercised (e.g. mining operators/workers)		<ul style="list-style-type: none"> <li>Structural support (training, credit) for a sufficient period of time for these people to adapt to their new activity and compensation for loss of income during the transition period (6 months)</li> </ul>
Loss of cultural and religious assets	Shrines/doany	<ul style="list-style-type: none"> <li>Holders of religious property</li> <li>Family concerned by the shrines</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of existing assets and payment of transfer costs (traditional rites).</li> </ul>
	Other religious and sacred sites		
Support and accompanying measures	Moving to a new location	<ul style="list-style-type: none"> <li>All PAPs</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for displacement costs/fixed moving allowance per household amounting to MGA 500,000 or USD 138</li> <li>Installation assistance of MGA 300,000 (83USD) is also provided</li> </ul>

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Type of Loss	Impact	Categories of PAPs Concerned	Compensation
	Food aid	·	· Food aid for the period when production is interrupted worth MGA 1,104,000 for six months (USD 305)
	Loss of employment (teacher, carrier...)	· Persons concerned	· Compensation for lost salary during the period necessary to find a new job (3-6 months)
	Material recovery	· All PAPs	· Right to recover materials and wood even if the building is subject to compensation.



## 7.4 Additional Resettlement Support

To improve people's living conditions, additional accompanying measures are proposed:

- Establishment of community wells or standpipes for communities.
- Implementation of a solar energy infrastructure that PAPs can choose to adopt or not in return for a payment,
- Establishment of an improved latrine for each household or a few community latrines, including those that did not have one in their home village
- Establishment of a health hut
- Establishment of a community laundry room

For the most precarious houses (made of wood and local materials, and without foundations), compensation in kind or in cash corresponding to the minimum amount required for the construction of an improved wooden house or a house with brick walls and sheet metal roofs is proposed in order to improve the living conditions of the PAPs.

## 7.5 Loss Evaluation and Compensation

The compensation scale used here is based on price surveys at local markets, consultation with decentralized technical services and other RAPs in Madagascar.

### 7.5.1 Land Plots

The prices in the scale below are based on reporting by PAPs and comparison with other RAPs in Madagascar. A 10% increase in the cost will be added to the amount of each piece of land when calculating compensation to ensure the various administrative costs related to the acquisition and securing of the land are paid for. The replacement cost of reconstruction lands is based on the price of state lands in rural areas.

This amount is applied for real estate transactions in Madagascar. A provision for land security will be included in the resettlement budget.

**Table 21: Land Compensation Unit Cost**

Type	Unit price	
	MGA/m <sup>2</sup>	USD/m <sup>2</sup>
Land (fallow, free land)	3,000	1.0
Rice paddies	20,000	5.5
Crop fields (other than rice fields)	5,000	1.4
Other (Forest area)	2,500	0.7
Reconstruction land (Resettlement site)	2,000	0.6
Land for reforestation	2,000	0.6
Land for agricultural development (resettlement site)	2,000	0.6

## 7.5.2 Food Crops

The compensation value of food or market gardening crops is estimated on the basis of the value of annual production estimated from the surface area of each plot, the average yield of the crop observed in the area and a unit price. Thus, the compensation cost for annual crops includes: the value of the production of a crop variety during the last crop season and the implementation cost (including seed, fertilizer and maintenance). The compensation rate is calculated using the following formula:

**T = RE x S x P** where

T = Compensation rate in ar

RE = estimated yield, expressed in kg/m<sup>2</sup>

S = Field area in m<sup>2</sup>

P = Average price per kg in Ar, on local markets

The unit values on the local market, by product type, are given in the table below.

**Table 22: Unit Food Crop Replacement Cost**

Crop	Compensation Costs	
	MGA/m <sup>2</sup>	USD/m <sup>2</sup>
Rice	660	0.2
Cassava	350	0.1
Beans	213	0.1
sugar cane	11,200	3.1
Pineapple	9,600	2.7
Angivy (African eggplants)	2,500	0.7
Groundnut (rainfed cultivation)	256	0.1
Brede	1,600	0.4
Carrot	1,020	0.3
Leek	800	0.2
Cabbage	4,500	1.2
Christophine (sofety)	2,000	0.6
Pumpkin	7,500	2.1
Cucumber	2,000	0.6
Green lentil	150	0.04
Corn (traditional crop)	130	0.04
Onion	5,000	1.4
Sweet potato	480	0.1
Small peas	1,575	0.4
Pepper	120	0.03
Bambara peas	225	0.1
Potato potato	1,100	0.3
Salad	263	0.1
Soya	225	0.1
Taro	1,800	0.5
Tomato	550	0.2
Tobacco	12,000	3.3

### 7.5.3 Perennial Crops

The calculation of the full replacement value of economic trees includes production over one year, the cost of re-establishing the plantation (seedlings, plowing, fertilizer and other), and income lost during the years required to re-establish the plantation.

The Project does not take back compensated crops and the owners of these crops can dispose of them in the way that suits them best. The discounted tree compensation costs are presented in the table below. These prices are updated to take into account the inflation rate.

The formula is as follows:  $T = V \times D + C + M$

- T = Compensation rate in MGA
- V = Average marketing value of a tree's product in MGA/year
- D = Average recovery time of the tree to an adult production level in years,
- C = Planting cost (plant, tillage, fertilizer),
- M = Cost of labor required for planting and maintenance during the plantation recovery period,

**Table 23: Compensation Rates for the Replacement of Perennial Crops**

Species	Compensation for trees	
	MGA	USD
Apricot tree	160,000	44.2
Peach tree	80,000	22.1
Avocado tree	150,000	41.4
Bamboo	25,000	6.9
Medlar	50,000	13.8
Khaki	80,000	22.1
Coffee tree	100,000	27.6
Etatra	15,000	4.1
Ash tree	20,000	5.5
Goava tree	30,000	8.3
Grenadelle	40,000	11.0
Fir tree	52,800	14.6
Eucalyptus trees	40,000	11.1
Letchis	80,000	22.1
Mango tree	200,000	55.2
Olivier	80,000	22.1
Orange tree	180,000	49.7
Rosewood	3,400,000	939.2
Pear tree	80,000	22.1
Apple tree	80,000	22.1
Grapes	120,000	33.1
Ravitsara	160,000	44.2
Banana tree	40,000	11.0
Vakona	20,000	5.5
Mulberry tree	25,000	6.9
Zahana	12,000	3.3
Jatropha	35,000	9.7

Species	Compensation for trees	
	MGA	USD
Paulownia	12,000	3.3
Chinese Camphorist	10,000	2.8

### 7.5.4 Dwellings

The calculation bases used are as follows:

- The undepreciated replacement cost of the various types of housing and structures, based on information collected on the number and types of materials used (brick, concrete, sheet metal, wood, straw bale, etc.) to build various types of structures (roof, wall, foundation);
- The prices of these items on various local markets;
- The costs of transporting and delivering these items to replacement lands or construction sites;
- Estimates of the construction cost of new houses and ancillary structures, including labor costs and a margin for contingencies.

Structures such as houses, huts, commercial buildings, shelters, granaries and fences, etc. will be subject to compensation for affected households that do not opt for resettlement.

Homogeneous constructions of up to 5 types of structures will be built on the resettlement sites for households choosing to go to the site.

A minimum of 50 m<sup>2</sup> composed of 2 rooms will be proposed as replacement for houses.

**Table 24: Estimated Unit Reconstruction Costs by House Type**

Actual house categories (according to RAP surveys)	Type of replacement	Wall	Roof	Soil	Unit Price (MGA/m <sup>2</sup> )	Unit Price (USD/m <sup>2</sup> )
House < 50 m <sup>2</sup>	50m <sup>2</sup> (2 rooms)	Brick	Sheet metal	Cement / Wood	375,000	104
House between 50 and 70 m <sup>2</sup> .	70m <sup>2</sup>	Brick	Sheet metal	Cement / Wood	375,000	104
House between 70 and 100m <sup>2</sup> .	100 m <sup>2</sup>	Brick	Sheet metal	Cement / Wood	375,000	104
House between 100 and 150 m <sup>2</sup> .	150 m <sup>2</sup>	Brick	Sheet metal	Cement / Wood	375,000	104
House > 150 m <sup>2</sup> (special case)	> 150m <sup>2</sup>	Brick	Sheet metal	Cement / Wood	375,000	104

**Table 25: Unit Replacement Cost for all Households (all types combined)**

Actual House Categories (Based on RAP surveys)	Type	Wall	Roof	Soil	Unit Price (MGA/m <sup>2</sup> )	Unit price (USD/m <sup>2</sup> )
Wall (Wood or Bamboo) - Roof (sheet metal or straw or Bamboo) -	Type 1 / Type 2-A	Made of wood	Sheet metal	Wood	300,000	83
	Type 1 / Type 2-B			Cement	320,000	88

Floor (wood, cement or earth)						
<b>Wall (Brick or stone) - Roof</b> (sheet metal or straw or Bamboo) - Floor (wood, cement or earth)	Type 3 / Type 4- A	Brick, Stone	Sheet metal	Wood	360,000	99
	Type 3 / Type 4- B			Cemen t	375,000	104
<b>Wall (clay)</b> - Roof (sheet metal or straw or bamboo) - Floor (wood, cement or earth)	Type 5 / Type 6- A	Clay	Sheet metal	Wood	330,000	91
	Type 5 / Type 6- B			Cemen t	340,000	94

A description of the various types of houses proposed can be found in the attached document.

### 7.5.5 Ancillary Buildings and Structures

Compensation for ancillary constructions (hangar, crop storehouses, etc.) includes the cost of materials and the construction labor cost. The following table shows construction costs according to the type of structure. The average unit costs, reported by the PAPs over the entire affected area, were taken into account.

**Table 26: Unit Replacement Costs for Ancillary Infrastructure**

Nature	Unit	Average Area or Unit	Replacement costs in m <sup>2</sup> or per unit	
			MGA	USD
Animal enclosure	Unit	1	60 000	17
Outdoor kitchen (type 4 building with straw roof)	m <sup>2</sup>	15	550 000	152
Crop storehouse (ancillary building)	m <sup>2</sup>	12	260 000	72
Other (Trade)	m <sup>2</sup>	12	260 000	72
Other (Carriage shelter, Toka Gasy manufacture)	m <sup>2</sup>	25	119 000	33
Laundry room	m <sup>2</sup>	1	500 000	138
Latrine	m <sup>2</sup>	4	360 000	99
Shower room	m <sup>2</sup>	4	360 000	99
Well	traditional 8m deep	1	1 250 000	345

### 7.5.6 Community Asset

The compensation rate for community assets is based on the replacement cost of a house with the following characteristics: earth brick wall, sheet metal roof, cement base. The amount per m<sup>2</sup> is 375,000 Ar. The cost for rebuilding the church has been increased by 50% considering that the costs of foundations are generally higher. The school construction cost has been increased by 20%.

**Table 27: Unit Replacement Costs of Community Assets**

Unit Replacement Cost by Type of Property	MGA	USD
Church	562,500	155
Elementary school and college	450,000	124
Playground (per m <sup>2</sup> )	3,500	0.9

### 7.5.7 Sacred Sites and Religious Assets

Sacred sites are made up of ritual sites and shrines. These also include other sites, places or entities that are recognized as sacred by local laws (including customary laws), practice, tradition, and culture.

Compensation consists of the cost of transferring the site (if a transfer is possible) and meeting and transfer ritual expenses. The prices indicated below have been recorded based on PAP declaration and local materials costs.

**Table 28: Unit Replacement Costs for Cultural Assets**

Goods	Unit Replacement Cost		Cost of transfer rituals	
	MGA	USD	MGA	USD
Sacred site (Doany)	1,000,000	276	5,000,000	1,381
Tomb	25,000,000	6906	15,000,000	4,144

### 7.5.8 Income Generated by Economic Activities

Depending on the case, the estimated compensation amount for loss of income sources is defined as the sum of the following:

- All losses of income and livelihood are taken into account. This is the loss corresponding to the margin generated during the resettlement period until the PAP in question can reach their previous production level.
- Salaries of staff to be replaced during the period when the activity resumes its course. The duration of the compensation period will depend on the activity.
- The value of the movable and immovable property that will be lost or destroyed with the move. These assets are different from the buildings that have already been recorded in the paragraph on the inventory of houses and other buildings. These are movable assets linked entirely to the exercise of the activity. They will no longer be usable in the event of displacements and are not inventoried as part of the inventory of the dwelling. These assets were included in the valuation of economic activities. The travel costs for displacing assets related to economic activity will also be taken into account.
- Loss of income or livelihood related to the exploitation of forest resources must also be compensated for in way commensurate with its importance for the person's livelihood.

- The costs of moving assets related to the economic activity in question.



**Table 29: Unit Compensation Cost for Economic Activities**

Beneficiary	Average Monthly Income in the Area		Duration of the Transition period (months)	Compensation Rates	
	MGA	USD		MGA	USD
Breeders	90,000	25	6	540,000	149
Mining operator	240,000	66	6	1,440,000	398
Fisherman	90,000	25	6	540,000	149
Teachers	360,000	99	6	2,160,000	597
Merchants	360,000	99	6	2,160,000	597
Farmer	180,000	50	6	1,080,000	298
Carpenters	480,000	133	6	2,880,000	796
Others (guard, driver, office employee)	180,000	50	6	1,080,000	298

### 7.5.9 Development of the Resettlement Site

The development of the resettlement site requires significant work. This phase will take up nearly 30% of the RAP budget. The budget will essentially include:

- Earthworks (housing, community infrastructure, agricultural development);
- The implementation of the reforestation and agroforestry project;
- Water borehole drilling works;
- Work related to the development of agricultural land;
- The purchase of land for development and tenure purposes;
- All the necessary infrastructure construction (drinking water, electricity, health center, administrative offices, community infrastructure, etc.).

The costs of “desacralizing” the site are also taken into account.

**Table 30: Unit Cost for Resettlement Site Development - Land Development**

Type (State Land)	Unit Price / ha	
	MGA	USD
Additional land required for development	20,000,000	5,525
Earthworks (Housing, Community Infrastructure, Agricultural Development)	75,000,000	20,718
Reforestation	1,448,000	400
Water drilling	72,400,000	20,000

**Table 31: Unit Cost for Resettlement Site Development - Infrastructure**

Activities to be considered	Unit	Quantity	Unit Cost	
			MGA	USD
Establishment of local compensation and claims offices				
Construction of local compensation and claims offices	m²	150	450,000	124
Supplies and equipment	fft	1	50,000,000	13,812
Community infrastructure (water and electricity, health center) - provision				
Community wells	nb	1	289,600,000	80,000
Mini drinking water supply (DWS)	nb	1	260,000,000	150,000
Mini solar grid with battery charging station and connection	nb	1	108,600,000	30,000
Construction of a health hut and provision of equipment	nb	1	126,700,000	35,000
Community laundries	nb	1	50,000,000	14,000
Public toilets	nb	2	60,000,000	16,000
Support to host communities (affected commune and Fokontany)	fft	1	181,000,000	50,000
Construction Church, school	See Table 26: Community Assets Replacement Costs			

### 7.5.10 Assistance with Moves and Installations

Resettlement assistance includes moving expenses, displacement assistance and food aid for a period of six months:

**Table 32: Unit Cost for Moving and Installation Support**

Help and assistance	Beneficiary	Unit Cost	
		MGA	USD
Moving expenses	All permanent residents	500,000	138
Guide and displacement assistance	All permanent residents	300,000	83
Food aid	All permanent residents	1,104,000	305
Health monitoring of PAPs and vulnerable people	Vulnerable person	2,7000,000	746

### 7.5.1 Project Implementation

The unit costs related to the implementation of the Project for a period of three (3) years are as follows:

**Table 33: Unit Cost for RAP Implementation**

Activities to be considered	Unit	Quantity	Unit Cost	
			MGA	USD
Communication and Information				
Internet and telephone (3 years)	fft/month	12	3,000,000	829
Printing of communication media	fft/year	1	9,045,125	2,500
Implementation Unit				
Project Manager - International Expert	Expert / Month	1	61,506,850	17,000
Executives and team leaders - National Expert	Expert / Month	6	7,236,100	2,000
13 Field agents (compensation agents, site managers, facilitators,...)	fft / month	1	4,884,368	1,350
Administrative staff (Management Office in Antananarivo): Accounting, Human Resources, Secretariat	fft/month	1	9,045,125	2,500
Implementation support				
Consultancy services providers (architects, engineers, etc.)	fft / year	1	817,679,300	226,000
Committee operating expenses (Indemnification and displacement)	fft/year	1	54,270,750	15,000
Provision for legal fees and displacement expenses for the Project owner	fft	1	145,000,000	40,055
Logistics				
Fuel costs for car travel	fft/year	4	14,200,000	3,923
Fuel costs for motorcycle travel	fft/year	5	2,000,000	552
Fuel costs for motorized canoe trips and canoe operator	fft/year	1	45,000,000	12,431
Purchase of 4 4x4 cars (Pickup)	Part	4	176,000,000	48,619
Purchase of 5 motorcycles	Part	5	15,000,000	4,144
Purchase of a motorized	Part	1	53,000,000	14,641

### 7.5.2 Others

In addition, all expenses related to economic rehabilitation will be added, considering activities related to the restoration of livelihoods, which amount to **USD 500,000** and will include the following:

- Updated socio-economic household data and identification of stakeholders in the area
- Support for community life organization
- Establishment of social microfinance structures
- Support for the implementation of economic rehabilitation projects (staffing, project management, etc.)

Psychological support throughout the RAP implementation phase is budgeted for a flat fee of **USD 100,000**.

## 8 RESETTLEMENT SITES SELECTION AND PREPARATION

8.1 Site Identification

Two potential sites were selected, based on preliminary studies conducted in the Project and surrounding areas:

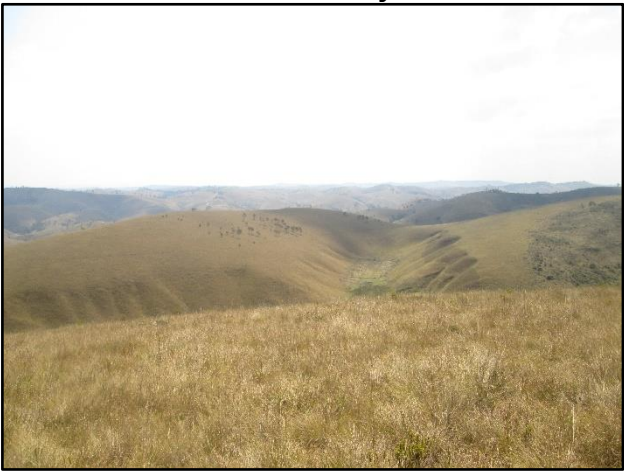
- Site 1: Fisoronana site (Belanitra Commune)
- Site 2: Soamanandrarinny site (Tsinjoarivo Commune).

