Adaptation Fund project – Promoting Climate Resilience in the Rice Sector through Pilot Investments in Alaotra-Mangoro Region

Mid-Term Review Report

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Promoting Climate Resilience in the Rice Sector through Pilot Investments in Alaotra-Mangoro Region

Adaptation Fund – Mid-Term Review Report

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Acronyms and Abbreviations

Acronym	English	French
AF	Adaptation Fund	
AfricaRice	Africa Rice Center	
ANAE	National Association for Environmental Activities	Association Nationale d'Actions Environnementales
AUE	Water Users Associations	Association des Usagers de l'Eau
BNGRC	National Office for Risks' and Catastrophes' Management	Bureau National de Gestion des Risques et Catastrophes
CALA	Regional Centre for Research in Middle-East (FOFIFA regional)	Centre Régional de Recherches du Moyen-Est (FOFIFA régional)
CTA	Chief Technical Advisor	
DNM	National Meteorological Agency	Direction Nationale de la Météorologie
DRADR	Regional Directorate of Agriculture and Rural Development	Direction Régionale de l'Agriculture et du Développement Rural
DREAH	Regional Directorate of Water, Sanitation and Hygiene	Direction Régionale de l'Eau de l'Assainissement et de l'Hygiène
DREEMF	Regional Directorate of Environment, Ecology, Sea and Forests	Direction Régionale de l'Environnement de l'Ecologie, de la Mer et des Forêts
DSSAT	Decision Support System for Agrotechnology Transfer	
FOFIFA	National Research Centre for Rural Development	Centre National de la Recherche Appliquée au Développement Rural
GEF	Global Environment Facility	
GIS	Geographic Information System	
LTA	Local Technical Assistant	
M&E	Monitoring and Evaluation	
MADR	Ministry of Agriculture and Rural Development	Ministère de l'Agriculture et du Développement Rural
MEAH	Ministry of Water, Sanitation and Hygiene	Ministère de l'Eau de l'Assainissement et de l'Hygiène
MEEMF	Ministry of Environment, Ecology, Sea and Forests	Ministère de l'Environnement de l'Ecologie, de la Mer et des Forêts
MIRR	Integrated Resilient Rice Model	Modèle Intégré de Riziculture Résiliente
MoU	Memorandum of Understanding	
MTR	Mid-Term Review	
NAPA	National Adaptation Programme of Action	
NGO	Non-Governmental Organisation	
PC	Project Coordinator	
PCT	Project Coordination Team	
PSC	Project Steering Committee	
PPR	Project Performance Report	Rapport de Performance du Projet
PRODAIRE	Project for the Development of an Integrated Approach to promote Environmental Restoration and Rural Development in Mararano Chrome	Projet de Développement de l'Approche Intégrée pour la Restauration Environnementale et le Développement Rural à Morarano Chrome
PURSAPS	Emergency Project for Food Security and Social Protection	Projet d'Urgence pour la Sécurité Alimentaire et la Protection Sociale
SAGE	Support Service for Environment Management	Service d'Appui à la Gestion de l'Environnement
SCV	Direct Seeding under permanent Vegetable Cover	Semi direct sous-Couvert Végétal
SNDR	National Strategy for Rural Development	Stratégie National de Développement Rural
SNGF	National Silo for Forest Seeds	Silo National des Graines Forestières

SRA	Improved System of Rice Growing	Système de Riziculture Améliorée
SRI	Intensified System of Rice Growing	Système de Riziculture Intensive
STOI	Trading Company of the Indian Ocean	Société Trading de l'Océan Indien
TM	UNEP Task Manager	
ToRs	Terms of Reference	

1. Executive summary

The Adaptation Fund project (AF project) entitled "Promoting climate resilience in the rice sector through pilot investments in Alaotra-Mangoro region" – with a total budget of US$5,104,925 – focuses on increasing the climate resilience of the rice sub-sector and started in December 2012. The interventions are divided into three components: i) increasing scientific and technical capacity at the government and non-government level; ii) developing an adapted and resilient rice-production cycle; and iii) leveraging policy changes. The three sites selected for the implementation of these interventions are the communes of Manakambahiny, Ambohijanahary and Bemaitso.

The Mid-Term Review (MTR) mission was undertaken in November 2015 to assess implementation progress and the level of achievement towards the project objective after three years of implementation. The 14 days in country – including six days of field visits – were dedicated to: i) consultations with national and local government stakeholders; ii) consultations with implementing partners, Non-Governmental Organisation (NGOs) and relevant environment/agriculture projects; and iii) focus group discussions with project beneficiaries in each commune.

The progress of the project during the first two years was mainly limited to the development of the Integrated Resilient Rice Model (MIRR). As a result, the level of achievement to date remains low, with ~20% progress toward achievement of the targets and a similar percentage of the total budget spent. This low level of achievement after three years out of five is explained by multiple factors such as: i) difficulties in the functioning of the Project Coordination Team (PCT) particularly during the first two years; ii) limited coordination between government institutions regarding the implementation of the project; iii) changes in local government representatives; and iv) some delays in the procurement processes including difficulties identifying and hiring appropriate consultants as well as consultants not delivering on time. The rate of progress to date is a risk to the success of the project particularly in mainstreaming of the identified MIRR techniques in the rice sub-sector and achieving the reforestation target. Additionally, there are substantial risks to the sustainability of the interventions including *inter alia* limited ownership of the project by government at national and local levels, and inadequate after-project planning. Overall, progress toward achieving the project objective to date has been rated as Moderately Satisfactory.

Several recommendations are proposed in the report to increase the rate of progress in project implementation and increase the probability of achieving the planned targets. These recommendations focus on project management, implementation of on-the-ground interventions and the sustainability of the project outputs. For each category, the main recommendations are presented below.

1. **Project management**: i) clarify the role of each member of the PCT; ii) increase efficiency of financial management; iii) implement a rigorous and quantitative monitoring and reporting system of consultant's deliverables, progress relative to the achievement of project targets, and satisfaction of local communities; and iv) increase engagement with other sectors and projects including through consultations, field visits, Project Steering Committee (PSC) meetings, technical committees and Memorandum of Understanding (MoUs).
2. Implementation and sustainability of the **MIRR interventions**: i) clearly define the target population for each intervention and adjust the number of beneficiaries and support provided

accordingly; ii) increase collaboration between the National Research Centre for Rural Development (FOFIFA central), Regional Centre for Research in Middle-East (CALA – FOFIFA regional) and any other relevant institution to finalise the MIRR; and iii) implement a community-based system for local production of seeds and a long-term support system on climate-resilient cultivation techniques for local communities.

3. Implementation and sustainability of the **reforestation interventions**: i) optimize labour force, payment system, equipment and use of national experience to maximise the probability of success of the interventions; ii) increase awareness of local communities on the medium- and long-term benefits of the reforestation activities and select indigenous species for the next planting seasons; iii) work with relevant NGOs to undertake the remaining reforestation activities to achieve the restoration targets; and iv) implement a long-term, community-based management system for forest resources in the interventions sites.

4. Other recommendations: prioritise the development and implementation of a **sustaining plan** including means for each project intervention.