Photo 14 Photos of Potential Resettlement Sites

Fisoronana Site



Soamanandrarinny Site



Located in the commune of Belanitra

Located in the commune of Tsinjoarivo

A complementary study was conducted on these two (2) sites in order to briefly analyze viability and feasibility in terms of development. This study focused on the following:

- Hydrogeological study ;
- Agro-ecological study;
- Access constraints to sites

After the various analyses described below, the Fisoronana site, which is located in the commune of Belanitra, was selected.

8.2 Preliminary Studies

A first study was carried out to analyze potential locations for the resettlement site.

The various criteria that led to the selection of these sites are as follows:

## 1) Cartographic Analysis

This analysis made it possible to identify the following:

- **Available space:** large enough for the resettlement of all PAPs;
- **Presence of nearby watercourses:** existence of small tributaries based on high-resolution image analysis
- **Demographic distribution analysis:** Identification of areas with little or no population
- **Topographic analysis:** Slope, relief and watershed, analysis based on a DTM (Digital Terrain Model)
- **Land use:** Identification and analysis of existing vegetation cover (forest, savannah, etc.)
- **Accessibility level**
- Geographical location in relation to the flood area: a site located on the northern side (Tsinjoarivo) and a 2<sup>nd</sup> site on the southern side (Belanitra)

Based on this mapping analysis, some potential areas were selected: Three potential areas in the Tsinjoarivo commune and one potential site on the Belanitra side.

## 2) Consultation with Mayors

Based on these pre-selected sites, an initial site visit was conducted along with consultations with local administrations. The mayors of Tsinjoarivo and Belanitra were consulted and gave their opinion and validation on the Somanandrany Site (one of the 3 Tsinjoarivo sites) and the Fisoronana site (Belanitra commune).

## 3) Identification of land status: the two pre-selected sites are state-owned lands

## 4) Site visits and initial status reports

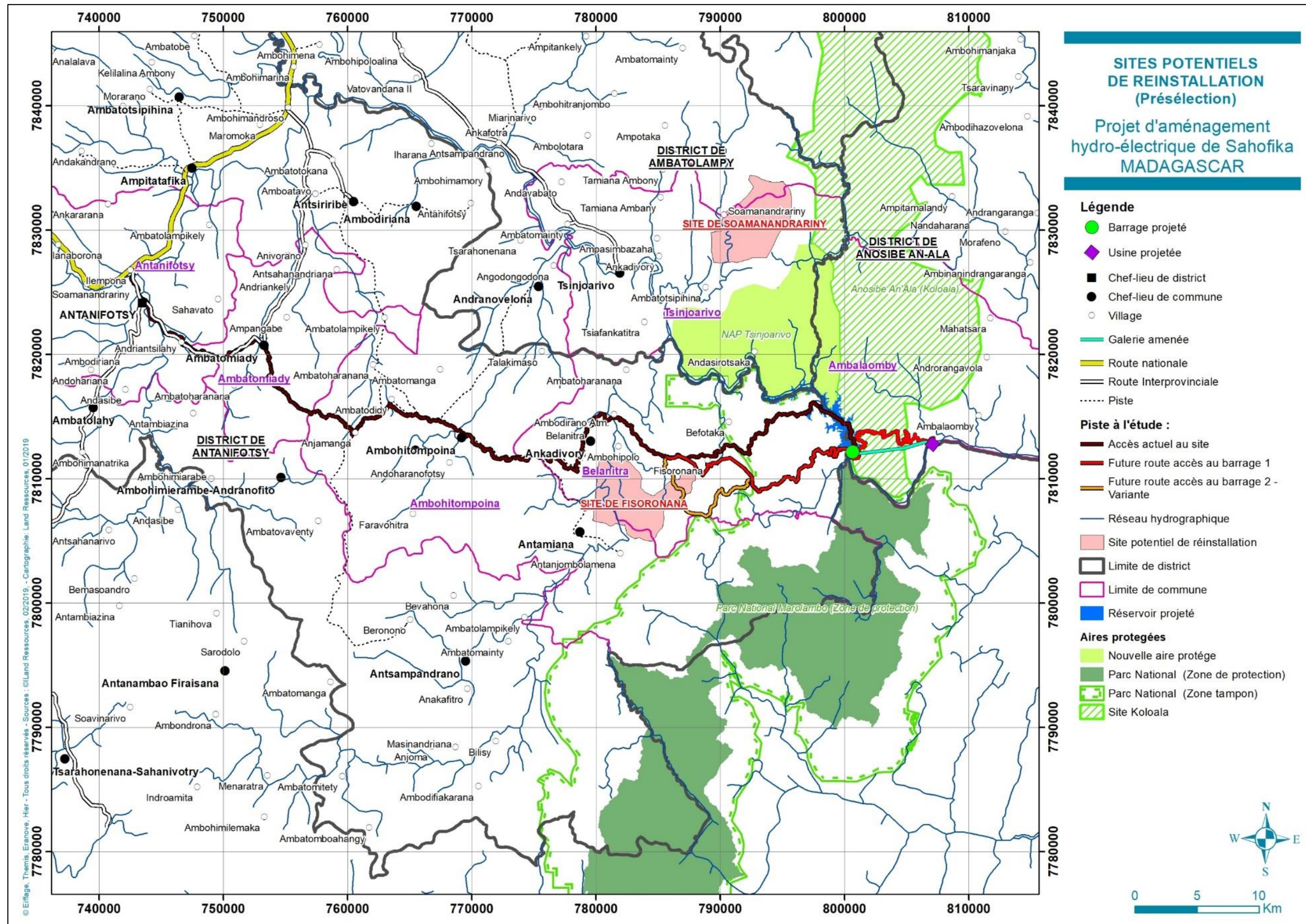
Initial surveys at the two sites showed there are virtually unoccupied areas (with some dwellings nearby), but which can nevertheless be converted into a resettlement site. Substantial development and environmental restoration measures (to be undertaken as soon as possible after the decision to build the dam has been taken) are to be expected.

The local “host” population did not raise any particular objection to the resettlement project at these sites. Nevertheless, they set some conditions: that they could benefit from the same provisions as those to be offered to the PAPs. The two pre-selected sites were presented to project affected people (PAPs) during household surveys and focus groups to ask them about their wish to relocate.

The location of these two pre-selected potential sites is presented in the following map



**Figure 15: Location Map of Potential Resettlement Sites**





## 8.3 Resettlement Site Selection

### 8.3.1 Results of Socio-economic Surveys

The selection of affected households for the resettlement location is described in the following tables:

#### a) Overall result

**Table 34: Breakdown of PAP Resettlement Site Choices**

	Nb of household	%
<b>Site proposed by the Project</b>	<b>101</b>	<b>27</b>
Fisoronana site	51	14
Soamanandrany site	26	7
Soamanandrany or Fisoronana site	24	7
<b>Free choice of the resettlement location</b>	<b>242</b>	<b>66</b>
Project area of influence	190	52
Outside the area of influence	31	8
Not specified (not located)	21	6
<b>No opinion</b>	<b>25</b>	<b>7</b>
No notification (not located)	25	7
<b>Grand total</b>	<b>368</b>	<b>100</b>

#### b) Detailed Result

	Nb of Households	Observation
<b>Site proposed by the Project</b>	101	27%
Soamanandrany site	23	
Soamanandrany or Fisoronana site	24	
Fisoronana site	54	
<b>Free choice of resettlement location</b>	242	66%
Ambatolampy	61	Area of influence
Ambatondrazaka	1	
Amparafaravola	2	
Andramasina	1	
Anosibe An Ala Ala	15	Area of influence
Antananarivo	10	
Antanifotsy	116	Area of influence
Fandriana	1	
Mandoto	2	
Marolambo	5	
Miarinarivo	1	
Morafeno	1	
Moramanga	5	
Not specified	21	No specific choice of location
No opinion	25	7%

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No notification (not located)		No choice
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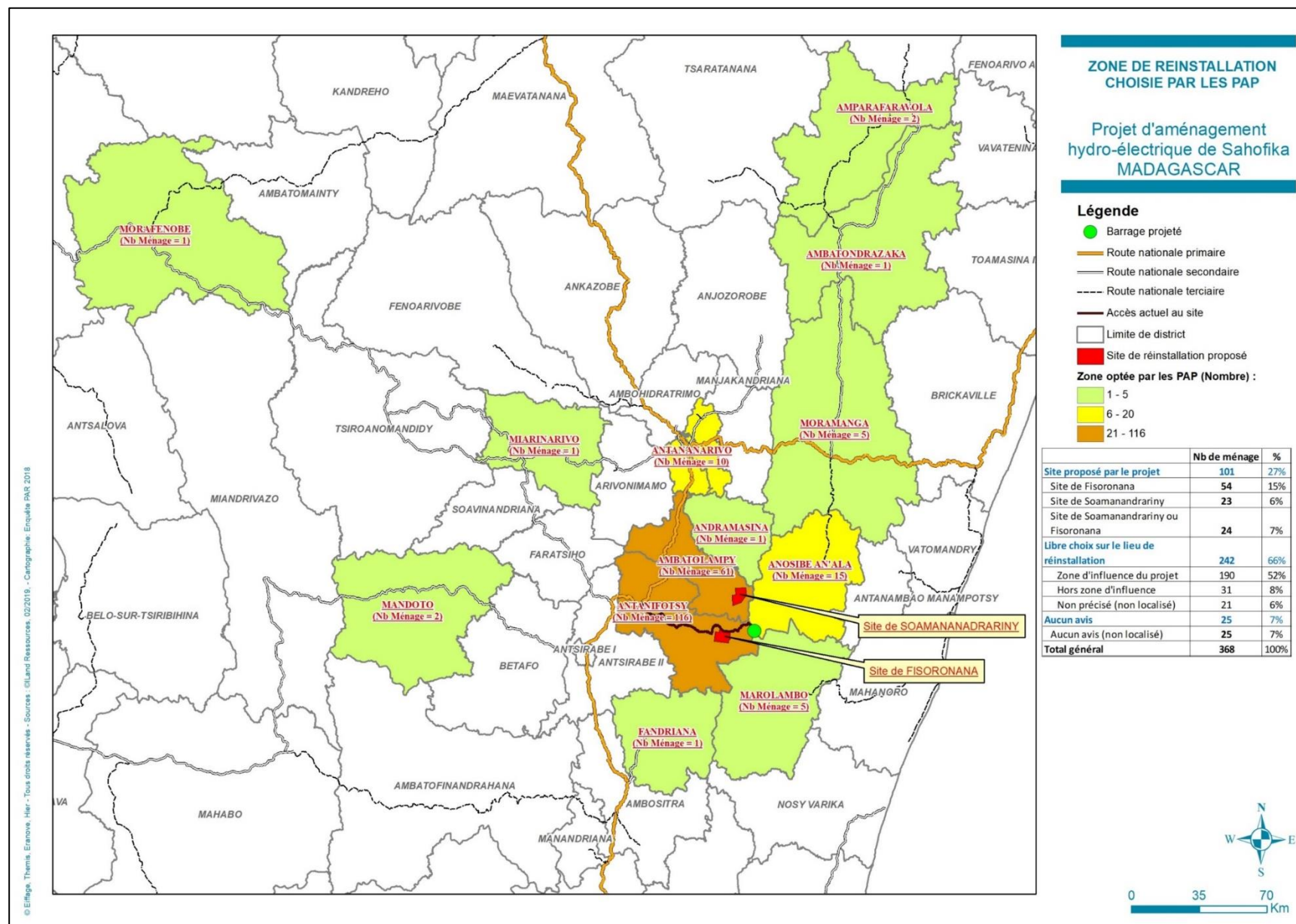
**c) Main reason for the choices**

- Out of the **242** people who did not choose the sites proposed by the Project, **76%** indicated “**family reunification / return to the home village**” as a reason.
- For the **46** people who have no particular choice, the reasons are as follows: either they have no idea and find it a bit difficult to projecting themselves or simply do not want to answer the question.

It should be noted that during the focus groups, a small group of local people stated that they wanted to go to the forest areas of Nosibe An’Ala and Manaripatsa (Marolambo NP side). Awareness of the importance of forest resources and protected areas has been raised without forcing them to make a choice.

The spatial distribution of these areas in relation to the Project area is presented in the following map.

**Figure 16: Location Map of the Sites Selected by the PAPs**



## 8.4 Results of Additional Studies

A hydrogeological study and an agro-ecological analysis were conducted. In addition, access constraints were analyzed.

Each of the sites has exploitable areas. The surface area of the sites that can be developed varies according to the structure and shape of the valleys. Both sites are viable and can be developed as resettlement sites. The characteristics of the 2 sites are more or less similar.

The constraints associated with the 2 sites lie in accessibility (accessible by motorcycle), soil poverty and lack of wooded areas. However, these constraints can be corrected.

### 8.4.1 Fisoronana Site

The Fisoronana Fokontany is located in the commune of Belanitra, Antanifotsy district, about 20 km along the axis leading to the reservoir area. The access track to the site joins the general access road to the dam site up to the Antanifotsy exit, which makes this site more advantageous compared to the Soamanandrany site or the construction of another road.

Population density is relatively low in the area and vegetation is poor with limited forested areas. The particularities of the Fisoronana site are as follows:

- Existence of potential water sources, presence of watercourses
- Possibility of creating a water retention basin for irrigation
- Possibility of agricultural development on terraces and irrigated crops (over part of the area depending on the terrain)
- There is no possibility for a hydroelectric project to supply the site
- The soil is poor from an agricultural point of view, but improvement solutions can be considered (described in the following sections). The type of soil varies according to the geographical location (hills or low grounds)
- Huge herbaceous area, The wooded areas are small which will lead to a reforestation and agroforestry development project
- Presence of a mining quarry south of the area, which can facilitate the economic conversion of households
- The host population has no resistance to the establishment of resettlement sites in the vicinity of their Fokontany.
- The area has a smaller agricultural potential than Soamanandrany, but the site has potential for agriculture
- The site is located near the access road to the Project that will be rehabilitated / built as part of this project

### 8.4.2 Soamanandrany Site

The Soamanandrany Fokontany is located in the commune of Tsinjoarivo. Ambatolampy District. The site is located north of the future reservoir (about 15 km as the crow flies from the tip of the reservoir). There is no direct access to the reservoir area, the two areas being separated by the Tsinjoarivo protected area zone, managed by SADABE (about 5 km from the site).

The proximity of this site to the Tsinjoarivo protected area makes it more vulnerable, but a development plan for the protection zone of this protected area has been prepared by SADABE and the Ministry of Environment.

Land use is organized through traditional practices called “solampangady<sup>5</sup>” and “Mamariparitra<sup>6</sup>”. These practices, although legitimate among local communities, are totally illegal because they are types of illegal occupation.

The specificities of the Soamanandrany site are as follows:

- Existence of potential water sources in the area and a dense hydrographic network. The area is criss-crossed by many deep valleys and rivers that are often intersected by waterfalls.
- Two waterfalls that could supply small hydropower plants have been observed in the vicinity.
- No potential sources of water pollution have been identified
- The northern part of the area is suitable for irrigation due to its physical context (relief, slope,...) and land availability
- The soil is poor from an agricultural point of view, but improvement solutions can be considered. The soil type varies according to the geographical location (hills or low grounds)
- Possibility of a terrace agricultural development
- Presence of some wooded areas (small area): Eucalyptus and pine.
- Access track to be rehabilitated to Tsinjoarivo and built from Tsinjoarivo to the site.

A detailed report of the results of the additional studies is available in a separate document containing the specific results of the summary soil and hydrogeological analyses

## 8.5 Assessment of the Advantages and Disadvantages of the Identified Sites

The following table presents the assessment of the advantages and disadvantages of the two sites.

**Table 35: List of Advantages and Disadvantages of Potential Resettlement Sites**

OPTIONAL	ADVANTAGE	DISADVANTAGE
<b>Maintain the 2 sites</b>	<ul style="list-style-type: none"> <li>· PAPs have a choice</li> <li>· Since the reservoir area is large (13 km in length), it will be easier for PAPs to make their choice</li> </ul>	<ul style="list-style-type: none"> <li>· Increases the budget</li> <li>· Complicates the social monitoring of PAPs after resettlement</li> </ul>
<b>Maintain 1 single site</b>	<ul style="list-style-type: none"> <li>· Lower budget</li> <li>· Facilitates resettlement management and subsequent social monitoring</li> </ul>	<ul style="list-style-type: none"> <li>· Risk of administrative conflicts since the impoundment area covers 2 districts (Antanifotsy and Ambatolampy) and 2 main communes (Belanitra and Tsinjoarivo): the development of a single site will bring economic benefits in only one of these two districts</li> </ul>

<sup>5</sup> Solampangady, designates a state property which some people have delineated as their property by stripping the soil by means of a simple spade (angady)

<sup>6</sup> Mamariparitra, is the practice of taking possession of State land by employed by villagers, by growing trees around the land to circumscribe and fence it.

## 8.6 Synthesis of Feasibility Studies of the Selected Sites

At the end of the various analyses carried out on the two resettlement sites, the proposal to establish a **single site**, the **Fisoronana site**, emerged. This option has been optimized for the following reasons, among others:

- The selection of a single site reduces costs and facilitates the management of the RAP and its implementation.
- The Fisoronana site seems preferable:
  - Site located along the Project's main access road, which is to be rehabilitated; this will reduce the cost for the conditions of access to the site;
  - The majority of PAPs chose the Antanifotsy area;
 Presence of a gold mining area nearby which could facilitate, among other things, the conversion and restoration of the PAPs' standard of living

## 8.7 Desacralization of the Selected Site

Regardless the site chosen, it will have to be subject to ceremonies with the relevant stakeholders before works begin. This will be discussed with representatives of the host community. The purpose of the ceremony will be to appease the sacred forces present or concerned by the site in order to allow its occupation by newcomers and the execution of works.

This process is essential given the cultural sensitivities of both the host and affected populations and will be initiated as soon as the Project and site are validated. It is expected to take two to three months from the start of the consultations to the completion of the ceremonies.

## 8.8 Participatory Process for Site Identification and Housing Replacement

Considering the diversity of resettlement location choices and the results of consultations held during the socio-economic studies, there was little interest for people to travel to the sites proposed by the Project. This may be due two reasons: (i) PAPs have not yet given much thought to this choice and the interests that resettlement to the proposed sites may bring, (ii) some PAPs may wish to rebuild their lives elsewhere.

New awareness-raising efforts were made during the consultation of the PAPs to convince them to choose the best option(s) proposed by the Project, accompanied by more detailed information on the sites considered. This awareness-raising activity was based on a 3D video.

Once the calculation of the assets actually affected and the final calculation of their compensation have been carried out and validated, the PAPs will be compensated up to the amount of their lost assets and property. They will then have to leave their farms to go to new farms or residential areas.

## 8.9 Site Development Concept

### 8.9.1 Overall Development of the Resettlement Site

The overall development of the resettlement site includes land preparation, utilities building, construction of access roads and construction of basic community infrastructure:

- The resettlement site must be provided with utilities: sanitation, roads, drinking water supply infrastructure
- The resettlement site must be electrified, and the electricity grid must be extended to the chief town of the resettlement site (as well as to the village in the immediate vicinity)

- The access road leading to the resettlement site must pass through the capital of the commune where the resettlement site is located.
- A major development of the agricultural zone is to be planned to ensure continuity of agricultural activities
- Basic community infrastructure (primary and public schools, playgrounds and a health center) must be provided at these resettlement sites (including the related human, logistical and financial resources)
- Each affected “host” population must be consulted and negotiated individually if the resettlement site and agricultural infrastructure encroach on their land.
- The resettlement site must be large enough in size to accommodate all households, their property and all community infrastructures. There should also be sufficient space for a reforestation area and a cemetery area containing the graves to be moved.
- Lands in the entire developed area must be secured.

All infrastructure and works related to the development of the resettlement site are described in Tables 29 and 30

### **8.9.2 Agroforestry Development**

To compensate for lost access to natural resources and prevent anthropogenic pressures on surrounding natural reserves, the Concessionaire will develop an agroforestry space based on community and participatory management by beneficiary households. This activity will be implemented with the technical support of a specialized organization.

### **8.9.3 Agricultural Development**

To maintain activities related to agriculture which is the main activity practiced by the PAPs, a major agricultural development will be implemented by the Project at the resettlement site. This arrangement requires the following criteria to be met:

- Installation of a large enough area corresponding to the total area flooded with a 20% increase
- Terrace cultivation development as generally observed along RN7 or in the Antsirabe area.
- An irrigation system in the form of a reservoir dam to supply the area with water.





A detailed study in pedology, topography, hydrogeology and agronomy will be carried out beforehand to define the potential area to be developed. In particular, the potential of rice and fish farming will be explored (to reproduce a model that is almost currently in place in some affected rice fields in the Onive).

#### **8.9.4 Gold Panning**

One of the assets of the Fisoranana site is that there is an area nearby that should be suitable for gold panning. The Project will not carry out any particular development in this area. On the other hand, it may help gold panners who wish to legalize their activity secure artisanal mining titles. Under the Malagasy mining code, obtaining artisanal mining titles is an administrative responsibility of the communes. A number of conditions must be met and fees must be paid. However, considering the informal nature of the current activity, it is not certain that a significant number of gold panners are willing to formalize this activity, which would expose them to various environmental, social and metal marketing constraints.

#### **8.9.5 Administrative Status of the New Resettlement Site**

The Fisoranana resettlement site is located in the same commune (Belanitra) as most of the affected area. This should facilitate the transition process because the vast majority of the inhabitants will not change their place of residence. The Project will liaise with the National Resettlement Committee to secure the creation of a new fokontany so that Antenina's autonomous administrative status (as a fokontany) is preserved, with the creation of a new fokontany, whose name should be defined in close collaboration with the affected population and the commune.

## 9 CONSULTATION PLAN AND COMPLAINTS MANAGEMENT

## **9.1 Consultations**

### **9.1.1 Principles and Objectives**

This stakeholder consultation plan (SCP) will help the Concessionaire have a strategic orientation on how to plan various consultation activities during the various phases of the Project. The objectives of this consultation plan are as follows:

- Facilitate the negotiation and launch of the resettlement process with the households concerned;
- Provide key messages during negotiations and consultations with the various stakeholders;
- Manage rumors and stakeholders' expectations and concerns;
- Build and maintain a relationship of trust between the various project stakeholders;
- Involve key stakeholders in the preparation, implementation and monitoring of the various aspects of the Project;
- Provide information about the proposed project in a way that is understandable and adapted to the local context.

In addition to the people affected by the Project, this consultation plan includes host communities, influential members and community leaders. The latter would constitute considerable assets in reducing the risk of social conflicts related to the Project.

### **9.1.2 Identification of Resettlement Stakeholders**

Stakeholder engagement focuses on households affected by the resettlement process, including leaders and influencers in the community(ies). Special efforts should be made to capture the opinions and preferences of women and vulnerable groups. Engagement activities for these groups can be conducted by trusted counterparts so that vulnerable people can express their opinions without fear of reprisals. The various consultations carried out with stakeholders in the preparation of this RAP helped identify the following actors:

- Government entities: Madagascar's Ministry of Water, Energy and Hydrocarbons, ONE, Ministry of Territorial Planning, Land and Public Works, Mayor of the Rural Communes of Antanifotsy and Tsinjoarivo, Regional Directorate of Environment and Sustainable Development, Head of the Ambatolampy Topography Department, Head of the Ambatolampy Lands Department, Head of the Public Works Department
- Civil society: Zina, NGO Sadabé, Fondation Avenir de Madagascar, Association des femmes 08 Mars, FRAM or parents' association
- Local community leaders: concerned fokontany leaders as well as fokontany leaders from host communities, mobile neighborhoods
- Community organization: VOI of the Befotoka and Antenina fokontany
- Religious organizations: FLM (from the Lutheran Church), MET, Sokafy fototra, MDMK (association in the Catholic Church), IKVK irak'i Kristy
- Proponent and Land Resources
- Households affected by the Project
- Host communities

### **9.1.3 The various steps requiring consultation of the PAPs and consultation with the stakeholders**

Several consultations have already been held as part of the preparation of this RAP. These activities are described in Section IV. When acquiring land, several activities must be planned that require informed and open consultation with various stakeholders. These activities are described in the section below with the necessary consultations related to them:

- Meeting with community leaders and local authorities;
- General consultation and complaints management;
- Official announcement of the Project launch and public consultation;
- Compensation payment;
- Consultations on the progress of the resettlement process and the Project in general;
- Launch of the implementation of livelihood restoration activities.

Consultation activities should continue during the implementation of resettlement activities until the restoration of livelihoods has been completed. In addition, stakeholders should be involved in the monitoring and evaluation process.

#### **9.1.4 Process for preparing and approving resettlement plans**

Preparing and approving resettlement plans is crucial to the success of the resettlement process. During the socio-economic studies, the Proponent proposed two resettlement sites that were chosen by 27% of the population while 66% of the PAPs chose other sites and 7% of them did not express an opinion.

Before starting the resettlement process it is important to:

- consult and inform the PAPs of the various measures to be implemented in order to support and monitor the RAP
- help PAPs make informed choices about resettlement sites and plans.

Beyond the approval of the resettlement site plan, the following resettlement steps require consultation with stakeholders:

##### **1) Step 1: Announcement of the launch of the RAP:**

This marks the official launch of the resettlement process. It consists in sharing tangible information on the resettlement schedule and on its various accompanying measures.

It is a key consultation activity that allows us to:

- understand the concerns of the PAPs,
- secure ownership of the processes defined in the RAP,
- collect community preferences on decisions mentioned in the RAP
- identify community problems and difficulties that may lead to complaints.

Host communities should be informed and consulted at this stage.

##### **2) Step 2: Consultation on the various household compensation measures:**

Understanding the details of the compensation and calculation procedures is crucial for the implementation of resettlement process. This is all the more difficult since it involves financial aspects and documentation that may be difficult for households to understand (considering their level of education). This phase, therefore, requires detailed and individual consultation, followed by a reflection and analysis phase. The payment process can only be initiated once all these details have been clarified. This phase also includes the validation of the village resettlement plan and the location of the plots for those who have chosen their own resettlement site.

##### **3) Step 3: Announcement of the completion of the resettlement site and allocation of land plots:**

The plot allocation event must be defined at a time when the majority of households can attend.

- The announcement should allow households sufficient time to organize their participation in the event, since households that miss the event are more likely to complain about the plots allocated to them. The plot allocation event should correspond to the allocation methodology chosen during the consultation process.
- Households that have chosen to build their own houses will want to start their construction works using the funds available before receiving compensation. Parcel allocation and actual alignment demarcation are important in ensuring that all construction activities are located within the designated parcels.
- If improvements and supports for house construction are available, the process for accessing this information should be disclosed.

**4) Step 4: Announcement of compensation payment and support events:**

- The compensation and support payment event should be planned at a time when the majority of households can attend
- It must take place at a location that does not unduly interfere with households or present a security risk (if cash is involved).
- This may be the Concessionaire's team moving through the village from one house to another or a local financial institution with which the Proponent will collaborate to make payments. This stage includes the negotiations and conclusions of various agreements, and is followed by payments.

**5) Step 5: Announcement of the livelihood restoration process:**

- To avoid confusion, it is preferable that detailed information on the restoration of livelihoods be announced separately from the launch of the RAP.
- At the launch of the RAP, PAPs will be informed that further detailed consultations will be organized.
- Consultation on livelihood restoration will be more detailed and initiated once the stress factors associated with compensation and resettlement are overcome.

### **9.1.5 Regular consultation and complaints management throughout the Project**

- Resettlement and livelihood restoration are a complex process involving a financial component that can be confusing and stressful for PAPs.
- This situation may lead to a perception of unfair treatment that may lead to chronic complaints against the Concessionaire or a poor relationship/reputation.
- Maintaining ongoing informal engagement, access to information and explanations throughout the process reduces stress levels and prevents concerns from turning into complaints.
- Therefore, PAPs and other stakeholders must be continuously informed of activities in the most accessible and understandable way possible. Some aspects of the consultations can be relayed by community leaders, but others must be addressed directly to affected households.

## **9.2 Complaints Management**

This chapter provides simple and accessible mechanisms for third parties to arbitrate and resolve resettlement complaints and conflicts. These mechanisms take into account traditional conflict resolution mechanisms and opportunities for judicial recourse.

During the preparation of the resettlement plan and prior to the signing of individual compensation contracts, affected individuals, families, groups and other entities will be consulted and informed of the procedures for expressing their agreement or disagreement and seeking redress. The conflict management procedure will be simple and:

- must be administered as much as possible at the local level to facilitate access;
- must be flexible and open to various forms of evidence;
- must consider that many people cannot read or write and are in a situation that requires rapid resolution;
- must be fair and equitable.

All complaints concerning non-compliance with contracts, compensation levels, or the takeover of assets without compensation may be addressed and processed at the various levels of the administration with the possibility of lodging appeals to local courts and tribunals. The resettlement committee will use all means (communication of the telephone numbers of its members, notebooks/feedback books filed in places of free and easy access and weekly statements, etc.) to collect complaints, register them and propose an equitable solution that should be developed after consultation with all stakeholders.

A complaint is defined as a concern, problem, sense of unfair treatment or claim (perceived or actual) that an individual or community group reports to the Concessionaire regarding the resettlement process, its implementation team and its various processes.

### **9.2.1 Grievance Mechanism**

The specific objective of this complaint management mechanism is to:

- report resettlement complaints and address them appropriately to prevent complaints from becoming conflicts between the Concessionaire and the communities;
- strengthen relationships with stakeholders by demonstrating the Consortium's willingness to take into account the concerns of affected communities;
- Provide affected households with a means of expressing their concerns about the progress of the resettlement and compensation processes.

## 9.2.2 Principles of the Grievance Mechanism

- This complaints management mechanism is simple, fair, accessible and open: key messages and management processes should be communicated to PAPs.
- It will be adapted to the local culture and target groups using appropriate language.
- The processing of a complaint must not exceed one month.
- All complaints must be registered within three days of receipt, whether or not they are well-substantiated.
- All complaints must be taken into account, whether formal or informal. Informal complaints are those that are reported verbally to one of the members of the resettlement team or a member of the resettlement committee.
- The mechanism includes procedures for treatment by the Concessionaire as well as the possibility of judicial recourse or mediation.

The Community Relations Office will play a crucial role in handling complaints as it will allow access to the members of the Concessionaire's team. Communication materials such as posters, complaints forms and a complaints box will be available at the Community Relations Office.

To anticipate conflicts and disputes, the members of the resettlement committee will participate in any price revaluations. They will assist in the management of appeals and will be heavily involved in obtaining the signatures of the beneficiaries' agreement by having them agree on the proposed amount.

This Commission is regularly informed of the Project's process. It also facilitates the participation of the various necessary administrative services and is called upon to take decisions on how to guide the process in the event of difficulties.

Since it takes time for people to realize that they have been wronged and decide to complain, complaints procedures will provide a reasonable period of time, up to three months after the delivery of the assets in question, during which affected persons may make their complaints. Every effort should be made to try to resolve conflicts amicably. Once all stakeholders, as well as the national and local administration, have agreed on the necessary and appropriate changes, a written description of the modified processes will be prepared. The local administration and local leaders will be responsible for informing the population.

## 9.2.3 Types of Complaints and Conflicts to be Dealt with

Complaints and conflicts that arise during the implementation of a resettlement and compensation program may include the following:

- Errors in the identification and valuation of assets;
- Disagreement on plot boundaries, between the affected person and the expropriation agency, or between two neighbors;
- Conflict over ownership of property (two or more affected persons claim to be the owner of the same property);
- Disagreement on the valuation of a parcel or other property;
- Estates, divorces, and other family problems, resulting in conflicts between heirs or members of the same family, over the ownership, or shares of ownership, of a given property;
- The Concessionaire will make available to the PAPs, several modalities and channels of communication and filing of complaints:
- Communication of the telephone number of the Complaints Officer.



- Complaint books/forms and confidential complaint boxes available at the fokontany and community relations office. Complaint books or boxes should be checked once a week at the latest.
- Verbal complaints to be recorded in the system.
- The complaint management system will be available and valid throughout the resettlement process. It is possible that complaints may only appear months after the start of the physical resettlement process. Besides, since the resettlement process only ends once the livelihoods have been restored, the mechanism must be operational until this stage or even beyond.

#### 9.2.4 Grievance Mechanism Adopted during the RAP Preparation Phase

During the preparation of the RAP and project impact studies, all complaints related to the Project, including those concerning the resettlement process, were collected by NGO Zina and then processed at the Land Resources and Concessionaire level.

**ZINA-ALC:** is responsible for the entire collection and recording of concerns and complaints at the local population level. Complaints will be registered by the ALCs according to their methods:

**Table 36: Complaint and Conflict Management Mechanism Adopted in the Preparation of the RAP**

Project Steps	Mechanisms
Recording of concerns/complaints	<ul style="list-style-type: none"> <li>• <b>“Formal registration”:</b> this is a complaint voluntarily filed at the ALC level by one or more PAPs. In this case, the statement must be “official” and therefore, the ALCs will direct the PAP (complainant) to the grievance book to register their complaint in an official manner.</li> <li>• <b>“Informal registration”:</b> during ALC visits to villages, people can express themselves informally about the Project by talking to the ALCs. Complaints or dissatisfaction, rumors or concerns may sometimes be expressed during discussions but nothing official. However, this information will be transcribed and recorded in the ALC report.</li> </ul>
Transmission of the report	<ul style="list-style-type: none"> <li>• <b>ZINA-ALC:</b> is responsible for sending a report no later than every two weeks to the “GROUPEMENT”, a copy of the email to LAND RESOURCES</li> <li>• Designation a <b>“Contact person” by the “GROUPEMENT”:</b> this will facilitate the management of communication between the Group / Zina / LR -</li> </ul>
Complaints management	<p>LR: is responsible for the management of RAP and EIS complaints and will deal with issues that concern him in 3 ways:</p> <ul style="list-style-type: none"> <li>• Answering questions: LR must forward to ZINA all responses to the various questions posed in the report by the PAPs. ALCs will forward these responses to the persons concerned.</li> <li>• Complaint under “Formal Registration”: these complaints will be processed on site in the presence of the committee (composed of the Fokontany Chief, Chief “Ilot”, Village elder, representing vulnerable communities), Complainant(s) and LR. ALCs do not participate in this meeting/intervention unless a community meeting is required.</li> <li>• <u>Complaint under Non-formal registration</u>: these points will be dealt with specifically by LR depending on the scope and reliability of the information (for rumors, for example).</li> </ul>

During the preparation of the RAP, no major complaints were reported. The complaints received mainly apply to concerns or requests for information from the PAPs regarding the Project schedule, the size of the flood area or compensation arrangements. To date, no complaints have been externally handled by a government agency or the resettlement committee.

When consultations on the RAP are launched and throughout the following process, a more responsive and accessible complaints management mechanism will be put in place, including several other entities such as the resettlement committee, the Concessionaire, which will play a more active role, and the possibility of legal recourse.

### **9.2.5 Proposed Grievance Mechanisms for the RAP**

In resettlement and compensation programs such as the one considered for the Sahofika Project, many complaints and conflicts may result from misunderstanding of the Project's resettlement policies, or from neighborhood conflicts that are sometimes unrelated to the Project, but can very often be resolved through arbitration and traditional mediation rules. Thus, many conflicts can be resolved:

- Through additional explanations (for example, explain in detail how the Project calculated the complainant's compensation and show them that the same rules apply to everyone)
- Through arbitration, by calling on elders or people respected in the community while being from the outside.

If these approaches fail, resorting to the courts is often time-consuming before a case is heard and can result in considerable costs for the complainant, or requires a complex mechanism, with experts and lawyers, which often can go completely beyond the complainant's control and ultimately turn against them. The courts are not supposed to hear cases of disputes involving informally held properties. Therefore, should significant resettlement and compensation disputes arise, the Concessionaire will set up an out-of-court mechanism for handling disputes involving explanation and mediation by third parties.

Each affected person, while of course retaining the possibility of resorting to justice, may use this mechanism, in accordance with the procedures specified below. There will be two main steps:

- Registration of the complaint or dispute;
- Amicable treatment, in three successive levels:
  - Internal management by the RAP Committee;
  - In the event of failure at Level 1, informal amicable mediation is conducted by the Local Committee;
  - In the event of failure at Level 2, the case is referred to the courts.

This mechanism will process complaints in three (3) steps, from the opening of the case to its closure.

- 1) Registration and processing of the complaint at the Concessionaire level
- 2) Amicable management, in two successive steps:

- Internal management by the Local RAP Committee;
- Internal management and informal mediation at the national RAP committee level

In the event of failure at Level 2, the case is referred to the courts.

### **9.2.6 Registration of Complaints**

The RAP Monitoring Committee will establish a complaints register in accordance with current national law and IFC Performance Standard No. 05. This register will be maintained by the Concessionaire's

teams and the local resettlement committee that was established during the implementation of the socio-economic studies for the preparation of the RAP.

The existence of this register and the access conditions (where it is available, when one can reach the agents in charge of registering complaints, etc.) are widely disseminated to the affected populations as part of consultation and information activities. In particular, it will be recommended that after the publication of the RAP and the various compensation measures, owners whose rights have not been accurately identified by the proposed measures will be able to claim their rights.

### **9.2.7 Complaint Resolution Mechanisms**

The various steps are described in the following table.