The implementation of the recommendations provided will increase the rate of progress of the project. To enable a good progress rate from the start for future projects, several lessons on project design and implementation can be extracted from the three years of implementation of the AF project. The main lessons that can be derived from the AF project experience are: i) involve relevant government sectors and community leaders during the first stages of the project design to enable ownership of the project by these stakeholders; ii) collaborate with the government and non-government institutions with relevant expertise for the design and implementation of each intervention to maximise their success; iii) ensure that the main PCT members have the capacity to work full-time on the project implementation; iv) engage intensively with local communities, and prioritise awareness-raising and training; and v) maximise the overlap between the project implementation phase and the implementation of the sustaining plan to allocate sufficient time for government, private and/or community-based systems to become independent from the project funds.

Overall, the management system for the AF project has improved since the beginning of the project and most of the interventions have commenced. Consequently, the percentage of achievement of the project targets should increase significantly by mid-2016. Efforts should now focus on mainstreaming the MIRR techniques, achieving the target of 4,000 hectares of reforested land and implementing a robust sustaining plan for the project.

2. Introduction and background

The AF project entitled "Promoting climate resilience in the rice sector through pilot investments in Alaotra-Mangoro region" was developed in 2011 and endorsed in February 2012. The overall objective of this project is to "demonstrate pathways towards the **transformation of the rice sub-sector to make it more resilient to current climate variability** as well as expected climate change and associated hazard, through implementation of pilot investments in the Alaotra-Mangoro region that have the potential for being upscaled at national level". Three sub-objectives have also been designed to guide the implementation of the project:

- "Strengthening the scientific and technical capacities of Malagasy authorities to **understand, analyse and manage climate risks to the rice sub-sector**, as well as to determine further adaptation options for the sector. This will be achieved at regional level, working with central and decentralized government and technical services."
- "Implementing and disseminating a series of **concrete changes to the rice production practices, from input to harvest management**, including measures designed to restore and maintain ecological services around rice ecosystems. This will be achieved through the demonstration of adaptation activities at local level in the Alaotra-Mangoro region."
- "Identifying and addressing the key policy barriers, gaps or maladaptations in order to **create the conditions for upscaling adaptation in the rice subsector**. This objective is targeted towards the identification of upscaling mechanisms at regional and national level and activities will be deployed with regional and national partners."

To achieve the overall objective and sub-objectives, the project design includes Components, Outcomes, Outputs and Activities, which are presented in Table 1 (please see Appendix 10.1 for the list of activities). Progress in achieving the project objectives is monitored against a results framework including indicators and targets of the project (see Table 2) which is the main element of the project's M&E system.

Table 1. Project outcomes, components and outputs.

Components/Outcomes	Outputs
Component 1. Scientific and Technical Capacity	
Outcome 1.1. Knowledge base on best practices for climate resilience in rice, based on existing local knowledge and international research	Output 1.1.1. Best Available Technologies and Integrated Resilient Rice Model (MIRR) selected and publicized
Outcome 1.2. Malagasy government, research institutions and local communities have the tools and methods to assess, monitor, and understand climate change impacts on rice	Output 1.2.1. Crop models are available for rice vulnerability mapping
	Output 1.2.2. Updated, dynamic agricultural calendars and climate early warnings taking into account current and projected variability disseminated to local population
	Output 1.2.3. Agricultural extension staff trained on climate risk management in an agro–ecosystem context
Component 2. Adapted and resilient rice production cycle	
Outcome 2.1. Sustainable increase in rice yields (using MIRR)	Output 2.1.1. Climate resilient rice varieties selected through participatory field testing
	Output 2.1.2. An operational multiplication and dissemination scheme for adapted seed varieties
	Output 2.1.3. Updated fertilisation guidelines according to best available standards and taking climate conditions into consideration
	Output 2.1.4. Integrated pest management is implemented
	Output 2.1.5. Water efficiency, management and conservation

Components/Outcomes	Outputs
	technologies and infrastructures are implemented
Outcome 2.2. Ecosystem services maintained	Output 2.2.1. Best available land preparation, production and harvesting techniques disseminated to reduce deforestation, maintain soil fertility and integrity, and to provide adequate growing conditions
	Output 2.2.2. Watershed rehabilitation in productive landscapes introduced, including through reforestation and adaptation of agroforestry practices
	Output 2.2.3. Soil conservation and livestock management techniques adapted to topography and landscape in light of future climate conditions
	Output 2.2.4. Revitalization of producer's cooperatives and water user associations for collaborative natural resources allocations (e.g. land and water) and management
	Output 2.2.5 Water quality assessments
Outcome 2.3. Post-Harvest losses reduced	Output 2.3.1. Increased utilization of rice by–product especially rice straw
	Output 2.3.2. Post–harvest storage facilities with phytosanitary control, serving as trading points and markets
Component 3. Leveraging policy change	
Outcome 3.1. Technical norms and standards in rice cultivation reviewed and where necessary modified to take climate change into account	Output 3.1.1. Gaps and possible maladaptations in the current rice policy are identified and recommendations on rice policy reform are made
Outcome 3.2. Conditions in place for a full adaptation of the rice sub–sector	Output 3.2.1. A report on best practices and lessons learned for rice adaptation in Madagascar

The total budget for the implementation of the AF project interventions is US$4,705,000. It is implemented in three districts out of five in the region of Alaotra-Mangoro. In each district, one commune was selected, namely commune Manakambahiny for Ambatondrazaka, commune Ambohijanahary for Amparafaravola, and commune Bemaitso for Andilamena.

The project started slowly with some delays in hiring the PCT members and appointing the consultants for the baseline study. The baseline study was undertaken in August 2013, which corresponds with the start of the implementation of project activities (see Figure 1 for the chronology of the main steps of the project implementation phase).

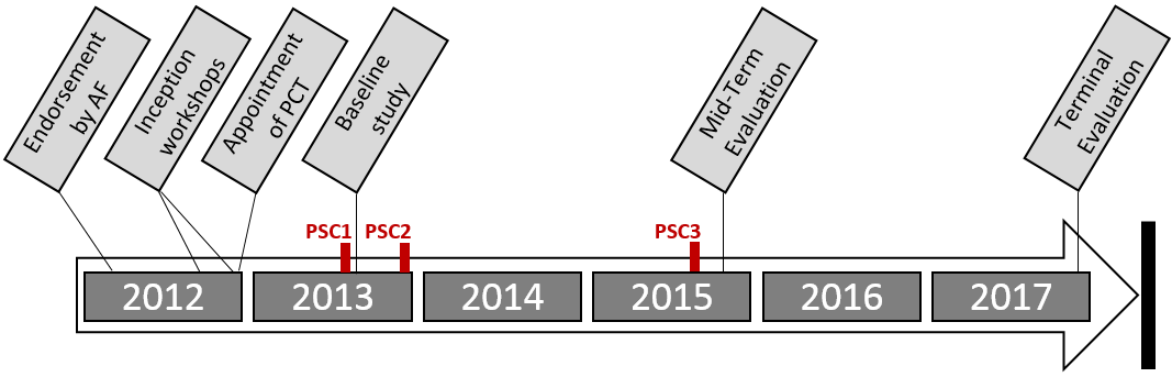


Figure 1. Main dates of AF project implementation and monitoring.