**Table 37: Complaints Handling Steps**

Steps	Description	Processing Time
Receipt of the complaint	<p>The complaint is received through various channels:</p> <ul style="list-style-type: none"> <li>• Fokontany Office</li> <li>• Community Relations Office</li> <li>• By hand to the Concessionaire's agents</li> <li>• Verbally or by phone</li> </ul>	Weekly verification of complaints with the offices mentioned
Recording and sorting of complaints	<ul style="list-style-type: none"> <li>• All complaints received, whether substantiated or not, will be recorded in an internal project register to keep track of all complaints made by the PAPs.</li> <li>• Sometimes unsubstantiated requests or complaints are placed in complaint boxes. These files will be sorted at this stage and transferred to the person or department concerned.</li> <li>• Well-substantiated complaints are recorded in the system and follow the normal process</li> </ul>	No later than three days after receipt of the complaint, except for complaints deemed urgent
Step 1: Analysis and processing by the Concessionaire	<p>After a complaint is registered, the Concessionaire analyses the complaint through field visits or internal investigations.</p> <ul style="list-style-type: none"> <li>• If necessary, the Concessionaire checks with the complainant what steps have been taken to resolve the situation locally.</li> <li>• In the event of the analysis of the complaint showing that it is unsubstantiated, a written response will be given to the complainant and copies will be submitted to the local resettlement committee for archiving.</li> <li>• If the complaint is well substantiated and processing is going to take more than 2 weeks, the Concessionaire will issue an acknowledgement letter with a provisional response.. This letter explains that the complaint is being processed and that a response will be sent as soon as possible.</li> <li>• If the response to the complaint is available at this stage, the Concessionaire sends a letter with a response to the complainant.</li> <li>• If this approach has been taken, but has been unsuccessful, the committee will take the complaint to the next level.</li> </ul>	A formal response must be sent to the complainant no later than 30 days after receipt

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Steps	Description	Processing Time
Step 2: 2.a. Mediation by the local resettlement committee	<p>The resettlement committee, composed of the various representatives of local authorities, communal/local leaders, as well as decentralized entities, will work in a complaints management sub-committee when necessary.</p> <ul style="list-style-type: none"> <li>If after Step 1, the complainant is not satisfied with the response, the complaint must be referred to this local resettlement committee for mediation.</li> <li>The members of the committee meet to examine the complaint through interviews with the members of the resettlement team and the complainant, and prepare all the technical elements required to give the best response to the complaint (e.g. proposed compensation, list of interviews or meetings held with the complainant, exact reason for the conflict, etc.). Following these interviews, the Resettlement Committee will draft a formal response by mutual agreement with the Concessionaire to be submitted to the complainant.</li> <li>If the complainant accepts the proposed resolution, the complaint will be closed and filed.</li> <li>If the complainant does not accept the response, the complainant will use an external judicial process.</li> </ul> <p>The agreement or refusal of the proposed solution is sanctioned by a protocol signed between the parties (the complainant and the Concessionaire's representative) for which the Chairman of the Committee is also responsible.</p>	No later than 15 days after the complaint is referred to the committee
Step 2 : 2.b. Mediation by the Technical Resettlement Committee	<ul style="list-style-type: none"> <li>This entity, composed of representatives of the State at the national level and the Concessionaire, will reassess the complaint again if it has not yet been closed and propose a new solution to the complainant. This third step is the final level of recourse for the Project to deal with complaints. If a disagreement persists after processing by this committee, the complaint or conflict must be brought before the courts.</li> <li>All responses proposed to the complainant must be documented and signed by the complainant, the committee representative and the Concessionaire.</li> </ul>	Within 15 days of the complaint being referred to the National Resettlement Committee
Step 3: Recourse to justice	<ul style="list-style-type: none"> <li>Any complainant who has not received settlement through the internal settlement mechanism may apply to the courts, in accordance with the procedures in force.</li> <li>In accordance with current national law, a complete file will be submitted to the President of the Ambatolampy Court. An expertise may be ordered if requested by one of the parties. It must be conducted by three (03) approved experts appointed by the court.</li> <li>Regardless of the level of complaint resolution, after agreement by the parties, minutes of the agreement will be prepared and signed by all parties.</li> </ul>	According to external processing times at the Ambatolampy court level

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Step 3: Recourse to justice	<ul style="list-style-type: none"> <li>Any complainant who has not received settlement through the internal settlement mechanism may apply to the courts, in accordance with the procedures in force.</li> <li>In accordance with current national law, a complete file will be submitted to the President of the Ambatolampy Court. An expertise may be ordered if requested by one of the parties. It must be conducted by three (03) approved experts appointed by the court.</li> <li>Regardless of the level of complaint resolution, after agreement by the parties, minutes of the agreement will be prepared and signed by all parties.</li> </ul>	According to external processing times at the Ambatolampy court level
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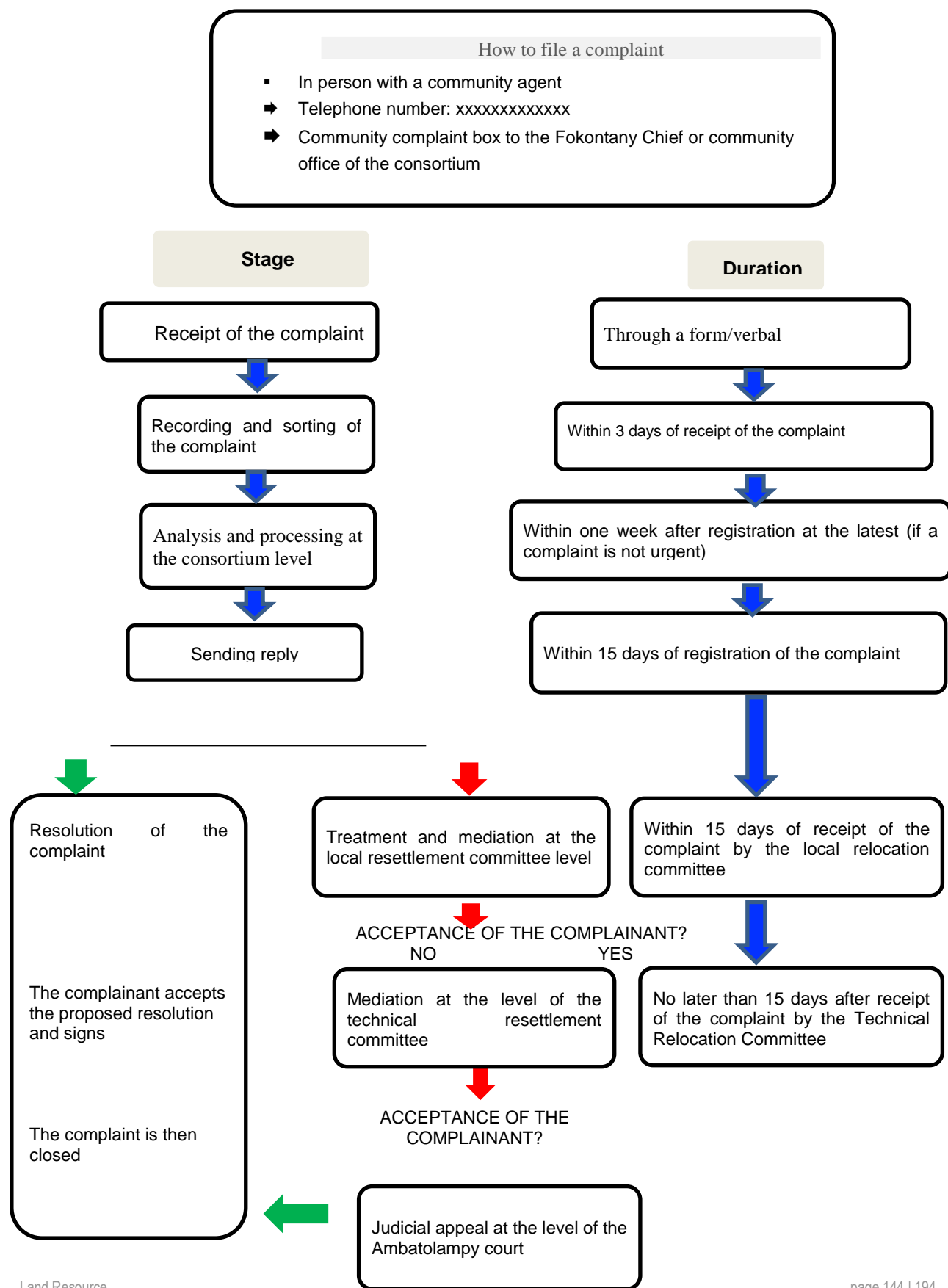


### **9.2.8 The Ambatolampy Court**

In the event of failure to reach an agreement and/or the expropriation report is not signed by all stakeholders, the PAPs may refer the matter to the court where a file will be opened. An independent expert report may be carried out if requested by one of the parties, as provided by law.

It is judges of the Ambatolampy court who, as a last resort, will be responsible for checking all the documents in the expropriation file and for deciding on compensation payments.

The procedure for resolving complaints concerning persons affected by the implementation of the Project can be summarized as follows.



# 10 VULNERABLE PEOPLE AND ASSISTANCE

PS5 pays particular attention to vulnerable individuals and groups so that they are not impacted more acutely and that they can have access to special benefits or attention corresponding to their condition.

This requires a specific planning of mitigation measures for the persons and households concerned. All public consultation and information disclosure activities must have specific measures to ensure the full participation of vulnerable households. Therefore, they must be adapted to the local dialect and their literacy level. Information should be as accessible as possible to facilitate access and understanding.

## 10.1 Identification of Vulnerable Groups

**A vulnerable group** consists of people who, for reasons related to gender, ethnicity, age, physical or mental disability or, due to economic or social factors, may be more significantly affected by the displacement and resettlement process. It could also be a group of people whose ability to claim or receive resettlement assistance and other benefits may be limited. These persons were identified through the comprehensive and direct household survey conducted by the Consultant.

**Vulnerable households are those** at risk of being more affected as a result of the resettlement process. These are households with needs for compensation and additional mitigation measures that are higher than other households. These vulnerable households include mainly:

- female heads of household, whose vulnerability is associated with the absence or weakness of the support they receive;
- households whose head is without or almost without resources;
- households weakened by a disease that affects one or more of their members;
- seniors who are unable to take care of or protect themselves;
- Elderly people living alone and not receiving any attention from neighbors;
- Disabled people who have difficulty, due to a physical, mental or visual disability, in carrying out their normal economic activities;
- People with incurable diseases, especially those with hiv/aids;
- Widows and children in difficult situations, especially those without a fixed home, orphans, etc.

## 10.2 General Measures

An NGO will be responsible for a program to support vulnerable PAPs identified in this RAP throughout the resettlement process. The following assistance will be provided:

- Reconstruction assistance;
- Transportation assistance for the resettlement process;
- Training/awareness for the use of compensation funds (NGO);
- Opening bank accounts for vulnerable PAPs, with priority given to those for which compensation amounts will be high.

## 10.3 Census of Vulnerable Persons and Households

The following table provides details on the number of vulnerable people.

**Table 38: Identification of Vulnerable Persons**

Vulnerable Persons	Number of Vulnerable Persons
Elderly people who are unable to take care of or protect themselves (over 65 years of age)	29
People over 65 years of age living alone	4

Vulnerable Persons	Number of Vulnerable Persons
People with a disability, chronically ill, with an incurable disease, with a mental disorder	65
Children under 3 years of age	238
Very young children with chronic diseases	10
<b>Total</b>	<b>346</b>

**Table 39: Vulnerable Households**

Vulnerable Households	Number of People
Households headed by single women.	22
Households living below the poverty line:	5
<b>Total</b>	<b>27</b>

## 10.4 Provisions to be Anticipated

The restoration of living standards will mainly require strong support for the people affected, either through a personalized approach or through NGOs that will support people or groups of people regardless of their choice, whether they are changing activities or otherwise.

### 10.4.1 Assistance to Vulnerable People

Specific assistance will be provided to vulnerable groups depending on the nature of their vulnerability.

The assistance provided will take the following forms:

- **Assistance in implementing the compensation procedure:** provide additional explanations on the process, ensure that the documents are well understood, accompany the person to the bank to<sup>7</sup> help them collect the compensation check, if necessary;
- **Assistance after the compensation payment** to ensure that the money is secured and that the risk of misuse or theft is limited. In-kind payments (e.g., providing a new home) should be considered whenever possible instead of cash payments. Other measures to help households manage their money well, such as training, are also recommended.
- **Assistance during the relocation:** providing means of transport, vehicle and close assistance, helping the person resettle;
- **Assistance in the construction of a new home:** the Project will take charge of reconstruction works;
- **Assistance in the period following displacement**, especially if the solidarity networks that used to benefit the vulnerable person benefited cannot be reconstituted immediately: food aid and health monitoring.
- **Assistance in livelihood restoration.**  
 Consultations will be held to help vulnerable PAPs choose their resettlement sites. PAPs will be supported in their resettlement to the site of their choice. In addition to compensation for their affected property, they will receive:
  - **A displacement allowance** to which all permanent residents are entitled. The amount is set at **MGA 500,000 (\$138 USD) per household**;
  - **A displacement assistance and resettlement guide** for vulnerable people. The amount is set at **MGA 300,000 (83 USD) per person**.

<sup>7</sup> Several banking companies have branches in the municipalities of Tsinjoarivo and Belanitra

▪ **Food aid during the period when production is interrupted (about six months).**

Temporary food support is also planned to assist identified vulnerable PAPs and tenant farmers. Each family (regardless of the number of children) will receive such support every month and for the duration of the transition from their current place of production to the next crop harvests on their new land:

**Table 40: Calculation of Food Aid Costs**

Wording	Amount per month		Amount for 6 months	
	MGA	USD	MGA	USD
50 kg of rice	125,000	35	750,000	207
Vegetables	50,000	14	300,000	83
1 liter of oil	6,000	2	36,000	10
1kg of sugar	3,000	1	18,000	5
<b>Total</b>			<b>1 104 000</b>	<b>305</b>

▪ **Health monitoring and free care**

During the first six months, medical teams will regularly visit vulnerable people, especially those who are ill. The Project will cover the cost of equipment and medicines.

It is recommended that mobile health teams be mobilized within the district health services to ensure medical follow-up. Costs related to logistics, wages and the purchase of medical consumables will be borne by the Concessionaire.

Households whose members will benefit from accompanying measures include:

- Resident owners: 288 households
- The vulnerable group: 346 individuals and 27 households
- Tenant farmers: 3
- Free occupants: 12.

#### **10.4.2 Psychological Support**

On several occasions during the consultations, and in particular during the last consultations held in May 2019 in the presence of the AfDB and in June 2019, representatives of PAPs insisted on the need for psychological support throughout the process, especially for physically displaced people before, during and after their relocation.

Attachment to the territory is strong and so are cultural ties, which triggers some general anxiety in various categories of the population when they are about to leave their territory.

Contacts were made in spring 2019 to identify organizations that could provide such psychological support. Several organizations working in this field in Antananarivo have been identified and contacts are underway before defining the scope of their intervention. A budget has been allocated in the RAP budget.

## 11 RESTORING LIVELIHOODS

The principle adopted for the economic rehabilitation and conversion program is to establish links between the PAPs and their new integration environment in order to create homogeneous development and to ensure peace and social cohesion.

This program should be associated with the investment program in host sites, which will enable PAPs to avoid any problems related to the use of existing infrastructure.

The amount allocated for this program to restore the livelihoods under the Sahofika Project is **USD 500,000**, in addition to which a budget of **USD 100,000 has been** allocated to support social integration programs. Part of these funds will be used for joint actions to be carried out by the organizations recruited by the Concessionaire. Some forecasts of the use of these funds in terms of pooled or individual investments are also provided in this section. However, it is clear that as the program progresses, opportunities will open up for some PAPs to request support for a conversion project or the financing of personal micro projects.

## 11.1 Mitigation Measures

The first step in the overall resettlement process is to inform the PAPs (before the relocation process begins) about the payment process and the follow-up measures that will be implemented so that they know that the Project will support them in their resettlement and the development of their activities at their new resettlement sites.

PAPs must be able to improve their living conditions. To this end, the Project will inform PAPs about options for improving their status and support them: either by changing their professional orientation or by improving their productivity/work capacity.

Although it has been decided that PAPs are free to choose where they are relocated (i.e. each PAP can relocate where they wish) and that compensation will therefore be paid in cash, it is nevertheless important that the Project also supports PAPs in their search for land, be they landowners, occupants or tenant farmers.

Therefore, PAPs, regardless of their status, will be eligible for specific accompanying measures, based on their needs. Some of these measures are proposed below.

Compensation will be provided both in kind and in cash, depending on the case and on the choice made by the PAP. Under this option, precautionary measures should be taken to ensure that the amounts allocated to PAPs are properly used for resettlement purposes and to limit any risk that money will be quickly squandered and that PAPs will then be left without any resources.

For PAPs wishing to return to their villages of origin or to neighboring areas, and in order to limit the risk of land speculations, the recommended strategy is that PAPs (owners, tenant farmers or occupants) undertake the search for new crop and housing land.

## 11.2 Implementation of Economic Rehabilitation Programs

The livelihood sources of the Sahofika Project's PAPs are quite diversified. The Concessionaire will ensure that several options are included in the program and that the PAPs have been consulted from the preparation phase to the implementation and monitoring of the various programs.

The restoration of livelihoods will be supported by<sup>8</sup> technical assistance supporting the Concessionaire for a minimum period of three years to complete the process.

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<sup>8</sup> This technical assistance will support the Consortium both in the resettlement process. It must be world-class and help the consortium address the concerns of the various technical and financial partners, NGOs or the Environmental and Social Advisory Panel.



To ensure its sustainability, the restoration activities will be based in part on existing organizations or projects, some of which are managed by decentralized technical services (agriculture, livestock, etc.) and will be accompanied by a social integration program.

All PAPs should have been informed of these activities prior to their displacement so that they are aware of the importance of staying in contact with the Project.

Before the relocation process, the Concessionaire will identify all actions carried out by organizations and/or projects in the planned PAP resettlement areas and map them. Activities that may be of interest to the PAPs will be identified. The Consortium, supported by technical assistants, will develop, with the organizations involved (projects, NGOs, etc.), the main support they will be able to provide to people affected by the Sahofika Project.

In addition to the assistance offered by these various assistance channels, PAPs will receive dedicated support through organizations contracted by the Consortium to implement specific aspects of the economic rehabilitation and conversion program. Specialized local organizations (projects, NGOs, etc.) will be selected and mobilized on the Project. They will be recruited as needed. The work of these organizations with the populations will generally consist of supervision and outreach. The organizations will be entrusted with communication, awareness-raising and support work with vulnerable people and some of them will have to follow up on the people who have been settled.

To ensure its success and sustainability, activities will be implemented in several stages:

- Development of a program with various options based on the current PAP livelihoods and in the Project's area of influence. The Consortium will therefore have an inventory of all possible options, based on consultation of the outcome of the socio-economic study, the ESIA and government-supported economic development programs and development projects similar to those in the study area
- Information and consultation of PAPs on options, and choice for each eligible PAP
- Development of a detailed livelihood restoration program taking into account the choices of PAPs and drafting of the various terms of reference for the selection of competent providers
- Launch of the program's implementation once the PAPs are installed at their new site.
- Monitoring and evaluation of the program.

The implementation of the resettlement plan measures will require considerable resources, so PAPs should be supported by specialized organizations to ensure efficient management of the resources allocated to them. The monitoring and evaluation of the resettlement of affected people will also be facilitated by these PAP support structures, which are responsible for providing them with advice on how to use the money collected efficiently.

The entire livelihood restoration program will be coordinated by an expert in charge of livelihood restoration under the supervision of the RAP expert and the advice of technical assistants.

The specific aspects of vulnerable households will also be managed by this expert and integrated into the economic rehabilitation program.

### **11.3 Concept of the Socio-economic Impact Mitigation System**

It is difficult to design a system for mitigating socio-economic impacts on local populations without taking into account the entire resettlement process for populations directly affected by the Project, since this process also leads to significant socio-economic changes in the region due to its scale.

It is therefore irrelevant to establish measures to manage socio-economic impacts independently of the resettlement process without creating bias or disruption in the existing social system. To this end, the proposed social measures attempt to minimize conflicts that could emerge between displaced

populations who have access to sustained project support and those who are not displaced and will suffer indirect impacts without having access to significant project support.

It is important that the resettlement process that supports displaced persons, especially in restoring livelihoods, be long enough to ensure that the PAPS have taken full ownership of the means at their disposal in their new environment. It was also important that the Project Proponent be able to withdraw from the support process at the appropriate time without this having an impact on the quality of life of the populations. It is therefore important to create a sustainable development process that will be independent of the Project and that will be able to manage the resources and assets made available to the community in the medium term, without placing a financial burden on the Project or the state.

The Project is expected to last 54 months. However, based on experience of this type of project, it is very likely to last more than 60 months. We can, therefore, consider the sustained presence, on the site, of the various organizations that will work on the construction of the infrastructure over a period of five to six years

This period should be used to structure the rural economy of the affected areas in a sustainable way so that the local economic fabric is not disrupted when the operating period arrives and there is a decline in economic activities due to the complete demobilization of the personnel and equipment that were working on the construction.

To do this, two fundamental elements must be put in place as soon as the funding agreement is acquired:

- A reforestation program using, in particular, fertilizer trees on resettlement sites based on pre-determined schemes that will make it possible to redistribute land to displaced persons
- Establishment of a mutual development cooperative that will largely take charge of improving farming and livestock practices for all displaced persons, but also for all populations in the Project's impact area, while ensuring essential tasks for the implementation of socio-economic mitigation measures for the Project

### **11.3.1 Fertilizer Trees**

These fertilizer trees, mainly legumes, have the potential to greatly improve soil fertility while providing many ecosystem services, thanks to their rapid growth and ability to capture nitrogen from the air and multiply by seeding bacterial and fungal strains in the roots of the seedlings. Once the planting is completed, the creation of nodules at the root level spreads rapidly under the soil, improving crop yields without using external fertilizers.

Programs have been successfully implemented in various countries (ong-apf.ovh) and have reduced fertilizer inputs and maintained soil quality and limited herbicide inputs.

The conservation of trees by producers is effective because of their contribution of nutrients and the significant improvement in production. Producers understand their importance and keep them on their land. The foliage of these trees is used as livestock feed, the many branches are used as firewood and after about ten years when these trees are too large they can be cut down and used as lumber. As a result, these agroforestry plantations become permanent and are eligible for the Reducing Emissions from Deforestation and Forest Degradation (REDD) process.

### **11.3.2 A Development Cooperative or Mutual**

The dam project involves the displacement of about 374 households, about 85% of which are farmers. The Project will also have other socio-economic impacts outside the dam area. The reduction of forest

and agricultural land could also put pressure on existing forests, which are becoming less and less important and are under protection.

Some farmers will see all their land flooded by the dam's water impoundment while for others the lands will be partially flooded. Some displaced persons will occupy new land, perhaps less productive than the land occupied before the displacement. Other affected people may wish to move away from farming practice to other sources of income and will need to be supported during this change.

The objective of the cooperative through these actions would be to ensure sustainable development of the Sahofika Dam area in the long term. This development will take into account people affected by the Project (PAPs), including displaced persons, and will improve their living conditions, even after the end of the Project and its financing.

The solution considered is to set up a cooperative organization that will coordinate the preparation and implementation of sustainable development plans before, during and after the construction of the Sahofika Dam to support the people affected by the Project as well as the entire community in the Project-affected area.

A cooperative is an independent association of people united voluntarily to meet common economic, social, cultural and environmental needs and aspirations within a collective organization where power is exercised democratically and transparently. Cooperatives enable their members to seize new opportunities by offering them a wide range of services.

The cooperative can play an important role in the Project area by helping those affected by the Project. This cooperative contributes to the economic and social development of their members and creates sustainable jobs.

Cooperatives offer new prospects and a wide range of services to small producers, including improved access to agricultural markets, micro-credit, training, new technologies and agricultural inputs, to name just a few. They also make it possible to jointly purchase and use agricultural production and processing equipment (tractors, harrows, etc.). Cooperatives facilitate the participation of small producers in decision-making, helping them obtain agricultural inputs, including fertilizers, improved seeds and equipment, at lower prices.

When they are organized as cooperatives, small producers can improve their living conditions and those of their communities. Cooperatives therefore contribute to the fight against poverty and to ensuring that people are food secure. In the medium term, the cooperative will be financially self-supporting and will be a driving force for the economic development of the area until another type of development takes over.

The advantages of a cooperative are as follows:

- Makes it possible to share services and equipment that are otherwise not accessible to farmers individually;
- Makes it possible to work in synergy with other State actors and civil society
- Managed by professional administrators with technical experts dedicated to members only ;
- Economies of scale for the purchase of inputs and equipment ;
- Facilitate product processing and marketing;
- Facilitate access to training and support techniques ;
- The cooperative is at the service of its members who own it and approve its main orientations, whether they are involved in the daily management of the organization (the cooperative is there to provide support)

- Can be financed by donors as part of the Sahofika Dam Resettlement Plan and any other development programs that may be required.

The main actions that could be carried out by the cooperative are according to the phases of the Project are summarized in the following table:

Project Phase	Main Activities
Preparation phase and construction of the dam	<ul style="list-style-type: none"> <li>· Awareness and acquisition of members ;</li> <li>· Approval of the first internal regulations of cooperative ;</li> <li>· Purchase of a brick press for the new constructions ;</li> <li>· Production of bricks at resettlement sites creating local jobs</li> <li>· Support for the construction of houses for physically displaced persons</li> <li>· Management of the fertilizer tree planting program ;</li> <li>· Purchase and resale of solar panels and lighting kits</li> <li>· Construction of the premises and installation of the cooperative ;</li> <li>· Purchase of equipment from the cooperative ;</li> <li>· Support for farmers who only lose part of their land, but will not be displaced;</li> <li>· Beginning of the structuring of the resettlement village. Construction of service centers (school, market, health center, water distribution network, etc.)</li> <li>· Supervision of work that can be completed in high labor intensity (HLI).</li> <li>· Processing and transport management of marketed agricultural products</li> <li>· Supply inputs to producers</li> </ul>
Dam impoundment phase	<ul style="list-style-type: none"> <li>· Supervision, with its employees and equipment, the preparation and seeding of new plots for the people to be relocated;</li> <li>· Preparation of the fisheries management process with the members and administrations involved</li> <li>· Technical and financial support for affected people to increase their production and income on cultivated areas;</li> <li>· Supply of inputs to producers (fertilizers, pesticides, etc.)</li> <li>· Starting training on new techniques and preparation of demonstration plots;</li> <li>· Coordinating the use of vegetation in the reservoir (training on composting, etc.);</li> <li>· Start breeding chickens, laying hens, pigs, or maternities in order to generate income and offer chicks, piglets, etc., to the cooperative's members;</li> <li>· Establishment of nurseries.</li> </ul>
Operation phase	<ul style="list-style-type: none"> <li>· Technical and financial support for the deployment of new cultivation techniques;</li> <li>· Pooled supply of inputs and other production equipment;</li> <li>· Offer the services of agronomists and veterinarians;</li> <li>· Provide training to members;</li> <li>· Processing and marketing of agricultural products</li> <li>· Microcredit services;</li> <li>· Process and market agricultural products to generate revenue to provide more services to members.</li> </ul>

## 11.4 Economic Rehabilitation Measures

Economic rehabilitation measures must be taken as part of the RAP to ensure that affected populations can quickly return to or even improve their initial standard of living.

**The proposed actions cover various areas:**

- Support for displaced people;
- Capacity building;
- Support in the conversion process;
- Improving community infrastructure;
- Other income-generating activities;
- Pooling of equipment for the production or processing of agricultural products.

Economic rehabilitation measures will also aim to facilitate the integration of displaced persons into the host population.

To achieve these objectives, the Project will proceed in three stages: (i) updating socio-economic data on affected households and preliminary consultations on the various economic rehabilitation options available, (ii) detailed consultations, (iii) implementation and capacity building.

## 11.5 Updating Socio-economic Data on Affected Households

Updating the inventory of land and assets is one of the first steps in the implementation of the RAP. As part of this operation, which consists in confirming the various properties of each PAP and carrying out possible land measurements in the event of a claim (by topographical survey), an update of households' socio-economic data will also be systematically carried out. An individual sheet per head of household will be published and will include most of the information from the surveys carried out within the framework of this RAP and archived in a database (STIP database). Then the various information relating to the household will then be confirmed or updated and a complementary questionnaire will make it possible to better identify the PAPs' specific support needs in terms of resettlement support (support in finding land, specific assistance, etc.) and in terms of economic rehabilitation. This additional information will allow us to better identify the needs for technical support / training /... and thus develop targeted economic rehabilitation programs.

**Independent Survey of Affected Households:** This is an update of socio-economic data from the PAPs, conducted independently prior to the implementation of the RAP and economic rehabilitation program. This survey made it possible to study and confirm the choices of each of the PAPs on the basis of several livelihood restoration options.

## 11.6 Capacity Building

Capacity building will include support to the population through awareness/training, the establishment of socio-community infrastructure and the financing of income-generating activities through social micro-finance. This form of financing of activities will make it possible to instill dynamics of socio-economic development within the displaced and host populations and to contribute to improved living conditions.

### A. Identification of Focus Areas

This step will allow the PAPs to confirm their wishes in terms of conversion in view of the new environment in which they find themselves.

The final identification of the resettlement site will be carried out during the socio-economic data update operation and will make it possible to define, more precisely on a map, the planned resettlement site of each of the PAPs and, on this basis, identify the various areas of concentration of displaced persons so that information meetings / consultation with the host villages and the PAPs can be organized by the Project.

The planned installment payment process will make it possible to monitor each PAP individually and therefore, their location after their displacement can be established with precision and on the basis of this information, support programs for PAPs and host populations can be developed on a consensual basis in accordance with the needs identified during the consultation and participatory diagnosis including the PAPs and the host population.

Should it prove necessary to set up community facilities, an inventory will be carried out and, if necessary, work will be carried out to improve existing facilities or build new infrastructures (market, school, health center, etc.).

Technical improvements and product processing equipment that may be necessary to ensure that the living standards of the displaced are maintained will also be accessible to the host population.

## **B. Support for community life organization**

### **1) Support for the organization of community life through information/awareness sessions:**

- Information/awareness-raising sessions will aim to improve the organization of community life in all its forms, with a particular focus on gender, vulnerable people and children. This will involve getting the community to elect a community development committee with a board representing all levels (if it is not already in place). This committee will be the primary interlocutor and will be an essential prerequisite for the start of any development action.
- Support for the elaboration of a local or community development plan with particular emphasis on available resources, resources to be sought and the necessary development priorities, definition of priority needs and necessary support.
- These sessions will also aim to raise community awareness of community health through hygiene and sanitation.
- Raising awareness of the importance of setting up production, marketing and processing groups.
- Awareness-raising and support for social cohesion as well as psychosocial support to manage the impacts related to possible psychosocial shocks induced by the resettlement process.

### **2) Training courses**

Training sessions will be organized in the main areas where displaced persons are hosted. These training sessions will aim to:

- Train people in community management and the roles and responsibilities of the bodies that have been set up;
- Train the population to participate in the implementation of assets and projects, to identify and include opportunities, strengths, weaknesses and threats for any development activity. Community infrastructure will be a priority in communities where sufficient numbers of PAPs have been established;
- Once the populations are settled, minimum hygiene rules will be established. Hence the need for training in community health management.
- The formation of groups is imperative for harmonious and participatory social development. Members of the groups will need to acquire knowledge and skills in their fields of activity. They will thus acquire knowledge in project development and fundraising.

The objective of this training activity is to equip the PAPs with the necessary skills for negotiations with the various actors involved in the community.

### C. Implementation of a social micro-finance program

The establishment of a social micro-finance system will follow the following principles:

- Access approach: access will be very simplified. The PAP will only have to justify its status by presenting their card (PAP identity card). However, sufficient information on micro-finance should be provided so that beneficiaries do not take credit for a grant.
- Conditionalities: The duration of the loans will be progressive (three, six, nine months, etc.). From a properly repaid 3<sup>rd</sup> loan, PAP will be able to access a larger loan over a longer period. The main objective of the first three loans will be to integrate the PAP into the logic of the repayment conditions of loans granted by microfinance entities.
- Support: The Project will be able to support microfinance entities by providing them with a guarantee fund equivalent to **USD 96,700** (approximately USD 260/PAP). This form of social micro-finance cannot be sustainable because it only helps encourage vulnerable groups to set up businesses.

### D. Project implementation

In support projects, the usual approach to project implementation should be followed. These include the following steps:

- Identification of PAPs by resettlement area and type of activity;
- Identification of associations or self-help groups;
- Awareness and information on the support that the Project can provide and the conditions of this support (individual allocation of inputs and small equipment or small groups);
- Training / ad hoc advisory support;
- Identification of priority needs;
- Support in financing approaches (micro-finance);
- Monitoring of results.

Thus, the following sectors can be supported:

**Table 41: Lifestyle Rehabilitation Options**

<b>Economic Rehabilitation Activities</b>	<b>Description</b>
Agricultural production	Support for production and productivity: technical support for crops and soil fertility improvement (promotion of young agricultural entrepreneurs), hydro-agricultural development, distribution of start-up kits (maize kit: fertilizer (100kg NPK, 50kg Urea), 10kg of improved seeds, planting stick for 0.5 hectares; rice kit: fertilizer (50kg NPK, 25kg Urea), 20kg improved seeds, planting stick, weed control, spray for 0.25 hectares);
Market gardening	Development of lowlands, development of plots for off-season crops (rice, and even corn of the 45-day variety, following flood recession).
Livestock farming	Sheep, goats, poultry, pigs, etc.
Conservation/processing and marketing: production enhancement	Access to processing equipment to increase the value of production on the farm (shellers for maize; huskers, threshers, valves and tarpaulins for rice; graters and manual presses for cassava).
Development of support infrastructure	Stores, drying areas, shelters for processing equipment, bulking buildings for marketing;

<b>Economic Rehabilitation Activities</b>	<b>Description</b>
Marketing support	Various studies on sectors, markets, marketing, etc.;
Support for structuring and producer organizations	Capacity building of producer organizations; support for women's groups and processing cooperatives (marketing of agricultural products, smoking and sale of fish, etc.); fishermen's groups, fish farmers' organizations, etc.
Support for the development of new production methods	Development of flood recession crops, agricultural intensification, market gardening
Equipped with a solar pump for irrigation.	This support will be provided in particular to affected people who have lost land but who have not suffered house losses (and who will therefore reside on the edge of the future reservoir) An exceptional allocation to cover all the support to be provided to the PAPs will be provided, both in the field of agricultural production, fisheries, livestock, fisheries production and processing/marketing.
Controlled mining operations	Technical studies at the two resettlement sites revealed the presence of mining areas. The Project will carry out a more in-depth evaluation
Development of a forest area	A 250 ha forest area will be moved to the resettlement site to enable households to resume forest-related economic and livelihood activities and also to compensate for the forest area flooded in ecological terms

The implementation of all these projects requires:

- Consultation and collaboration with the populations;
- The core principles of the community development approach consist in empowering people and communities to take charge of their own problems, whether it is their health, their children's education, their own training or income generation. It is no longer about implementing a project in which the community is the beneficiary, but about working with the community to know, on the basis of a common analysis of the situation and problems, which project to implement and then implement it together. The development of policy projects must give way to work in partnership with the populations concerned, through community structures, but also through new consultation platforms. One of the major aspects of this approach is the identification, support and promotion of initiatives by individuals, groups and communities in order to be able to carry out new innovative experiences. Participatory working methods and procedures for negotiation and consultation between partners, with the populations and their own structures, are adopted.
- Communication with various partners.
- Building relationships with communities (a fundamental approach at the grassroots level) depends on communication, i.e., mutual understanding of the information exchanged.
- Similarly, the implementation of partnership actions at the global level between central government structures and development partners on the one hand and, on the other hand, between the various government decision-making bodies, civil society, their implementing structures and communities, also requires effective communication. The aim is to facilitate cross-cultural communication and build the capacity of communities to express themselves better.

Actions undertaken by the Sahofika Project will only be sustainable through specific strategies to be promoted to address each problem. The Project will have to develop strategies capable of promoting the ownership of the actions initiated and ensure the necessary resources to guarantee their continuation are created.



Indeed, some important sustainability factors depend on the ability of communities to change the conditions in which their life/social condition occurs. This implies the strengthening or creation of capacities enabling those concerned to carry out income-generating economic activities, to create and manage social and economic enterprises on an individual or shared basis. All this requires institutional organizational and management capacities, assets that the Project must succeed in promoting among the main actors in the region.

Finally, and in general, communication media - especially radio - will also have a major role to play in raising community awareness of the major current issues faced.

## 11.7 Support Entities for Producers

### o **Local agricultural, livestock and fisheries services<sup>9</sup>**

Reporting directly to the regional directorates of agriculture, livestock and fisheries, these services have the following roles:

- Develop efficient agriculture, livestock and fisheries and aquaculture systems, from production to marketing;
- Establish an environment conducive to the development of agriculture, livestock and fisheries;
- Develop skills in the public and private sectors;
- Create alliances to negotiate resources and identify necessary business opportunities.
- o **Inter-Regional Departments and Services for the Environment and Sustainable Development (DIREDD)**
  - They are responsible for the implementation of environmental, forestry and sustainable development policy at the regional level, in conjunction with local authorities, NGOs, the private sector, associations, grassroots communities (COBA), deconcentrated and decentralized services. Each inter-regional or regional directorate for the environment and sustainable development is placed under the authority of the inter-regional or regional director for the environment and sustainable development.
- o **Local authorities,**
  - In accordance with their prerogatives under the decentralization laws, local authorities work at the commune level to develop and implement local development strategies. The communal authority (Communal Council) is therefore an important link that must be continuously strengthened, with the support of the decentralized State structures and the collaboration of other actors
- o **Civil society organizations (local or regional), including :**
  - NGOs, agricultural producers' organizations, cooperatives and professional associations. Many NGOs are involved in the agricultural and rural sectors. They carry out support and accompaniment activities for grassroots actors and try to supplement the State's withdrawal from the framework for producers (e.g. agricultural advisory services). They have a wealth of field experience to draw on if their technical and financial capacities are strengthened. Other organizations are involved in information, communication, advocacy and lobbying on sector and environmental and land issues.
- o **Financing structures**

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<sup>9</sup> DECREE No. 2019-071 establishing the powers of the Minister of Agriculture, Livestock and Fisheries and the general organisation of his Ministry.