3. Objectives and scope of the Mid-Term Review

As stated in the ToRs (see Appendix 10.4), the main objective of the MTR is to assess implementation progress and the level of achievement towards the project objective. To do so, the Mid-Term Evaluator will:

- assess achievements and challenges at the project mid-point and in particular assess the progress of the project towards achieving the planned outputs, objectives and outcomes (Tables 2 and 4). The risks to achievement of project outcomes and objectives will also be evaluated (see Table 4);
- focus on identifying corrective actions that are practical and feasible for the project to achieve maximum impact. The findings of the review will feed back into the project management processes through specific recommendations and 'lessons learned' to date (see Tables 5 and 6); and
- consider sustainability issues and 'exit strategy', and proposed ways to increase the likelihood that the project outcomes will be sustained beyond the project implementation phase.

The deliverables of the MTR are:

- an inception report by 30 October 2015;
- a draft MTR report by 23 December 2015;
- a response sheet to the comments of the national team and UNEP on the draft MTR report, and revised MTR report by 28 February 2016; and
- a final MTR report by 30 April 2016.

4. Methodology used

The MTR assessment was divided into three phases as described below.

Preliminary desktop work

Document analysis

The documents analysed include all the relevant documents pertaining to the project implementation:

- Project Document and Baseline study report;
- Inception report including project workplan;
- Project Performance Reports (PPRs);
- Project Steering Committee meeting reports;
- Financial audits, cash advances, revised Activity-Based Budget and budget expenditure reports;
- Chief Technical Advisor (CTA) reports;
- Terms of Reference (ToRs) and MoUs of national consultants and institutions;
- Attendees lists for MIRR training workshops; and
- National consultants' progress, draft and final reports based on availability.

National policy documents were also consulted such as:

- Second National Communication for the United Nation Framework Convention of Climate Change (2010);
- National Adaptation Programme of Action (2006);
- National Strategy for Agricultural and Rural Training (2012); and
- Regional Plan for the Development of the Alaotra-Mangoro region (2005).

Online research

Online research was undertaken to complement the information in the project documents and obtain other relevant information on rice cultivation in Madagascar.

Mission to Madagascar

A 14 days mission to Madagascar was undertaken from 4 and 17 November 2015. This mission included: i) three days of consultations with national stakeholders in Antananarivo; ii) six days of consultations with local stakeholders and project beneficiaries at the project intervention sites; and iii) a meeting with the project team and main project partners to present the preliminary results and request complementary information. The detailed agenda for the mission is provided in Appendix 10.3.

Stakeholder consultations
Interviews with relevant stakeholders were undertaken to collect both qualitative and quantitative information – when available – on the achievement of the project targets. Stakeholders included national and local government representatives, NGOs, chiefs of Fokontany[1], as well as members of the local communities.

Focus groups were organised with local communities in the Fokontany where the demonstration sites of the project are implemented. The use of focus groups is a qualitative research technique that comprises semi-structured interviews with a targeted group. This approach allows for the collection of detailed information on a targeted subject and assesses the needs, expectations, level of satisfaction, opinions and motivations of the group. Open questions explore the different points of view and experiences of the participants. While participants of the focus group are carefully selected as they need to be related to the topic of investigation, participation is voluntary. In the context of the MTR, the focus groups method will enable the evaluator to: i) meet as many beneficiaries as possible within a given period of time; ii) determine whether there is good understanding and communication amongst the beneficiaries, and between the beneficiaries and the executing agencies; and iii) assess the beneficiaries' knowledge, ownership of and satisfaction with the project.

The main questions used to lead each focus group are as follows:
- How have you been involved in the project design and implementation?
- Who participated in at least one of the training workshops on MIRR techniques?
- What do you think of the manner in which the project was implemented?
- Does the project address your priority needs regarding climate-related and environmental problems?
- Do you think that the project interventions implemented have or will effectively reduce your vulnerability to the negative effects of climate change such as droughts and floods?
- As a result of the awareness campaigns conducted through this project, do you have a better understanding of climate change and its effects?
- As a result of the awareness campaigns conducted through this project, have you noticed any behavioural changes in your household or within the community?
- How have the interventions implemented through this project improved your quality of life (e.g. increased food security, household revenue)?
- If the project had to start all over again, how could it be improved?

Further questions – specific to each intervention site – were asked to the focus group. The size of the focus group varied from 20 to 42 farmers, and each focus group consultation lasted approximately two to three hours. The information collected during the focus group consultations is deemed accurate, unless contested by any of the participants.

Workshops

[1] Village(s)

A group workshop was held at the end of the field mission (17 November 2015) to present and discuss the preliminary results and conclusions of the evaluator. The presentation was divided into two parts. The first part addressed the PCT and the main project partners (i.e. National Silo of Forest Seeds – SNGF, CALA) as well as the National Consultant in Communication and the Technical Local Assistant of Ambohijanahary. The presentation covered the following topics: i) introduction of the MTR; ii) main achievements in the field; iii) level of achievement of Outcome level indicators to date; and iv) observations and recommendations relative to the implementation and sustainability of the project. The second presentation addressed the members of the PCT and focused on: i) the evaluation table; and ii) the observations and recommendations pertaining to project coordination.

5. Project Performance and Impact

Table 2. Progress toward achieving the targets of the project result framework.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
Component 1. Scientific and Technical Capacity						
Outcome 1.1. Knowledge base on best practices for climate resilience in rice, based on existing local knowledge and international research	***Indicator 1.1. Percentage of farmers with access to selected and publicized Integrated Resilient Rice Model (MIRR)***	There is currently no MIRR available, although various ameliorated rice production techniques have been developed in recent decades that can improve the resilience of rice production.	The first draft of MIRR was developed in 2014. Since then, there have been ongoing on-the-ground tests of the MIRR techniques. The next step is the integration of the test results into the MIRR and the development of technical guidelines. Based on the present sheets received by the evaluator, the following number of farmers received training on the MIRR techniques in 2015: i) 62 farmers in Manakambahiny; ii) 156 farmers in Ambohijanahary; and iii) 34 farmers in Bemaitso. The percentage of targeted farmers who have received technical support and training to date cannot be estimated because the initial number of targeted farmers is not defined.	40%	Based on existing ameliorated techniques such as Direct Seeding under permanent Vegetable Cover (SCV), Intensified System of Rice Growing (SRI) and Improved System of Rice Growing (SRA), and based on new research, 1 Resilient Rice Model is selected and published. At least 90% of farmers targeted by the project have received technical support and have been trained to implement the technique according to the technical guidelines.	• Interviews with DRADR and the farming research center. • Focus group with farmers. • Documentation review: MIRR developed, including a series of technical guidelines.
Output 1.1.1. Best Available Technologies and MIRR selected and publicized	Indicator 1.1.1. Number and type of technical guidelines for MIRR developed and publicized based on best available technologies and techniques	A series of technical guidelines were created for SCV techniques as part of the project BV Lac from 2003 to 2013. During the last decade, technical guidelines were also developed for SRI and SRA as part of other projects and programs. The	The first draft of the MIRR was developed in 2014. This draft will be finalised in 2016 through integrating the results of the on-the-ground tests. Summaries of the technical guidelines on seeding, planting, harvesting and fertilisation are provided in the draft report produced by CALA in November 2015. However, the content of these guidelines is not complete, exhaustive or	40%	1 Recommended Integrated Resilient Rice Model developed and published, including a series of at least 1 technical guidelines with the following key stages/techniques: • Seeding • Planting • Harvest • Post-harvest	• Interviews with DRADR, extension services, and farming research center. • Focus group with farmers. • Documentation review: MIRR