The financing structures and offers are very diversified in the Project's area of influence. There are the Bank of Africa, BNI Madagascar, BFV as well as other microcredit organizations such as OTIV, Microcred. The Concessionaire will make a more in-depth evaluation of the various offers as well as an analysis of the existing peasant organizations, civil society groups and institutions, once the various options for economic rehabilitation and reconversion have been drawn up

## 11.8 Reconversion Support

Reconversion support will be offered to heads of households but also, with more limited support, to other members of the displaced family (the objective being to promote the improvement of the overall income of the resettled family).

Further studies will be carried out to identify interests in PAP reconversion.

Information on reconversion opportunities will be provided before the relocation, depending on the guidance and training capacities available from existing structures. The support will be aimed at people who can be physically followed (known residence). Support would take several forms:

- **Reconversions towards craftsmanship:**
  - Technical training by specialized organizations;
  - Management training;
  - Subsidy for equipment and assistance in setting up credit applications;
  - Monitoring and support of trained persons over a sufficient period of time (e.g. 3 years), in accordance with the specific provisions of each institution.
- **Reconversion to formal trade:**
  - Management training;
  - Assistance in setting up credit applications;
  - Monitoring and support of trainees over a sufficient period of time (e.g. 3 years), in accordance with the specific provisions of the training institutions and the nature of the reconversion.

This support will not include informal income-generating activities or carpentry or timber-related activities, to avoid increasing pressure on forest resources in the area.

- Step 1: Identification of PAPs wishing to change activities (or confirming their reconversion wish expressed during censuses)
- Step 2: Interview with each PAP/Feasibility Analysis/Advice Support
- Step 3: Support for the PAP in their reconversion:
  - Assistance in identifying steps to be taken
  - Identification of institutions able to provide training in the field of reconversion

The funds earmarked for restoring living standards will only be available to the PAPs after they have moved and only if they are integrated into the monitoring process, i.e. they have previously informed the Project of their new place of residence.

These funds will be available for individual or joint projects, such as the purchase of land, small equipment, the start-up of a microenterprise, or joint projects (i.e. PAPs that organize themselves into groups to purchase equipment for shared use or any other collective project). In this context, NGOs will provide support for the start-up of these projects.

It is estimated that since access to funds for the restoration of living standards will be conditional on disclosure of the new place of residence, almost all PAPs (except perhaps large landowners) will choose to inform the Project of their new location, thus allowing for close monitoring.

The monitoring of these PAPs will also make it possible to measure the additional “pressure” they will exert on public infrastructure. If it appears that many PAPs are settling in a village or hamlet, monitoring their installation will make it possible to count them and define an appropriate investment program for socio-community infrastructure to be undertaken in that locality, which will be funded by the local development program (Not funded by this RAP). The community infrastructure investment program will be developed in consultation with the PAPs and the host population.

These investments will benefit both displaced and host populations and improve life quality for all. The objective of these community investment programs is to limit negative impacts on host communities and allow for harmonious development between displaced and host communities. Similarly, if new agricultural techniques are implemented and training is provided to PAPs, operators of host sites will also be able to benefit from such training.

The same principle will apply to people who have lost part of their land, but whose homes are not affected. They will be entitled to the same support to increase yields on the land to be found on the banks of the reservoir. For those affected people who have lost land but have not suffered the loss of their dwellings (and who will therefore reside on the edge of the future reservoir), the development of new production techniques adapted to the new environment could be considered.

# 12 MONITORING AND EVALUATION

The purpose of monitoring and evaluating the displacement and compensation process is to monitor the progress of the various RAP implementation actions, identify problems related to the PAP resettlement (complaints, conflicts, disputes, etc.) and determine whether or not the affected persons have regained their original standard of living and living conditions, as they did before the Project was carried out. Monitoring and evaluation should therefore make it possible to evaluate the progress of the measures being implemented and verify whether the measures taken are sufficient.

The monitoring and evaluation system aims to feed monitoring results into the Project management process, thereby ensuring the rapid implementation of appropriate corrective measures, if necessary.

The two main objectives of the monitoring and evaluation process are as follows:

- **Monitoring:** monitoring must make it possible to report on:
  - specific situations and difficulties arising during implementation;
  - compliance of operational implementation with the objectives and methods defined in IFC PS5 and this RAP.
- **Evaluation:** assessment of the impacts of safe resettlement: (i) affected households, their livelihoods, income and economic conditions, (ii) the absorptive capacity of host sites, (iii) the level of social integration, (iv) housing, (v) the environment, etc.

The monitoring and evaluation of the displacement and compensation process will be carried out in two ways:

- (i) Internal monitoring and evaluation carried out by the Concessionaire and ;
- (ii) External monitoring and evaluation by an independent body (team of resettlement specialists with expertise in international standards for involuntary population resettlement) or any specialized social organization designated by mutual agreement between the Concessionaire and its financial partner.

## 12.1 Scope of the Monitoring and Evaluation Process

This monitoring and evaluation system will have three components: monitoring the performance of the RAP, monitoring the impact of activities and implementing an external audit of the RAP:

- **Performance monitoring** makes it possible to verify, especially at the start of the RAP, that planned activities are being carried out on time. It allows internal monitoring and individual responsibilities to be carried out to address the issues identified and corrective measures to be adopted if necessary. This action specifically applies to the physical resettlement process and the various compensation measures, as well as complaints management.
- **Impact monitoring** will make it possible to monitor indicators of the achievement of the RAP's medium- and long-term objectives. This involves acceptance and appropriation of the various support measures, livelihood restoration and the Concessionaire's relationship with the communities.
- **The implementation of the audit** allows independent verification of the restoration of the population's livelihood and standard of living in relation to the initial phase.

Monitoring should cover the following aspects:

- Monitoring the implementation of physical resettlement: land acquisition, construction and land security;
- Monitoring the implementation of the compensation process;
- Social and economic monitoring of displaced households:
  - Monitoring the situation of the displaced: means of production, reconstruction, etc.;
  - Level of integration of resettled persons in their reception area;
  - Monitoring of social and environmental balances: risk of land speculation, pressure on the environment in host areas, hygiene problems;
  - Monitoring of economic rehabilitation: restoration of livelihoods, especially in the agriculture, livestock, fisheries, trade and crafts sectors, and monitoring of the situation of people going through reconversion (creation of workshops, paid employment, etc.).
- Follow-up of vulnerable persons;
- Monitoring of construction work on community asset;
- Monitoring of the complaints and conflict handling system;
- Monitoring the implementation of economic rehabilitation programs: agriculture, livestock, fisheries, commercial or craft activities, and monitoring of measures to assist conversion.

## 12.2 Monitoring Indicators

The table below lists the overall indicators or tools that will allow monitoring to be carried out.

**Table 42: Overall Indicators and Monitoring and Evaluation Tools**

Monitoring Aspects	Indicators/Tools
- Monitoring the implementation of the compensation process	<ul style="list-style-type: none"> <li>- Number of households and persons affected by the Project's activities;</li> <li>- Number of households and individuals physically and morally displaced by Project activities;</li> <li>- Status of negotiations on affected assets;</li> <li>- Number of households that have found resettlement lands;</li> <li>- Number of compensation agreements signed;</li> <li>- Number of households and persons compensated;</li> <li>- Total amount of compensation paid.</li> <li>- Number of bank accounts opened in the names of PAPs.</li> <li>- Total amount of compensation paid for the purchase of land and construction of buildings</li> <li>- Total amount of compensation paid for crop losses</li> </ul>
- Monitoring the situation of the displaced: means of production, reconstruction, etc.	<ul style="list-style-type: none"> <li>- RAP Database/Survey based on a representative sample of PAPs;</li> <li>- Example of socio-economic indicators to be monitored:</li> <li>- Number of resettled persons - Number of households that have found a home or are rebuilding their homes;</li> <li>- Indicators related to housing and livelihoods - Assessment of the quality of construction;</li> <li>- Average monetary income, and average total income (with valuation of self-consumption);</li> <li>- Average breakdown of household expenditure;</li> <li>- Number of people without work (people with no income generating activity);</li> <li>- Number of children enrolled in school; of households that have been allocated their plots to the resettlement site</li> <li>- Replacement rate of perennial crops after 2 years;</li> <li>- etc.</li> </ul>

Monitoring Aspects	Indicators/Tools
- Level of integration of resettled persons in their reception area.	<ul style="list-style-type: none"> <li>- Social survey of PAPs and the host population conducted annually (representative sample of PAPs);</li> <li>- Access of resettled persons to drinking water, electricity, education, health</li> <li>- % of people who remain on their new land after obtaining their land title</li> <li>- Number of people participating in community activities and organizations at host sites</li> </ul>
- Monitoring of social and environmental balances: risk of land speculation, pressure on the environment in host areas, hygiene problems.	<ul style="list-style-type: none"> <li>- Social survey of PAPs and the host population conducted annually;</li> <li>- Environmental monitoring.</li> </ul>
- Monitoring of economic rehabilitation: restoration of livelihoods, especially in the agriculture, livestock, fisheries, trade and crafts sectors and the situation of people changing activities (creation of workshops, paid employment, etc.).	<ul style="list-style-type: none"> <li>- Socio-economic indicators and monitoring on a sample of PAPs.</li> <li>- Evolution of people who have kept the same activity and those who have changed activities.</li> <li>- Number of consultations on livelihood restoration programs/number of people attending meetings</li> <li>- Number of people involved in AGR activities</li> <li>- Number of people supported in agriculture, livestock, commercial or craft activities and monitoring of measures to assist in the reconversion process.</li> <li>- Number of livelihood restoration projects initiated and funded</li> <li>- Number and % of individuals and households involved in projects</li> <li>- Number and % of households visited for the purpose of monitoring and evaluating progress in restoring livelihoods</li> <li>- Number of workshops, shops, etc. created,</li> <li>- Number of structures rebuilt for economic activity purposes</li> <li>- Number of temporary jobs received by people affected by the resettlement process</li> </ul>
- Monitoring of vulnerable people.	<ul style="list-style-type: none"> <li>- Specific social monitoring (individual monitoring);</li> <li>- Efficiency/sufficiency of assistance actions undertaken</li> <li>- Number of vulnerable households who received in-kind compensation</li> <li>- Number of households that have received training on money management and amount of support for money management</li> <li>- Number of minutes of meetings to explain the compensation process</li> <li>- Amount of compensation distributed in relation to other households</li> <li>- Support for vulnerable people</li> <li>- Number of vulnerable people assisted during the compensation process, during displacement and in the reconstruction of their homes.</li> <li>- Number of PAPs that have received food aid and health monitoring.</li> </ul>
- Monitoring of construction work on community assets:	<ul style="list-style-type: none"> <li>- Quality of the constructions in relation to the initial situation;</li> <li>- Satisfaction survey of PAPs and the host population.</li> <li>- Percentage of wells built compared to planned number</li> <li>- of households with access to health facilities</li> <li>- Number of churches, schools, fokontany offices and playgrounds rebuilt</li> </ul>
- Transfer of cultural and religious heritage	<ul style="list-style-type: none"> <li>- Number of religious properties rebuilt and transferred;</li> <li>- Number of rites performed</li> <li>- Number of complaints about the transfer of cultural heritage</li> </ul>

Monitoring Aspects	Indicators/Tools
<ul style="list-style-type: none"> <li>- Monitoring of the complaints and conflicts handling system:</li> </ul>	<ul style="list-style-type: none"> <li>- Periodic follow-up of the complaints register</li> <li>- Number of complaints expressed and recorded by type.</li> <li>- Number of complaints about the amount of compensation</li> <li>- Number of outstanding compensatory complaints still pending</li> <li>- % of complaints that had to go through the courts compared to those resolved internally</li> <li>- % of complaints resolved and closed compared to complaints received</li> <li>- Average processing times for complaints at various stages of the process</li> </ul>
<ul style="list-style-type: none"> <li>- Monitoring the implementation of economic rehabilitation programs: agriculture, livestock, fisheries, commercial or craft activities and monitoring of measures to assist in the reconversion.</li> </ul>	<ul style="list-style-type: none"> <li>- Indicator for monitoring the progress of programs and key results:</li> <li>- Number of people affected ;</li> <li>- Evaluation of income improvement;</li> <li>- Success rate of people in their reconversion business.</li> <li>- Number of people remaining unemployed,</li> <li>- Number of workshops, shops, etc. created,</li> <li>- Agricultural yields per household;</li> <li>- Crop production level measured by field observation</li> <li>- Number of farmers who have found plots to cultivate and are able to use them</li> <li>- Number of elderly people who have another activity besides agriculture</li> <li>- Others</li> </ul>

For socio-economic surveys, the initial value of the indicators (reference value) will be established on the basis of the censuses carried out as part of the elaboration of the RAPs. These surveys should be carried out once a year on a sample of 15% of affected households. This sample of households will be drawn from the RAP database and must be representative of the various categories of PAPs (owner, beneficial owner and occupant, tenant, main activity, initial income level, place of resettlement, etc.).

### 12.3 Internal Monitoring and Evaluation by the Concessionaire

Internal monitoring aims to provide a progress report on the implementation of the RAP and, if necessary, to correct implementation activities “in real time”.

The Concessionaire will have to identify, in advance, results indicators for the resettlement of the affected populations. As mentioned above, these indicators (not exhaustive) should cover, among other things, the resettlement process, the PAP participation process, and the assessment of the impacts of the compensation process at the level of each household: standard of living (income and agricultural production), quality of life (drinking water and other public services), housing, education, etc., and the host population.

#### A. Monitoring from the Database

All socio-economic information on households and the list of their assets affected has been archived in a database. In addition, the boundaries of each parcel have been vectorized and are available in GIS (Geographic Information System) format

#### B. Administrative Follow-up

The objective of internal monitoring (administrative monitoring) is to ensure that the progress of the various actions planned by the Project respects the dates set in the overall planning. This monitoring should also make it possible, where appropriate, to identify obstacles to the successful implementation of the RAP and to implement corrective/revised actions to eliminate them in order to ensure that the program is completed on time and as planned.



Internal monitoring therefore consists in verifying whether planned activities have been implemented in accordance with their initial planning and in documenting difficulties encountered during such implementation and the solutions proposed to address them. Internal monitoring includes a record of payments made under the program.

On the other hand, internal monitoring consists in documenting complaints made by PAPs, their scope, purpose, the categories of PAPs that issue them, the process, duration and outcome of their processing.

Internal monitoring will be carried out on an ongoing basis. A report on the results of this audit will be produced monthly by the monitoring and evaluation expert.

## **12.4 External Monitoring and Evaluation by an Independent Body**

During the implementation of the Project, an independent body, recruited by the Concessionaire, will periodically review the measures taken and review the implementation of the RAP. This body will also prepare a final evaluation report at the end of the process.

External monitoring and evaluation will focus more specifically on the results produced by resettlement activities and the level of achievement of RAP objectives through the analysis of these results.

This external monitoring will consist, on the basis of the data from the socio-economic studies carried out as part of the preparation of the RAP, in periodically producing data on the evolution of the socio-economic situation of people displaced by the Project and on their perception of this evolution. This data should make it possible to:

- measure the level of preparation of the resettlement operation;
- measure the effectiveness of the resettlement operation itself;
- measure whether the activities have produced the impact of improving the conditions and livelihoods of the PAPs (economic rehabilitation);
- measure the level of satisfaction of PAPs with their situation;
- Identify the problems encountered, the factors preventing the implementation of Paragraphs (a) and (b).

Since the resettlement operation under the Sahofika Project affects various categories of PAPs (landowner, beneficial owner, occupant, mining operator, tenant farmer, fisherman, breeder, trader, etc.) any analysis will have to present an overview of the situation and a breakdown by category of PAPs.

Monitoring and evaluation should also pay particular attention to developments in the situation of women and vulnerable persons during and after resettlement activities. It will measure the nature (improvement or degradation) and level of this evolution and propose corrective measures to better ensure that RAP objectives for these categories are met.

The frequency of external monitoring will vary throughout the implementation of the RAP:

- Quarterly monitoring during the RAP implementation year for close monitoring;
- Semi-annual monitoring during the 2<sup>nd</sup> half of the year;
- Annual monitoring during the three years following the end of implementation.

External monitoring will include periodic reports (quarterly or semi-annual) as well as an annual monitoring report that will describe the overall situation and that of each category of PAP. These periodic reports should also provide recommendations on the measures necessary to address the gaps / difficulties identified. Upon receipt of each monitoring report, a meeting will be held with the Concessionaire to present the results of the monitoring process and discuss corrective actions, if any, to improve the implementation of the RAP.

Based on the various periodic and annual reports, a final evaluation will be carried out at the end of the resettlement activities and at the end of the economic rehabilitation programs.

This external monitoring and final evaluation will be carried out by an organization (NGO/study office/private operator, etc.) with extensive experience in monitoring social actions. This entity will be engaged by the Concessionaire with the approval and funding of the AfDB. It is important to ensure that this entity is operational as soon as the implementation of the RAP begins.

The following table presents a draft of the external monitoring system and key indicators for the various stages of the resettlement process planned: (i) evaluation of the implementation of the RAP; (ii) evaluation of the implementation of RAP activities; (iii) measurement of the impact of the economic resettlement/rehabilitation activities and the achievement of RAP objectives.

The organization to be recruited for external monitoring and final evaluation should specify and detail the various indicators in its action plan

## **12.5 Participation of PAPs in Monitoring and Evaluation Activities**

The participation of affected and host populations in the monitoring and evaluation process may take several forms:

- Participation in socio-economic surveys conducted on an ad hoc basis by the entity in charge of external monitoring (opinion surveys in particular);
- Participation of PAP representatives in programming, monitoring and evaluation meetings, including through village committees;
- Intervention with representatives of village committees, the resettlement committee or the Concessionaire in case of dissatisfaction with the implementation of the RAP and the activities undertaken;
- Regular visits to PAPs as part of the follow-up of their resettlement and support;
- Grievance books will be made available to the population in each village committee and/or fokontany office. These books will be collected monthly and questions and problems will have to be addressed;
- Focus group meetings will be organized quarterly by the various village committees. The purpose of these meetings will be to exchange information, review progress in the implementation of the RAP and discuss various issues related to resettlement and the living conditions of affected households.
- Radio programs may also be organized periodically around these same themes and the population may participate.

## **13 ORGANIZATION FOR THE IMPLEMENTATION PROCESS**

## **13.1 Roles and Responsibilities**

### **13.1.1 Overview of the Situation**

Since the Project is a public-private partnership, the State of Madagascar (Granting Authority) and the Concessionaire will collaborate in the implementation of the resettlement process by clearly allocating roles and responsibilities and organizing their cooperation through the establishment of joint coordination committees.

Based on the concession agreement currently being finalized between the Government of Madagascar and the Consortium and in accordance with the usual rules for concession projects of this nature, it is the Government that is ultimately responsible for the release of the land necessary for the implementation of the Project and that makes this land available to the Consortium, which is responsible for building and operating the Project on this land. However, in practice, the Consortium will facilitate the implementation of the RAP by providing the necessary financial, human and material resources for its implementation and by coordinating its day-to-day implementation, while reporting regularly to the Granting Authority.