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
		guidelines are available from DRADR but are not yet widely disseminated. Very few farmers have access to any guidelines for ameliorated irrigated rice techniques and practices.	designed for the farmers. No publication or dissemination of guidelines, including those relating to water management, has been initiated yet. A consultant on integrated pest management has not been hired yet.		• Fertilization • Integrated pest management • Water management	developed, including a series of technical guidelines.
Outcome 1.2. Malagasy government, research institutions and local communities have the tools and methods to assess, monitor, and understand climate change impacts on rice	*Indicator 1.2. Level of use of the tools and methods made available to the Malagasy government, research institutions and local communities to assess, monitor, and understand climate change impacts on rice production*	Current tools to address, monitor, and understand climate change impacts on rice are hampered by the limited availability of climate data at the local level making it difficult to create models and planting calendars. The limited number of extension staff prevent the information on climate change from being disseminated to farmers.	Training on climate change trends and impacts was provided as part of the MIRR training workshop to 200 government staff. Awareness-raising on climate change trends and impacts was provided to the public through the development of communication tools such as pamphlets, radio talks and documentaries. Activities toward "improving access to climate forecasts over 3-4 days through multiple communication channels" have not yet been initiated to date. Training on the MIRR was provided during several events at the national (Sept 2014), regional (August 2015) and local levels (2014-2015). However, technical guidelines have not yet been finalised and vulnerability maps have not been produced.	30%	All regional extension services, research institutions including CALA, and at least 90% of targeted farmers are aware of climate change trends and impacts through awareness raising and information sessions, have access to regular climate forecasts through local communication channels (radio, newspapers), and have been trained and implement the MIRR and its technical guidelines, including vulnerability maps.	• Interviews with DRADR and farming research center. • Focus group with farmers. • Documentation review: rice cropping system models, climate forecasts bulletin, and training reports.
Output 1.2.1. Crop models are available for rice vulnerability mapping	Indicator 1.2.1. Number of rice cropping system models based on	Currently, there is no rice cropping system model that includes vulnerability maps of future rice production	Two automatic weather stations have been installed (one in Ambohijanahary and one in Bemaitso). The Local Technical Assistant (LTA) are collecting	30%	Detailed available downscaled data on expected climate change risks and impacts on rice sub-sector at the local level	• Documentation review: climate change study, rice models

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
	expected climate change scenarios, including vulnerability maps of future rice production and hydrological models developed	under potential climate change impacts and hydrological models developed.	the weather data. However, there is no system in place to analyse the data collected. In addition, the dissemination system for this information (e.g. transmission to the National Directorate of Meteorology - DNM) is yet to be developed. The climate-based hydrological model was produced by a national expert during the first trimester of 2015. Hiring of a Geographic Information System consultant to develop the vulnerability maps is planned for 2016. A consultant has been hired for the development of the rice cropping system models which are currently being developed. NB: The rice cropping system models are to be informed by the vulnerability maps. The consultant for the vulnerability maps should therefore be appointed as soon as possible to avoid further delays.		compiled; identified gaps on available data are filled in; and all data are disseminated to relevant stakeholders at the regional and local levels. 4 rice cropping system models with vulnerability maps developed according to 4 different expected climate change scenarios (driest, low dry, low humid, and most humid scenarios) and 1 hydrological model developed based on available downscaled data on expected climate change risks and impacts.	developed. • Individual interviews with main stakeholders including DRADR, DRE, and the farming research center.
Output 1.2.2. Updated, dynamic agricultural calendars and climate early warnings taking into account current and projected variability	Indicator 1.2.2. Frequency of dissemination of updated dynamic agricultural calendars and climate information including	Agricultural calendars under current climate conditions are well defined for all seed varieties developed, yet farmers do not necessarily apply them. The challenge resides in	The appointed consultant for the development of the agricultural calendars started in June 2015. The calendars have not yet been submitted to the PCT. To date, no activities pertaining to the	20%	Climate information and 3- 4 day forecasts, including flood early warnings, made available to farmers through local communication systems. Dynamic agricultural calendars updated and disseminated to at	• Interviews with DRADR, research center, local and regional radio. • Focus group with farmers.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
disseminated to the local population	flood early warnings in the three project sites (Municipalities of Manakambahiny, Ambohijanahary and Bemaitso)	distributing and encouraging the application of established calendars amongst farmers through training and diffusion. Furthermore, new agricultural calendars will need to be developed on the basis of projected future climate trends.	dissemination of 3-4 day climate forecasts including early warnings[2] have been implemented.		least 80% of targeted farmers.	• Documentation review: climate forecasts.
Output 1.2.3. Agricultural extension staff trained on climate risk management in an agro–ecosystem context	Indicator 1.2.3. Number of agricultural extension staff in the three districts trained on climate risk management in agro–ecosystem context (gender and district disaggregated)	Extension workers were trained in climate change issues through the BV Lac project, and they do not necessarily lack training. The challenge is disseminating information from extension workers to farmers given how little contact they have with farmers.	A national climate risk management expert was selected. The PCT was awaiting the reception of the cash advances (see Section 9 for information on the cause of the delay) to initiate the contract. The climate risk management expert will work in collaboration with the agroforestry specialist to design and hold the training workshops for the extension services in 2016. The precise needs in term of training on climate risk management have not yet been identified. In September 2014, training on the MIRR was provided to 79 staff within national government authorities. This training workshop included awareness-raising on climate change and the associated	50%[4]	100% of staff trained on climate change aspects and how to disseminate new knowledge to farmers, including women.	• Interviews with DRADR and the extension service. • Focus group with farmers. • Documentation review: training report.

[2] The DNM has an EWS in place for floods, droughts and hail that covers the country. Under this system, the DNM analyses the climate information and disseminates early warnings to the National Office for Risks' and Catastrophes' Management (BNGRC), the relevant government officials and via the media – including SMS through TELMA network. However, increased access to this information by farmers is required.

[4] This percentage is approximate because the initial targeted staff has not been defined.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
			effects on rice cultivation. Additionally, 23 agriculture extension staff out of 58 of them working at the Regional Directorate of Agriculture and Rural Development (DRADR) in Alaotra-Mangoro were trained on the MIRR at a regional level in August 2015. 35 individuals are therefore still to be trained. Training tools are currently being prepared by the MIRR consultant as part of the ToRs to support the training of farmers by agriculture extension services. Based on the information gathered by the evaluator, ~15% of the training participants were women[3].			
Component 2. Adapted and resilient rice production cycle						
Outcome 2.1. Sustainable increase in rice yields (using MIRR)	***Indicator 2.1. Percentage of change in rice yields in all three project sites***	Rice yields in 2012-2013 for irrigated rice in the project areas were: • Manakambahiny – 3.41 tons/ha average (roughly 3 tons/ha for Mk34 and 3.5 tons/ha for Dista and Tsemaka) • Bemaitso – 0.7 tons/ha for MK34 and 1.5 tons/ha for Dista (the low yields observed in Bemaitso are due to floods – care should therefore be taken	During each focus group, the participants were asked whether they benefitted directly from the use of MIRR techniques during the 2014-2015 season. A positive response was consistently received and the participants reported a significant increase in yield and income. However, no measurements of the yield have been undertaken and the achievement toward meeting the target set for this indicator therefore cannot be determined. The number of farmers who benefited from the training workshops on the MIRR techniques in 2014 is estimated at 30	30%	Individual rice yields for targeted producers increase by 25% in relation to current averages in each project area.	Interviews with DRADR and extension service. Focus group with farmers.