Two resettlement steering committees will be established jointly by the main government departments concerned and the Concessionaire, one at national level to provide strategic guidance and the other one at local level to resolve implementation issues.

In addition, since the Consortium plans to use international funding for the implementation of the Project, it will assume responsibility for the implementation of the RAP vis-à-vis lenders, especially in terms of compliance with lenders' resettlement requirements (OS2 for the AfDB and PS5 for potential banks adhering to IFC standards or the Equator Principles). The compliance of the implementation process with the commitments made by the Concessionaire will be verified by an Independent Consultant recruited by the lenders and accountable to them.

### **13.1.2 Responsibilities of the Granting Authority**

The Granting Authority, namely the Malagasy State represented by the Ministry of Energy, Water and Hydrocarbons (MEEH), is responsible for releasing the rights of way necessary for the construction and operation of the Project, which it will make available to the Concessionaire, under the terms of the Concession Agreement currently being formalized between the Granting Authority and the Concessionaire. In particular, the MEEH has the following responsibilities:

- Review and approve this RAP in conjunction with the National Environment Office (ONE) which coordinates the review and approval of the Environmental and Social Impact Assessment of which the RAP forms a part;
- Coordinate the action of the other ministerial departments concerned, especially the following:
- Ministry of Land Use Planning, Housing and Public Works (MATHTP), in particular the Land Services Directorate General (DGSF) which is attached to this Ministry, for questions relating to the identification of affected land and their owners and/or beneficial owners, the consolidation of the general land title or titles covering all rights of way, then the transfer of this title or its usufruct to the Concessionaire for the construction and operation of the Project, and to contribute to the decision-making process concerning the selected resettlement sites;
- Ministry of Economy and Finance (MEF), for questions relating to compensation, taxes, and economic development on resettlement sites;
- Ministry of Environment and Sustainable Development (MEDD), for issues related to the management of potential environmental impacts of resettlement and environmental authorization

sites, reforestation and good environmental practices in the released area and on resettlement sites;

- Ministry of Population, Social Protection and the Advancement of Women, for issues relating to vulnerable segments of the affected population, gender and the protection of women and children;
- Local authorities and mayors of the communes concerned;
- Chairing the work of the Steering Committee for the implementation of the Sahofika Project RAP;
- Be involved in the resolution of sensitive complaints and conflicts brought to its attention by the Consortium's implementation unit;
- Participate as appropriate in raising awareness among affected and host populations as a State representative in the Project;
- And in general, be involved in any matter where the responsibilities of the State are at stake in the implementation of the RAP.

### **13.1.3 Responsibilities of the Consortium**

The Consortium is responsible for the implementation of the RAP and reports regularly to the Granting Authority. The Consortium will set up a resettlement unit within its Health/Safety/Environment/Communities Department. This unit will, in particular, take care of the following tasks:

- Management of any additional surveys that may be necessary (property surveys and socio-economic surveys);
- Updating and maintenance of the PAP database
- Production of statements and compensation agreements for signature by the PAPs, management of any corrections to the statements of assets, management of PAP preferences (resettlement or cash compensation);
- Development of the resettlement site, including community infrastructure and housing reconstruction;
- Facilitation, information and awareness-raising of PAPs, in particular with regard to resettlement sites (organization of visits), design of resettlement buildings, drawing lots for plots on the resettlement site, livelihood restoration measures, complaints management;
- Management of complaints related to the identification, compensation and resettlement process;
- Finalization and organization of the implementation of livelihood restoration measures;
- Facilitation of meetings of the steering and local resettlement committees.

### **13.1.4 Resources of the Implementation Unit**

The Resettlement Implementation Unit will be headed by a "Resettlement" Project Leader, reporting to the Director of Health, Safety, Environment and Communities (HSEC), who in turn reports to the Consortium's Project Manager. This Project Leader will be a Malagasy or expatriate manager with significant experience in conducting a similar operation in difficult conditions. He/She will have a large administrative and financial autonomy (signature delegations to be specified at the start of the operation) to ensure the Unit is flexible and responsive. Beyond the amounts delegated to the Project Leader, the signing of commitments will be the responsibility of the Project Manager.

The following six teams will be placed under the authority of the "Resettlement" Project Manager:

- "Survey - Database" team coordinating additional surveys and database maintenance (team leader and two to four permanent agents with the use of temporary staff who may be made available by consulting firms when works are at their peak);

- “Compensation” team ensuring the production of compensation agreements, their negotiation with the PAPs and their signing, then the execution of payments for the cash portion; this team should include a team leader and two to four permanent agents;
- “Reconstruction” team providing design, procurement and works supervision for the development of the resettlement site, the reconstruction of community facilities, and the reconstruction of housing; this team will include a team leader and two site managers, with the support of consulting engineers and architects for certain specialized technical design and control activities;
- “Engagement” team coordinating and executing stakeholder engagement and complaint management actions related to resettlement, including a team leader and two officers;
- The “Livelihood Restoration” team, which will coordinate the design and implementation of activities in this field by specialized partners (a team leader and two specialists - agronomist and economist);
- “Social” team in charge of assistance to vulnerable people and psycho-social support to PAPs, including one or two specialists (social worker and/or psychologist).

The Unit may call upon the specialists of the other Project teams (in particular health, safety and environment) and, if necessary, the specialists of the EPC company for certain aspects relating to the development of the resettlement site (road access, electricity and water in particular) for specific tasks. The Unit may also call upon consultants for *ad hoc* support. Livelihood restoration activities will be implemented by specialized partners, such as NGOs with experience of the activity in Madagascar.

The Unit will have an office in the affected area, which will also serve as an information center for the affected population, as well as vehicles and other equipment necessary for the unimpeded performance of its missions.

### 13.2 National and Local Resettlement Steering Committees

Two Resettlement Steering Committees involving the authorities and the Consortium are being set up, one at the national level and another at the local level. The establishment of these Committees meets the following objectives:

- Common understanding of RAP objectives and donor requirements;
- Better ownership of the process and facilitation of implementation;
- Resolution of issues that may arise during implementation that should involve both parties (Government and Concessionaire);
- Resolution of complaints and grievances of populations likely to involve both parties;
- Implementation of the legislative provisions applicable to the resettlement process, especially in the unlikely event of expropriation being necessary;
- Facilitation of authorizations required for the development of resettlement sites;
- Review and regular monitoring of activity progress;
- In general, liaison between the Government and the Concessionaire on compensation and resettlement issues.

At the national level, the Steering Committee is composed of the following ministerial entities:

- Ministry of Energy, Water and Hydrocarbons (MEEH),
- Ministry of Land Use Planning, Housing and Public Works (MATHTP),
- Ministry of Economy and Finance (MEF),
- Ministry of the Environment and Sustainable Development (MEDD),
- Ministry of Population, Social Protection and the Advancement of Women,

- Concessionaire's representative.

At the local level, it is composed of the following decentralized services and local authorities:

- Regional Energy Directorate;
- Regional Population Directorate;
- Head of department of the Ambatolampy land offices;
- Head of the Ambatolampy Topography Department;
- Regional Director of Environment and Forests (DREF) of Vakinankaratra ;
- Head of the Regional Agricultural District of Antanifotsy;
- Regional Budget Director of Vakinankaratra;
- Representatives of the Mayors of the communes of Tsinjoarivo and Belanitra, one of whom chairs the committee
- The four presidents of the affected fokontany (Antenina, Antandrokomby, Befotaka, Ankazomena)
- Two representatives of the traditional authorities (Elders) or Tangalamena;
- Five representatives of the PAPs, including two women, appointed by the PAPs;
- A representative of the Concessionaire (represented by Land Resources until the publication of the RAP).

The terms of reference of this committee are attached to this document.

### **13.3 Independent Advisor to Lenders**

An independent advisor was hired by the lenders to assist them in reviewing the environmental and social documents of the Project, and in ensuring that, after the financial closure, the implementation of the Project was independently monitored to ensure compliance with the commitments made by the Concessionaire and the State to the lenders, including commitments resulting from AfDB and Equator banks standards. With respect to the resettlement process, it will be necessary to verify the compliance of this RAP prior to financial closure, and then to monitor at key points in the compensation and compensation process if the process is in accordance with guidance in this RAP.

In particular, the independent advisor will verify the following points:

- Conformity of the design and implementation of cash compensation;
- Conformity of the design and implementation of reconstruction;
- Taking into account all eligible people;
- Actions towards vulnerable people;
- The quality of the monitoring and evaluation process implemented;
- The quality of complaints and claims management systems;
- The adequacy and quality of livelihood restoration actions;
- Results in terms of maintaining the standard of living of affected populations

### **13.4 RAP Implementation Schedule**

The resettlement implementation schedule has three essential phases:

- The release of the area necessary for the start of the dam works, which will be a priority (first phase);
- The release of the area required for the reservoir (second phase);
- The release of the rights-of-way necessary for the linear components of the Project (third phase).

The schedule for the implementation of the RAP is presented in the following table. **This schedule is subject to change when the start date of the works is set.**



[illegible]

### 13.5 RAP Costs and Budget

This section details the RAP budget for the dam and reservoir. The **exchange rate used is USD 1 / MGA 3.620.**

**Table 44: RAP Budget - Compensation**

N°	Activity	Amount in MGA	Amount in USD
<b>1</b>	<b>Compensation for affected assets</b>		
1.1	Compensation for land	45,870,142,687	12,671,310
1.2	Compensation for houses	8,550,293,500	2,361,960
1.3	Compensation for ancillary structures	532,005,000	146,963
1.4	Compensation for annual crops	2,339,033,119	646,142
1.5	Compensation and transfer of religious assets	291,000,000	80,387
1.6	Compensation for perennial crops	925,622,800	255,697
1.7	Transitional compensation for lost income	418,500,000	115,608
1.8	Aids and assistance	745,556,000	205,955
1.9	Land tenure security	200,000,000	55,249
	<b>Sub-total</b>	<b>59,872,153,106</b>	<b>16,539,269</b>
<b>2</b>	<b>Compensation for community infrastructure and other affected assets</b>		
2.1	School compensation costs	382,500,000	105,663
2.2	Compensation costs for churches	347,500,000	95,994
	<b>Sub-total</b>	<b>730,000,000</b>	<b>201,657</b>

**Table 45: RAP Budget - Resettlement**

<b>3</b>	<b>Resettlement site - Construction of Community Infrastructure</b>		
3.1	Community wells	289,600,000	80,000
3.2	Mini drinking water supply (AEP)	543,000,000	150,000
3.3	Mini solar grid with battery charging station and connection	108,600,000	30,000
3.4	Construction of a health hut and provision of equipment	126,700,000	35,000
3.5	Support to host communities (affected Commune and Fokontany)	181,000,000	50,000
3.6	Community laundries, public toilets	162,900,000	45,000
3.7	Construction of local compensation and claims offices	108,600,000	30,000
	<b>Sub-total</b>	<b>1,520,400,000</b>	<b>420,000</b>
<b>4</b>	<b>Resettlement site - Acquisition and Development of the Site</b>		
4.1	Compensation for resettlement site including additional land required for development	6,335,000,000	1,750,000
4.2	Site excavation work	11,403,000,000	3,150,000
4.3	Reforestation project	362,000,000	100,000
4.4	Water drilling works	217,200,000	60,000
	<b>Sub-total</b>	<b>18,317,200,000</b>	<b>5,060,000</b>

The (limited) compensation related to the hydroelectric plant is not included in the above budget at this stage (compensation budget of around USD 300,000), nor are the compensation related to the linear components of the Project which are the subject of the second part of this document.

**Table 46: RAP Budget - Livelihood Restoration and Project Management**

<b>5</b>	<b>Economic Rehabilitation</b>		
5.1	Livelihood restoration projects	1,810,000,000	500,000
5.2	Psychosocial support for PAPs and support for vulnerable people	289,600,000	80,000
	<b>Sub-total</b>	<b>2,099,600,000</b>	<b>580,000</b>
<b>6</b>	<b>Implementation of the RAP</b>		
6.1	Communication and information	126,700,000	35,000
6.2	Establishment of an Implementation Unit	4,344,000 000	1,200,000
6.3	Implementation support	2,751,200,000	760,000
6.4	Logistics costs	1,086,000,000	300,000
	<b>Sub-total</b>	<b>8,307,900,000</b>	<b>2,295,000</b>

**Table 47: RAP Budget (Dam and Reservoir) - Summary**

<b>BUDGET FOR THE RESERVOIR COMPONENT</b>			
<b>N°</b>	<b>Activity</b>	<b>Amount in MGA</b>	<b>Amount in USD</b>
<b>1</b>	<b>Compensation for affected assets</b>		
	<b>Sub-total</b>	<b>59,872,153,106</b>	<b>16,539,269</b>
<b>2</b>	<b>Compensation for community infrastructure and other affected assets</b>		
	<b>Sub-total</b>	<b>730,000,000</b>	<b>201,657</b>
<b>3</b>	<b>Resettlement site - Construction of community infrastructure</b>		
	<b>Sub-total</b>	<b>1,520,400,000</b>	<b>420,000</b>
<b>4</b>	<b>Resettlement site - Acquisition and development of the site</b>		
	<b>Sub-total</b>	<b>18,317,200,000</b>	<b>5,060,000</b>
<b>5</b>	<b>Economic rehabilitation</b>		
	<b>Sub-total</b>	<b>2,099,600,000</b>	<b>580,000</b>
<b>6</b>	<b>Implementation of the RAP</b>		
	<b>Sub-total</b>	<b>8,307,900,000</b>	<b>2,295,000</b>
	<b>TOTAL</b>	<b>90,847,253,106</b>	<b>25,095,926</b>
	<b>Unexpected (10% of total)</b>	<b>9,084,725,311</b>	<b>2,509,593</b>
	<b>GENERAL TOTAL excluding tax</b>	<b>99,931,978,416</b>	<b>27,605,519</b>

## **14 LIST OF ANNEXES TO THE RAP FOR THE DAM AND RESERVOIR (SEPARATE VOLUME)**

**Table 48: List of Annexes**

<b>N°</b>	<b>Title</b>
<b>Appendix 1</b>	Terms of reference of the RAP
<b>Appendix 2</b>	Non-technical summary
<b>Appendix 3</b>	Census file
<b>Appendix 4</b>	Quotation for resettlement houses in the resettlement area
<b>Appendix 5</b>	Unit compensation cost
<b>Appendix 6</b>	Minutes of public consultations
<b>Appendix 7</b>	Minutes of the local committee meeting
<b>Appendix 8</b>	Terms of reference for the establishment of the resettlement committee
<b>Appendix 9</b>	List of households and assets affected
<b>Appendix 10</b>	List of people met
<b>Annex 11</b>	List of heads of household absent or refused during the survey campaign
<b>Appendix 12</b>	Affected religious assets sheets
<b>Annex 13</b>	PAP compensation process presentation sheet
<b>Annex 14</b>	Consultation plan for the various phases of the resettlement process
<b>Annex 15</b>	Benchmarking analysis table
<b>Annex 16</b>	Bibliography consulted

# **PART TWO – ABBREVIATED RESETTLEMENT ACTION PLAN FOR THE LINEAR COMPONENTS OF THE PROJECT**

# 1. Introduction - Purpose and Scope of This Document (ARAP)

## 1.1 Objectives of the ARAP

This Abbreviated Resettlement Action Plan (ARAP) is part of the process of preparing environmental and social documents for the Sahofika Hydropower Plant Project in Madagascar (“the Project”). It relates to the linear components of the Project and complements the Resettlement Action Plan (RAP) prepared for the dam and reservoir component. At the stage where the ESIA and the main RAP are presented to the Malagasy regulator, the linear components are not yet precisely defined, which makes it impossible to prepare a complete RAP as prescribed by international standards including the African Development Bank’s OS2 standard. This ARAP is therefore intended to present all the principles that will be applied to compensation and resettlement for linear components, and will be supplemented by a full RAP when the engineering design of the Project has advanced sufficiently so that the rights-of-way affected by these linear components can be precisely delineated.

## 1.2 Linear Components of the Project

Linear components are those that have linear land acquisition schemes (roads, railways, canals, power lines, water pipes or other pipelines). In rural areas, a linear project generally has a relatively small impact on a given landowner because it is generally possible to avoid physical displacement at the design stage of the Project itinerary, and economic displacement is limited to the acquisition of a relatively small part of an agricultural plot. Compensation is characterized by a multitude of small compensations for the loss of assets such as limited land and standing crops. The situation is different in an urban area, but the Sahofika Project does not affect an urban area. The main difficulty with the linear components lies in the fact that multiple owners are affected, which requires a large number of transactions, and in the problems that arise when compensation measures must be coordinated between multiple administrative jurisdictions and/or various cultural and linguistic regions.