[3] This percentage should be confirmed because gender information was not provided in the presence sheets.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
		while analyzing these data) • Ambohijanahary – 2 tons/ha for MK34 and 3 tons for Tsemaka	beneficiaries. This number increased significantly in 2015 with 252 participants in total. This increased number of participants cannot be reflected in the rice production to date because the harvesting season will be in March-April 2016. Counter-season rice cultivation cannot be considered in the MTR because no quantitative data on the yield is available to date.			
Output 2.1.1 Climate-resilient rice varieties selected through participatory field testing	Indicator 2.1.1. Number and types of climate-resilient rice varieties tested and selected in the three project sites (Municipalities of Manakambahiny, Ambohijanahary and Bemaitso)	Current rice farming is dominated by the seed variety MK34, though it is not necessarily resilient. The next most prominent varieties are Dista and Tsemaka.	Multiple climate-resilient rice varieties have been created and tested by CALA in the laboratory. Three of them were then selected by the farmers in the intervention sites and tested in the field. These varieties are SEBOTA 231, X265 and Madikatra. Considering the length of the process of demonstrating the suitability of a new rice variety for adoption by farmers, it is not advised to integrate two new varieties at this stage to reach the target, except if it comes up as a demand from the farmers during the coming focus groups. Except for funding research on new varieties and buying seeds, no support has been provided by the AF project to strengthen CALA infrastructure and capacity to develop, test and produce climate-resilient seeds.	60%	CALA facilities and capacities are strengthened to develop at least 5 varieties that are tested and proven resilient in both laboratory and field settings in the three project sites.	Interviews with CALA and DRADR. Focus group with farmers.
Output 2.1.2 An operational multiplication and dissemination	Indicator 2.1.2. Annual quantity and quality of adapted certified seeds	Seed multiplication appears to be dominated by four main facilities: CALA, Multiplication Center of	A total of 2.4 tonnes of rice seeds has been provided for the season 2014-2015 and counter season 2015 to test the MIRR techniques. According to CALA,	30%	At least 5 tons total of seeds for all 5 varieties that were tested and proven resilient are produced annually and	Interviews with research center and DRADR.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
scheme for adapted seed varieties	produced and distributed in each of the project sites	Anosiboribory, ANDRI–KO, and Société Semis Direct Madagascar. Challenges include production capacity for CALA and the publication and dissemination of seed-specific planting guidelines.	based on the increasing number of people interested in adopting MIRR techniques, the target of 15 tonnes/year will be met next year. The implementation of local seed multiplication systems required to enable the production of affordable climate-resilient seeds after the end of the project have not yet been initiated.		distributed in the 3 project sites.	Focus group with farmers.
Output 2.1.3. Updated fertilisation guidelines according to best available standards and taking climate conditions into consideration	Indicator 2.1.3. Number of farmers who apply updated fertilisation guidelines in all three project sites (Municipalities of Manakambahiny, Ambohijanahary and Bemaitso)	Farmers do not appear to follow any specific guidelines for fertiliser application. Farmers vary on how and when they use compost, manure, urea, NPK, and/or DAP. Many farmers do not use any chemical fertiliser practices.	The consultant on fertilisation from the Trading Company of the Indian Ocean (STOI) supervised the production of natural compost in 2014 and 2015 for rice and non-rice cultivation. To do so, the consultant provided training on compost production to some of the community members. Awareness-raising activities were also undertaken on the use of compost and training was provided as part of the MIRR workshops. Specific training events on community-based production of compost were held in the week following the MTR mission. No specific guidelines for the use of natural and chemical fertilisers have been produced to date.	50%	90% of targeted farmers have been trained and/or received technical support and apply fertilisation guidelines updated as part of the development of the MIRR.	Focus group with farmers. Documentation review: fertilisation guidelines.
Output 2.1.4 Integrated pest management is implemented	Indicator 2.1.4. Number of farmers trained in integrated pest management in all three project sites (gender and age disaggregated)	In general, farmers have no information or training about the appropriate protocols for using pesticide in pest control. While some used commercial pesticides, they	There has been an improvement in pest management through the provision of the relevant information by the MIRR expert during the training workshops. However, the expert who is expected to provide specific training and guiding documents for integrated pest	10%	400 farmers trained in integrated pest management, gender and age disaggregated (and among them 50% women and young)	Focus group with farmers and site visits. Documentation review: training reports.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
		apply them with little knowledge of best practices.	management has not been appointed to date.			
Output 2.1.5. Water efficiency, management and conservation technologies and infrastructures are implemented	Indicator 2.1.5 (a) Number of Km of rehabilitated irrigation canals and number of reservoirs dredged in all three project sites	Infrastructure in the 3 municipalities was in a state of significant disrepair with damaging siltation and reduced irrigation capacities throughout. There is a large need for rehabilitating canals and dam infrastructure.	The baseline situation has not changed. A national specialist was appointed at the end of September 2015 to undertake the feasibility study. The start of the contract was pending the reception of cash advances (in November 2015). The consultant will select the project interventions to be implemented from the list of priority interventions prepared at the communal level through consultations with farmers. NB: The list of priorities for the commune of Manakambahiny has not yet been received.	10%	*The following targets will require costly investments for which the current available budget (US$575,000) may not be sufficient. Some fund reallocations between outputs may be possible (see recommendation 8) to increase the available budget envelope and achieve the following targets. If budget reallocations are not possible, the following targets would therefore need to be decreased.* Manakambahiny: 35 km of primary canals cured, dredged, and maintained with norms that take expected climate change impacts into account (future precipitation regimes, drainage and run-off); 4 water intake points along the Ilakana River rehabilitated, strengthened and made more resilient to expected climate change impacts. Bemaitso: The dam is drained and dredged; 14 km of primary canals and 21 km of secondary canals are cured, dredged, and maintained all with norms that take expected climate change impacts into account.	Site visits. Interviews with DRADR and extension services.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
					Ambohijanahary: The dam at Anony is rehabilitated, primary water control valves are repaired; 13 km of primary canal are drained, dredged, and repaired; and primary canal is extended to irrigate 600 ha of additional rice fields all with norms that take expected climate change impacts into account.	
	Indicator 2.1.5 (b) Percentage of change in water availability in all seasons to water users associations and in their water use efficiency (water losses estimations)	There is a decrease in water availability during the dry season in all 3 Districts, and water losses reach up to 50%.	To date, there has been no infrastructure rehabilitation to increase water availability. The consultant appointed to strengthen the institutional and technical capacity of Water Users Associations (AUEs) is halfway through the contract (June 2015-May 2016). The strengthening strategy was developed during the first months of the contract. The implementation of this strategy started with the renewal of the members of the AUEs. The technical training on improved water management was planned shortly after the MTR mission (December 2015).	10%	35% increase in water availability in all seasons in all 3 districts. Water loss estimation decrease from 50% to 25%.	Site visits – water flow measurement in dredged primary and secondary irrigation canals. Interviews with DRADR and extension services. Focus groups with farmers
Outcome 2.2. Ecosystem services maintained	***Indicator 2.2. Percentage change in land covered by biomass and in overall productivity (rice, vegetables and livestock) in project***	There is no evidence of activities to increase land covered by biomass such as agroforestry practices, reforestation, or vegetable crop rotations. No farmers use soil quality or water	10 nurseries have been built in each commune. At MTR, no planting activities had been initiated yet. The saplings being produced in the nurseries will be planted in January and February 2016 and are expected to cover ~600 hectares per commune.	20%	Change in overall land area covered by forests (i.e. net reforestation) of at least 50km2 across the combined 3 municipalities. Data on vegetables and livestock	Site visits. Interviews with DREEMF. Interpretation of satellite photos

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
	sites	quality improvement techniques.	Regarding agroforestry, the national expert has designed a demonstration activity and the implementation thereof was scheduled to start at the end of November. However, at the time of the MTR mission, no trees had been planted. The first counter-season rice and non-rice cultivation campaign took place in 2015. These activities were experimental and were tested on a limited number of hectares per commune. The harvest started in November 2015 and was deemed successful based on the MTR mission, however no measurements of the yield have been made to date. Techniques for crop rotation and soil conservation such as the use of vetches to increase nitrate concentration, avoiding tillage and conservation of vegetation waste on site (e.g. leaving the trunk on site when collecting beans) have been tested at a small scale in each commune in 2015.		productivity/yields collected by extension services, and increase in overall productivity of rice, vegetables and livestock of 5% throughout the life of the project and across the intervention sites.	collected at project start, mid-term and end of project for the region (see next chapter for data collection protocols). Monitoring of productivity by agriculture extension services through site visits and focus groups with targeted farmers.
Output 2.2.1. Best available land preparation, production and harvesting techniques disseminated to reduce deforestation, maintain soil fertility	Indicator 2.2.1. Percentage application of resilient rice model, including rice–vegetable rotation systems, in all three project sites (gender and age	Rice/vegetable crop rotations are used on only very small pieces of rice fields. Guidelines for rice/vegetable rotation practices were developed under the BV Lac project, but their dissemination was somewhat limited.	The first training campaign on non-rice cultivation was undertaken in June-July 2015. During the campaign (June-July 2015), 3-4 training events were held in each commune. The number of attendees varied between 15 and 25. The attendance of women was 0%-20% in Manakambahiny and Ambohijanahary, and ~50% in Bemaitso. After these	20%	At least 75% of targeted farmers practice rice/vegetable crop rotation on an area larger than 0.1 ha and for commercial purposes (and among them at least 50% of women and young).	Site visits. Focus groups with farmers.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
and integrity, and to provide adequate growing conditions	disaggregated)		workshops, experimentation activities for non-rice cultivation practices were implemented on several hectares in each commune. The crops cultivated include cabbage, carrots, beans, potatoes, onions and tomatoes. Considering the interest showed by local communities in non-rice cultivation in the last month, the number of people participating in the training workshops next year is expected to be significantly higher.			
Output 2.2.2. Watershed rehabilitation in productive landscapes introduced, including through reforestation and adaptation of agroforestry practices	Indicator 2.2.2 (a) Number of ha reforested in all three project sites	Reforestation activities have been rather limited over the last decade in the project sites despite significant potential.	Based on consultations with SNGF staff, the restoration activities in Bemaitso for the 2014-2015 season failed because of a combination of inadequate practices implemented by SNGF staff regarding: i) length of stay of the plant in pots before planting on site; ii) size of planting holes in the restoration sites; and iii) timing of planting within the rainy season. According to SNGF's director, these mistakes have led to multiple lessons learned which will inform the second planting season. 10 Tree nurseries are in place in each of the communes. Each nursery contains ~120,000 plants: *Eucalyptus robusta* (100,000 plants), *Acacia mangium* (10,000 plants), and *Acacia leptocarpa* (10,000 plants). Approximately 2,000 plants are planned per hectare, therefore the capacity of each nursery corresponds to ~60 hectares of reforestation. The 2015-2016 reforestation season is	10%	In total, at least 50km^2 of area distributed in the 3 districts are reforested (5,000 ha).	Site visits. Focus groups with farmers. Interpretation of satellite imagery (see next chapter for description).

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
			expected to cover 600 hectares/commune. The remaining 400 hectares per commune will have to be planted during the 2016-2017 season to achieve the target of 3,000 hectares in total. An additional 350 hectares are expected to be restored by local communities under the supervision of communes and NGOs during the 2016-2017 season. An MoU with local authorities (municipalities) was distributed during the MTR mission (one of which was signed immediately, in Ambohijanahary). NB: Based on the current and planned activities, the expected target at the end of the project is 4,050 hectares restored rather than 5,000 hectares. Two options should be considered by the project team: i) revise the target to reduce it to 4,000 hectares after checking with the AF board if it is acceptable; or ii) envisage to request a no cost extension of the project for a year to give extra time to meet the target of 5,000 hectares. If the first option is selected and some budget becomes available as a result of the reduced target, it should be allocated to awareness-raising on the role of the reforestation interventions and training on MIRR techniques.			
	Indicator 2.2.2 (b) Number of farmers	Farmers have currently not been trained in sustainable	To date, training on agroforestry has not yet been undertaken. The national	20%	At least 400 farmers trained in sustainable agroforestry and	Documentation review: training

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
	and land/forest users trained on sustainable agroforestry and land management in all three project sites (gender and age disaggregated)	agroforestry and land management practices.	consultant was hired and a combined training workshop on agroforestry, compost production and the MIRR has been planned for December 2015. However, no specific training workshop on agroforestry is planned to date. The on-the-ground demonstration activities of the benefits of agroforestry using an integrated approach were scheduled to commence at the end of November.		land management (and among them 50% of women and young).	reports.
Output 2.2.3. Soil conservation and livestock management techniques adapted to topography and landscape in light of future climate conditions	Indicator 2.2.3. % change in erosion rate	The project PRODAIRE[5] has been training workers for the Regional Directorate of Environment, Ecology, Sea and Forests (DREEMF) in monitoring erosion rates. DREEMF has therefore the in-house capacities to monitor erosion rates in the project sites.	No planting activities on hill sides have been implemented to date. Three national consultants have been appointed and will collaborate on the design and implementation of the training workshop on improved livestock management to reduce erosion. They will also provide training on the use of agricultural waste for livestock feeding. During the first months of the contract, they will focus on literature reviews and surveys. The training campaign is expected to start in December 2015. NB: It is necessary to check that the monitoring of erosion rates is part of the MoU signed with DREEMF.	10%[6]	50% reduction in erosion rates.	Interviews with DREEMF. Documentation review: DREEMF annual reports.
Output 2.2.4.	Indicator 2.2.4.	Water user cooperatives	The consultant appointed to strengthen	30%	75% of the members of water	Interviews with

[5] Project for the Development of an Integrated Approach to promote Environmental Restoration and Rural Development in Mararano Chrome.
[6] This means 10% of progress toward achieving the targets, not 10% of reduction in erosion rates.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
Revitalization of producer's cooperatives and water user associations for collaborative natural resources allocations (e.g. land and water) and management	Number of members of farmer's cooperatives and water user associations trained on water management and administrative management within the three project sites	exist in the three project areas; however, in all areas members expressed a need for training in administrative management as well as training in water management.	the institutional and technical capacity of AUEs is halfway through the contract (June 2015-May 2016). The strengthening strategy was developed during the first months of the contract and implementation commenced with the renewal of the members of the AUEs. The institutional and technical training activities were planned for shortly after the MTR mission (December 2015)[7]. NB: The ToRs of the consultant refer to capacity strengthening but do not refer specifically to administrative training. The need for administrative training should be assessed based on consultations with local communities and the consultant's assessment report. If administrative training is required, the corresponding training workshops should be developed and implemented. CALA is providing support for the creation of agricultural cooperatives where needed. However, a national consultant to provide training in administrative and water management to the existing and newly created agricultural associations has not yet been appointed.		user cooperatives in the project area have been trained on water management and administrative management.	water user cooperative members. Focus groups with farmers.
Output 2.2.5. Water quality assessments	Indicator 2.2.5. Percentage change in	There is currently no water quality analysis conducted	No improvement has been noted in land use through reforestation, agroforestry	20%	Water quality assessment is conducted in all 3 project sites	Documentation review: water