The linear components of the Sahofika Project are as follows (see maps below):

### 1. Access road :

- Construction of the Dam Track - Belanitra
- Rehabilitation of the Belanitra-Antanifotsy road
- Road Construction Dam - Power Plant

### 2. Power line :

- Installation of the power line on the Central/Barrage axis - Antanifotsy - Antananarivo

Figure 17: Map of the Planned Roads' Location

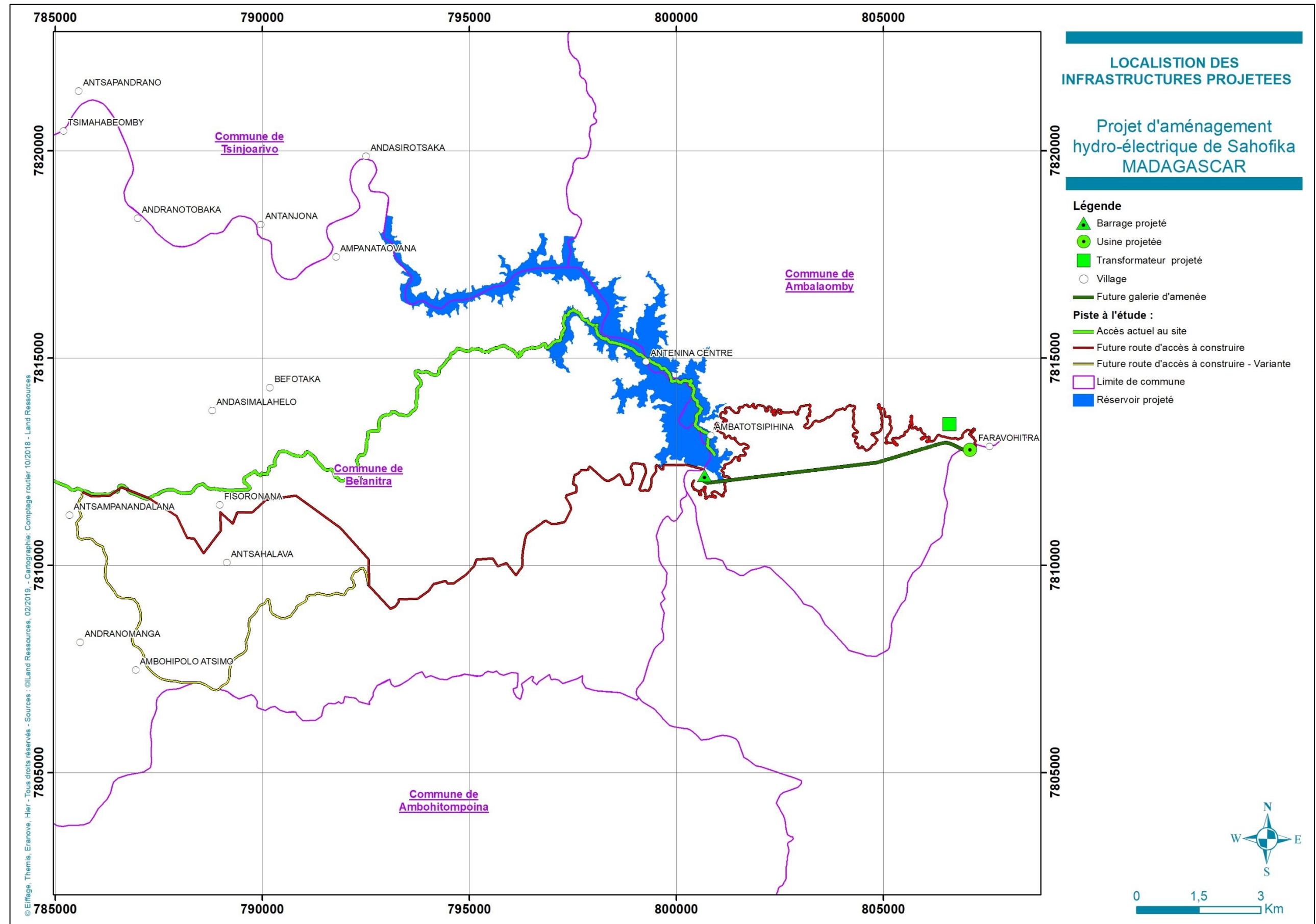
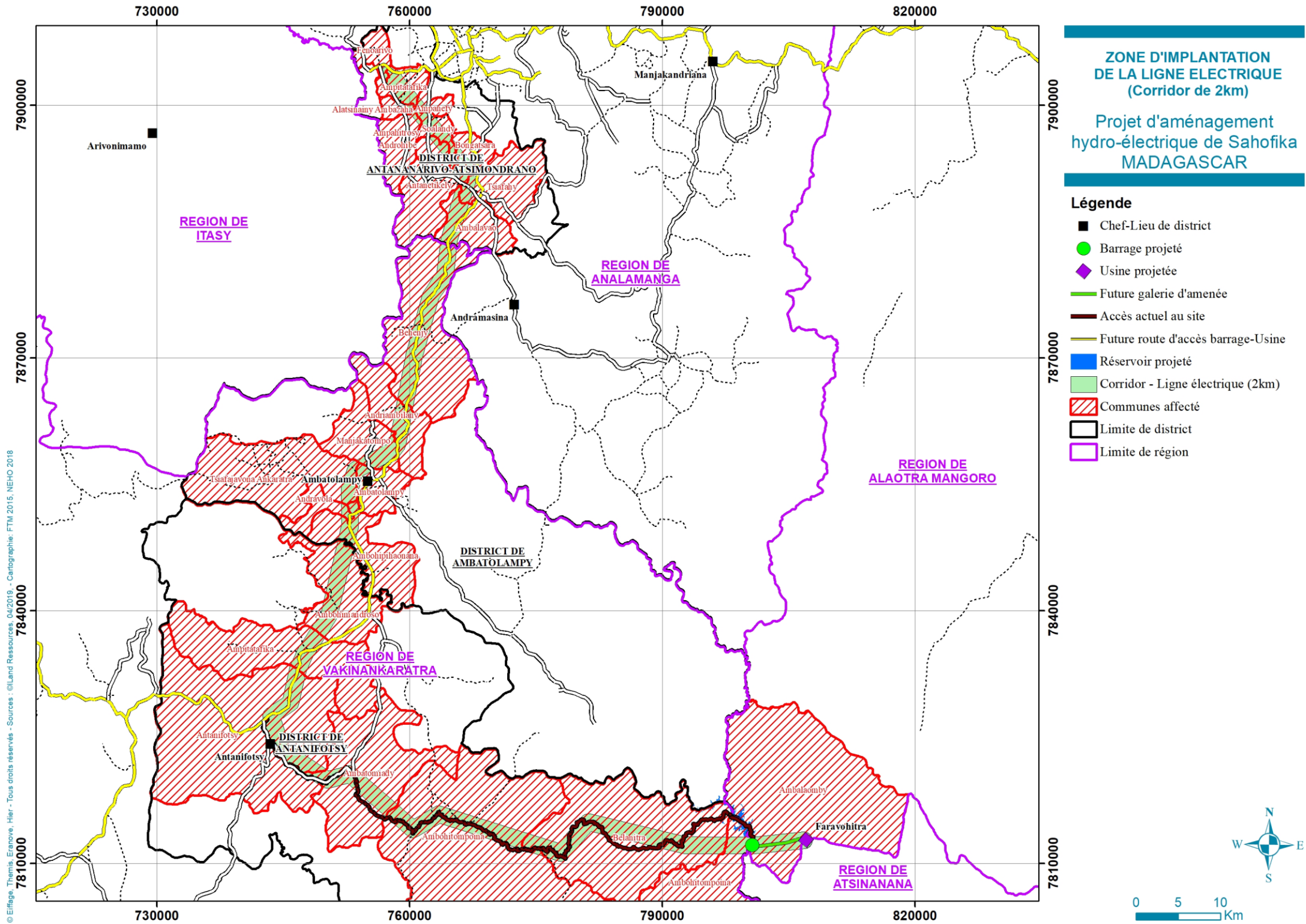




Figure 18: Indicative Location Map of the Corridor Planned for the Proposed Transmission Line



### 1.3 Principles of this Short Plan

The resettlement and compensation processes will be conducted in accordance with the following guiding principles derived from international standards, including the African Development Bank's Operational Standard 2:

- Preliminary elaboration of a resettlement plan;
- Avoidance and minimization of impacts, in particular of physical displacement for linear components that will be designed to avoid, as far as technically and economically possible, residences, cultural or religious sites, and agricultural areas;
- Compensation of assets allocated to the full replacement value;
- Consideration of informal users and customary owners even if they do not have a valid title;
- Prior consultation and information of the persons affected by the Project;
- Support for vulnerable people;
- Gender sensitivity;
- Assistance in restoring livelihoods so that the income and living standards of affected people are at least equivalent after the Project to what they were before;
- Monitor and evaluate activities during and after their implementation;
- Establish a complaints management mechanism that meets international requirements and is adapted to the social and cultural characteristics of the affected population.

## 2. Applicable Legal Framework

The detailed presentation of the applicable legal framework is given in Part I (RAP Dam and Reservoir) in Chapter **Erreur ! Source du renvoi introuvable.**

### **3. Definition of Impacts - Transmission Line and Road Corridors of the Project**

#### **3.1 Avoidance and Minimization of Impacts**

The following impact avoidance and minimization principles will be applied in the selection of corridors for the Project's transmission lines and roads:

- Avoidance of residential buildings. Where preliminary line and road design indicates that residential buildings may be affected, corridors will be moved to avoid such impacts since such displacement is technically and economically feasible.
- Avoidance of cultural and religious sites. Similarly, cultural sites (shrines, sacred sites) designated by surrounding communities and places of worship will be avoided by moving corridors, unless there is clear technical or economic infeasibility.
- Minimization of impacts on cultivation areas, in particular on rice fields which have significant economic and cultural value for the populations of the area, and secondarily on slash-and-burn cultivation areas.

However, it is important to note that considering environmental constraints on the selection of the route of transmission line and roads (presence of protected areas and/or critical habitats), it is possible that some agricultural areas may not be avoidable. In this case, compensation provided for in this PARA will of course become applicable.

#### **3.2 Standards and Practices of National Company JIRAMA Regarding Transmission Line Corridors**

Jiro Sy Rano Malagasy (JIRAMA) is Madagascar's public water and electricity company. JIRAMA has developed standards and practice for corridors for high voltage transmission lines. JIRAMA was consulted by the Project team in order to understand the standards that will be applied to the high voltage line project.

The construction of the high-voltage line is a public utility easement that represents or causes an alienation of property and a restriction of activities on the land crossed by the line: installation of pylons, prohibition to plant trees more than two meters high, prohibition to build houses, etc.

The easement is established on the entire corridor (or right-of-way) of the line (26 m on either side of the line), and this results in damage to persons and property, as the case may be, which gives rise to compensation.

This easement prohibits the presence of any trees, shrubs and residential buildings on the right-of-way. In this right-of-way, it is generally possible to install (i) pylons with a ground surface area of 5x5 m<sup>2</sup> in alignment and 10x10 m<sup>2</sup> in anchoring position, (ii) a 3 m wide longitudinal track under conductors and (iii), if possible, transverse access tracks in poorly accessible areas.

Before the foundations are laid and the line's pylons are erected, all structures on the right-of-way must be destroyed and the trees felled. At the transformer substation level, the Project must acquire ownership rights to the land concerned.

JIRAMA indicated that the following additional requirements would be applied:

- The pylons must be at a maximum distance of 1 km from the main access (currently 100 to 200 meters);
- The pylons must be placed at a minimum distance of approximately 500 meters from permanent residential houses.

### 3.3 Transmission Line Corridors - Widths Selected for the Project

The following widths are used for the transmission line corridors:

- The pylon base will be acquired on a permanent basis. This represents an area of around 100 m<sup>2</sup> per pylon, with possible limited extensions in the event of unfavorable topography (excavation) or other site constraints;
- A temporary corridor of 10 meters in average width will be temporarily occupied (a few weeks) to allow the construction of the line, in particular the unwinding of the conductors; this also applies to places where the pylons are located, with possible excess widths to cope with unfavorable topography or specific site constraints (material storage, storage of the pylons' or conductors' components, storage of construction machines);
- In the 52-meter wide corridor along the line itself:
  - o A permanent 3-meter wide maintenance and monitoring track will be acquired on a permanent basis; the width will be rounded to 5 meter to take into account possible local over-widths due to topographical or other obstacles);
  - o The rest of the corridor (47 meters wide along the conductors divided into two strips on either side of the previous track) will be subject to an easement establishing the following restrictions:
    - Prohibition of any construction, whether for residential or non-residential use;
    - Prohibition of planting tall trees (more than 3 meters high);
    - No access restrictions for people and herds;
    - No restriction on annual crops.

### 3.4 Access Road Corridor - Widths Selected for the Project

The roads will be the subject of a corridor acquired by the Project under the following conditions:

- Permanent operating corridor: 20 meters wide (with over-widths possible locally in certain specific cases - stream crossings or high embankments and deep excavations in particular);
- (Temporary) construction corridor: temporary occupation of some additional land possible on a case-by-case basis (material storage areas, parking areas for construction machinery, material borrowing areas, etc.).

Temporarily occupied areas will be rehabilitated and revegetated with a view to returning them to their owners or users in their original condition. In the case of borrowing areas that could not, for practical reasons, be returned to their original state (in particular disturbances of the terrain), they will be definitively acquired by the Project.

## 3.5 Summary of the Impact on People and Property Associated with Line and Roads

Due to the corridor structure as described in the previous sections, the types of impacts that may affect people and property in the context of the linear components of the Sahofika Project are as follows:

- 1- Permanent acquisition of land:
  - a. Line: Base of the pylons and 5-meter operating track;
  - b. Road: Permanent 20-meter wide corridor;
- 2- Temporary occupation for the duration of the construction:
  - a. Line: Construction corridor 10 meters wide along the conductors;
  - b. Road: Some areas to be defined (material storage areas, parking areas for construction machinery, material borrowing areas, etc.);
- 3- Permanent use restrictions in the form of easement:
  - a. Line: 47 meters wide along the conductors divided into two strips on either side of the previous track with the following restrictions : prohibition of any construction, whether for residential or non-residential use, prohibition of planting tall trees (more than 3 meters high), no restriction on access for people and livestock, no restriction on annual crops.
  - b. Road: none.

## **4. Compensation Eligibility and Rights**

### **4.1 Eligibility and Cut-off Date**

Persons recognized during the inventory of property and persons carried out along the corridors as owners or users of the affected land will be considered eligible. For each component, a cut-off date will be defined as the start date of census operations. Assets (buildings or crops) that are established in the Project's right-of-way after the cut-off date and after the census will not be eligible for compensation.

### **4.2 Compensation Matrix**

This compensation matrix, which is derived from the impact classification presented in Section 3.5 (Part II - ARAP), is as follows:

**Table 49: Linear Components - Compensation Rights Matrix**

Impact Type	Component	Type of Property Affected	Eligible Unit	Compensation
<b>Permanent acquisition of land</b>	<b>Line: pylon base and operating track Road: permanent 20 m wide operating corridor</b>	Land	Owner of the property	Cash compensation at full replacement value Assistance in restoring livelihoods if the impact on the affected landowner's overall land is greater than 25%.
			User	No compensation for land Assistance in restoring livelihoods if the impact on all the affected user's land is greater than 25%.
		Non-residential structures	Owner of the property	Cash compensation at full replacement value
			User	No compensation unless a commercial structure is used, in which case assistance for livelihood restoration will be considered depending on the nature and magnitude of the impact
		Annual or perennial crops	Owner of the crop (may be different from the owner of the land)	Cash compensation at full replacement value
		Community natural resources (pasture, wetlands, bush, forest)	Community claiming customary ownership of the area	In-kind community compensation in the form of a small community project (supply of building materials for community buildings, creation of wells, repair of buildings for collective use, etc.)

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Type of impact	Component	Type of Property Affected	Eligible Unit	Compensation
<b>Temporary occupation for the duration of the construction</b>	<b>Line: Construction corridor 10 meters wide along the conductors Road: Some areas to be defined (material storage areas, parking areas for construction machinery, material borrowing areas, etc...)</b>	Land	Owner of the property	Rent for the construction period (usually rounded to one year) paid in cash and calculated at full replacement value
			User	None (but compensation for crops if crops are affected)
		Non-residential structures	Owner of the property	Cash compensation at full replacement value
			User	No compensation unless a commercial structure is used, in which case assistance for livelihood restoration will be considered depending on the nature and magnitude of the impact
		Annual or perennial crops	Owner of the crop (may be different from the owner of the land)	Cash compensation at full replacement value
		Community natural resources (pasture, wetlands, bush, forest)	Community claiming customary ownership of the area	In-kind community compensation in the form of a small Community project (supply of building materials for community buildings, creation of wells, repair of buildings for collective use, etc.)



Type of impact	Component	Type of property affected	Eligible unit	Compensation
<b>Restriction of permanent use in the form of easement</b>	<b>Line:</b> 47-meter wide corridor along the conductors divided into two strips on either side of the operating track with the following restrictions: prohibition of any construction, whether for residential or non-residential use, prohibition of planting tall trees (more than 3 meters high), no restriction on access for people and livestock, no restriction on annual crops.	Land	Owner of the property	Cash compensation for the restriction at 20% of the full replacement value
			User	None
		Non-residential structures	Owner of the property	Cash compensation at full replacement value
			User	No compensation unless a commercial structure is used, in which case assistance for livelihood restoration will be considered depending on the nature and magnitude of the impact
		Annual crops	Owner of the crop (may be different from the owner of the land)	None (no restriction)
		Annual or perennial crops	Owner of the crop (may be different from the owner of the land)	Cash compensation at full replacement value if the perennial crop does not meet the conditions of the restriction (i.e. if its height exceeds three meters)

## 5. Process

### 5.1 Inventory, Census, Surveys

Once the rights-of-way of the line and roads have been established with precision, the Project will conduct a census of the people and property affected on the same basis as those applied to the dam and reservoir (see description of methodology in Part I, Section **Erreur ! Source du renvoi introuvable.**). The data will be entered into a database and mapped in a GIS. Potentially vulnerable persons will be identified for the assistance outlined in Section 5.6 below.

### 5.2 Determination of Replacement Values

Since the line and roads affect (at least in part) areas different from those affected by the dam and reservoir, compensation rates will need to be studied specifically in order to determine integral replacement values (land, crops, structures) in the context of the districts and fokountany affected by the line and roads.

### 5.3 Information and Consultation

Information meetings will be held in the districts and fokountany affected by the line and roads as soon as the final rights-of-way have been determined. Affected individuals, elected officials, civil society organizations, and other relevant stakeholders will be informed in detail on the following points:

- Line and road layout;
- Construction methods ;
- Classification of impacts ;
- Compensation methods;
- Complaints management system.

The comments expressed by stakeholders will be noted and taken into account in the preparation of the detailed RAP to be submitted before the financial closure of the Project (see below Section 0, Part II).

### 5.4 Negotiation and Execution of Compensation Agreements

For each household identified as affected, a compensation agreement will be negotiated and signed, with both spouses signing if a married couple.

### 5.5 Preparation and Submission of a Detailed RAP

The entire process described above will be reflected in a detailed RAP that will be submitted and published before the financial closure of the Project. This RAP will include, among other things:

- A detailed description of impacts based on the inventories of affected assets and people;
- A detailed description of the social and economic circumstances of the affected communities based on socio-economic surveys;
- Details of the calculation of compensation rates for the various areas affected;
- The compensation and implementation budget, including livelihood restoration and assistance to vulnerable people;
- Implementation procedures, which for the transmission line could differ from those anticipated for the dam since the institutional context is different with the involvement of JIRAMA.

## 5.6 Assistance to Vulnerable People

Assistance to vulnerable people in the context of a linear project without physical resettlement may include the following:

- Psycho-social or legal assistance during the inventory and negotiation process;
- Specific aid (care, one-off food aid) during the impact period (construction in particular) and the ensuing transition period;
- Regular psycho-social follow-up.

## 5.7 Livelihood Restoration

The linear components of the Project are not expected to have any significant impact on the livelihoods of affected people. Nevertheless, in the unlikely event of them occurring, the following impacts will trigger specific assistance actions (see also compensation matrix above):

- Land losses if the overall impact on the affected household's land is greater than 25% (area lost in relation to the total available area);
- Potential impacts on commercial structures (unlikely considering the environment).

In this case, the affected household will be eligible for livelihood restoration actions, such as the following:

- Farmers affected by the loss of agricultural land:
  - o Assistance in identifying and facilitating the acquisition of alternative agricultural land;
  - o Supply of seeds, fertilizers, seedlings or other agricultural production inputs;
- Entrepreneurs affected by the loss of their commercial buildings:
  - o Facilitating identification and acquisition of a replacement site for the affected commercial space using the compensation provided by the Project;
  - o Facilitating access to credit.

## 5.8 Complaints Management System

The complaints management system that is already operational for the dam and reservoir area will be expanded to cover the districts and fokontany affected by the transmission line and roads, based on the same principles and commitments made for the dam and reservoir (see Section **Erreur ! Source du renvoi introuvable.**, Part I).

## 5.9 Monitoring and Evaluation

The linear components of the Project will be integrated into the overall monitoring and evaluation system for resettlement activities described in Part I, Chapter **Erreur ! Source du renvoi introuvable.**