[7] The ToRs of the national consultant in AUEs should clearly include this target of 75% of the member trained on administrative and water management.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
	water quality (e.g. reduction in turbidity, pollutant content, microbial content, sediment content) in all three project sites	in any of the three municipalities.	or livestock management as a result of the project interventions. A consultant from the National Centre for Environment Research was appointed to monitor water quality from 2014 on a yearly basis. However, in 2015 no information on the progress thereof was made available to the PCT. NB: The feasibility of achieving the target "10% increase in water quality" is questionable considering that the rehabilitation activities for water management infrastructure and planting activities did not start to date. This target should be reassessed as soon as the water management infrastructure to be rehabilitated as part of the AF project interventions have been identified. A SMART target should then be identified and validated by the PSC.		by the DIREAU with technical support provided by the project if needed. Water quality increase by 10% from the date of the first analysis.	quality assessment
Outcome 2.3. Post-harvest losses reduced	***Indicator 2.3. Percentage change in post-harvest losses***	Post-harvest losses are estimated to be between 5 and 10% of total harvest.	No changes reported in the use of rice by-products as a result of the project interventions to date.	10%	Post-harvest losses are reduced to less than 4%.	Focus groups with farmers.
Output 2.3.1. Increased utilization of rice by-product especially rice straw	Indicator 2.3.1. Percentage change in use of rice straws in animal feeding and for briquetting	There are regional variations in the degree to which farmers exploit rice stalks for other uses. In some municipalities, residues are burned in the fields.	The two consultants appointed for the agricultural and social studies pertaining to the use of rice by-products have completed the literature reviews and surveys. The training workshop on the use of agricultural by-products for livestock feeding and as an alternative source of energy was planned for shortly after the MTR mission (December 2015). It is not clear if the briquetting activity is	10%	75% of farmers use or commercialise rice straws.	Focus groups with farmers.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
			part of the techniques selected by the consultant to reduce waste of rice by-products.			
Output 2.3.2. Post-harvest storage facilities with phytosanitary control, serving as trading points and markets	Indicator 2.3.2. Number of renovated storage facilities in all three project sites	Storage facilities in the project sites exist, but they are not in adequate condition.	The site for the construction of a storage facility has been selected in each commune, in proximity to the municipality offices for security purposes. The national consultant responsible for undertaking a feasibility assessment for the construction of this infrastructure has not yet been selected. The dissemination of the ToRs was planned for soon after the MTR mission (December 2015).	10%	75% of existing facilities have been renovated.	Sites visits. Focus groups with farmers.
Component 3. Leveraging policy change						
Outcome 3.1. Technical norms and standards in rice cultivation reviewed and where necessary modified to take climate change into account	***Indicator 3.1. Number and types of technical norms and standards in rice cultivation reviewed and modified at the national level to take climate change into account***	No recommendation or revision has currently been made to technical norms and standards in rice cultivation.	Interventions pertaining to this outcome have not yet started.	0%	At least one national strategy on rice cultivation and at least one technical guideline for the following rice cultivation stages/techniques are revised and updated at the national level: • Seeding • Planting • Harvest • Post–harvest • Fertilization • Integrated pest management • Water management	Documentation review: Reviewed national strategy on rice cultivation and technical guidelines.
Output 3.1.1. Gaps and possible	Indicator 3.1.1 (a) Number and types of	While there is an Agricultural Development	To date, no replication strategy or actions plans have been developed. No	10%[8]	1 replication strategy and action plan developed, including at	Documentation review:

[8] The percentage of achievement at output level does not match that of the outcome level because the target as they stand are independent.

Components/Outcomes/Outputs	Indicator	Baseline level (as defined in the baseline study) (August 2013)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target for End of Project (as defined in the baseline study) (December 2017)	Source of data (as defined in the baseline study)
maladaptations in the current rice policy are identified and recommendations on rice policy reform are made	activities identified and implemented for upscaling and replication from MIRR application in broader Alaotra basin and in other regions	Strategy at the national level, it does not have a true application at the regional level due to financing. There is no specific policy for growing rice.	funding has yet been raised to upscale and replicate the interventions. A first initiative towards future upscaling and replication of the project activities in other sites of the Alaotra Mangoro regions has been undertaken by the PCT. Indeed, a concept note is currently under development by the PCT for submission to funding entities in 2016. The three components of this concept note are: i) upscaling the intervention sites within the districts selected under the AF project; ii) replication of the AF project intervention in the other two districts of Alaotra-Mangoro region; and iii) developing a sustaining strategy.		least 5 to 10 operational activities for up scaling and replication of MIRR practices in the broader Alaotra basin and beyond.	Replication strategy and action plan.
	Indicator 3.1.1 (b) Number and types of recommendations on rice policy reforms made	The National Strategy for Rural Development (SNDR) was completed. However, this strategy has not been published or disseminated.	This activity has not yet started. It is recommended to initiate this activity in early 2016.	0%	The SNDR is revised with measures to increase climate change resilience of rice production, and then the strategy is published and disseminated.	Documentation review: revised and updated SNDR.
Outcome 3.2 Conditions in place for a full adaptation of the rice sub–sector	***Indicator 3.2. Number and type of stakeholders to which the report on best practices and lessons learned is distributed***	Lessons learned and best practices will be identified and collected during project implementation.	This should only happen in 2017.	0%	1 report at end of project.	Documentation review: report on lessons learned and best practices.
Total				**20%**		

Table 3. Progress toward achieving the targets of the Adaptation Fund result framework.

AF Objective/Outcome/Output and Outcome	AF Outcome Indicator	Baseline (see Units in next sheet)	MTR comments on level of achievement (November 2015)	% achievement at mid-term (November 2015)	Target at CEO endorsement (see units in next sheet)
Objective 1					
Outcome 4. Increased adaptive capacity within relevant development and natural resource sectors	***Outcome Indicator 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress***	2	No rehabilitation activities for water management infrastructures for rice cultivation have been undertaken to date.	10%	4
Output 4. Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	Output Indicator 4.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	0 physical assets are made resilient to impacts of climate change.	The baseline situation has not changed. A national specialist was appointed at the end of September to undertake the feasibility study. Cash advances were awaited at the time of the mission to start the contract. The consultant will select the project interventions to be implemented from the list of priority interventions prepared at the communal level through consultations with farmers. NB: The list of priorities for the commune of Manakambahiny has not yet been received.	10%	Irrigation and drainage infrastructure is improved in 3 sites as follows: Manakambahiny: 35 km of primary canals cured, dredged, and maintained,; Bemaitso: The dam is drained and dredged; 14 km of primary canals and 21 km of secondary canals are cured, dredged, and maintained; Ambohijanahary: The dam at Anony is rehabilitated, primary water control valves are repaired; 13 km of primary canal are drained, dredged, and repaired; and primary canal is extended to irrigate 600 ha of additional rice fields.
Objective 2					
Outcome 5. Increased ecosystem resilience in response to climate change and variability-induced stress	***Outcome Indicator 5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress***	2	To date, no soil stabilisation activities using climate-resilient tree species have been undertaken successfully. Indeed, the first planting season was unsuccessful and no sapplings survived.	20%	4 - Mostly Effective. Change in overall land area covered by forests (i.e. net reforestation) of at least 50km2 across the combined 3 municipalities.
Output 5. Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	Output Indicator 5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	Limited or no reforestation activities in target areas.	10 nurseries have been built in each commune. The saplings produced will be planted in January and February 2016 and are expected to cover ~600 hectares per commune. However, to date, the planting activities in the reforestation sites have not	20%	At least 5000 ha reforested across 3 districts.

			been initiated. Regarding agroforestry, the national expert has designed a demonstration activity and the implementation thereof was meant to start at the end of November. However, at the time of mission no trees had been planted. The first counter-season rice and non-rice cultivation campaign took place in 2015. These activities were experimental and were tested on a couple of hectares per commune. The harvest started in November 2015 and seemed successful based on the MTR mission, however no measurement of the yield has been made to date. Techniques of crop rotation and soil conservation such as the use of vetches to increase nitrate concentration, avoiding tillage and conservation of vegetation waste on site (e.g. leaving the trunk on site when collecting beans) have been tested at a small scale in each commune in 2015.		

6. Risk analysis

Table 4. Description of the risks identified in the project implementation.

INTERNAL RISK Project management										
Risk Factor	**Indicator of Low Risk**	**Indicator of Medium Risk**	**Indicator of High Risk**	Low	Medium	Substantial	High	Not Applicable	To be determined	**NOTES**
Management structure	Stable with roles and responsibilities clearly defined and understood	Individuals understand their own role but are unsure of responsibilities of others	Unclear responsibilities or overlapping functions which lead to management problems			X				The distribution of the roles is not fully clear within the management team (e.g. responsibilities regarding consultants' monitoring, production of the PPR sections) and with the CTA (e.g. responsibilities regarding the development of ToRs, review of consultants' work, decision making). This occasionally leads to delays in the coordination process.
Governance structure	Steering Committee and/or other project bodies meet periodically and provide effective direction/inputs	Body(ies) meets periodically but guidance/input provided to project is inadequate	Members lack commitment (seldom meet) and therefore the Committee/body does not fulfil its function			X				There have been three PSC meetings to date[9]. The participation of the relevant government authorities was limited in these meetings. Furthermore, few strategic decisions arose from these meetings. Therefore, these meetings could be used more efficiently as a tool to increase the rate of progress.
Internal communications	Fluid and cordial	Communication process deficient although relationships between team members are good	Lack of adequate communication between team members leading to deterioration of relationships and resentment / factions			X				Increasing communication between the PCT members on the one hand, and the CTA and TM on the other hand, would likely contribute to solve the difficulties in the management process described above in this table.
Work flow	Project progressing according to	Some changes in project work plan but without	Major delays or changes in work plan or method				X			The implementation of some activities is one to two years late according to the workplan

[9] No PSC meetings were held in 2014.

INTERNAL RISK Project management										
Risk Factor	**Indicator of Low Risk**	**Indicator of Medium Risk**	**Indicator of High Risk**	Low	Medium	Substantial	High	Not Applicable	To be determined	**NOTES**
	work plan	major effect on overall implementation	of implementation							developed during the inception workshop. As a result, unless the adequate measures are implemented (see Table 5), there is a significant risk that some of the targets pertaining to the reforestation activities and mainstreaming of the MIRR techniques in Madagascar's rice sub-sector (see Table 2) will not be met by the end of the project.
Co-financing	Co-financing is secured and payments are received on time	Is secured but payments are slow and bureaucratic	A substantial part of pledged co-financing may not materialize					X		No co-financing agreements were made as part of the project design as it is not a requirement for AF projects.
Budget	Activities are progressing within planned budget	Minor budget reallocation needed	Reallocation between budget lines exceeding 30% of original budget	X						There have been important transfers of funds between the following budget lines: "Consultants", "Travel" and "Subcontracts". However, the global budget for procurement remained unchanged. No other significant changes were made to the initial budget.
Financial management	Funds are correctly managed and transparently accounted for	Financial reporting slow or deficient	Serious financial reporting problems or indication of mismanagement of funds		X					Based on the results of the first audit, the financial management processes need to become more organised and automated to reduce the risk of human error. This will facilitate access to important information on expenditures, engaged budget and transferable budget.
Reporting	Substantive reports are presented in a timely manner and are complete and accurate with a	Reports are complete and accurate but often delayed or lack critical analysis of progress and	Serious concerns about quality and timeliness of project reporting		X					PPRs are completed accurately. However, limited recommendations for adaptive management are generated from these reports. The use of PPRs should be used more efficiently by the PCT as a tool to strategise for

INTERNAL RISK Project management										
Risk Factor	**Indicator of Low Risk**	**Indicator of Medium Risk**	**Indicator of High Risk**	Low	Medium	Substantial	High	Not Applicable	To be determined	**NOTES**
	good analysis of project progress and implementation issues	implementation issues								increased progress. During the MTR mission, there was little information available to date on the progress of achieving project activities. The management and monitoring of the project should be based on the targets set.
Stakeholder involvement	Stakeholder analysis done and positive feedback from critical stakeholders and partners	Consultation and participation process seems strong but misses some groups or relevant partners	Symptoms of conflict with critical stakeholders or evidence of apathy and lack of interest from partners or other stakeholders			X				The involvement of government and non-government institutions in the project has been limited during the first two years of the project. Increased awareness and involvement of the relevant institutions – at both national and local levels – in the activities is required for project sustainability.
External communications	Evidence that stakeholders, practitioners and/or the general public understand project and are regularly updated on progress	Communications efforts are taking place but not yet evidence that message is successfully transmitted	Project existence is not known beyond implementation partners or misunderstand-ings concerning objectives and activities evident		X					A strategy to communicate the project's interventions to the general public is under implementation. It includes the distribution of pamphlets, and broadcasting of radio talks and documentaries on the project activities. However, based on the consultations during the MTR mission, awareness of government institutions, NGOs and ongoing agriculture projects' staff on the project interventions is limited. Increased communication with the relevant government and non-government institutions through consultations, workshops, field visits and the distribution of documentation, is consequently required to increase the support of the project by these institutions and promote upscaling of the

INTERNAL RISK Project management										
Risk Factor	**Indicator of Low Risk**	**Indicator of Medium Risk**	**Indicator of High Risk**	Low	Medium	Substantial	High	Not Applicable	To be determined	**NOTES**
										interventions.
Short term/long term balance	Project is meeting short term needs and results within a long term perspective, particularly sustainability and replicability	Project is interested in the short term with little understanding of or interest in the long term	Longer term issues are deliberately ignored or neglected		X					The strategy following the closure of the project has not been sufficiently developed as yet.
Science and technological issues	Project based on sound science and well established technologies	Project testing approaches, methods or technologies but based on sound analysis of options and risks	Many scientific and /or technological uncertainties		X					The project is promoting agricultural practices that have been proven to be efficient by previous initiatives in the country (e.g. SCV, crops rotation, use of natural compost). Apart from a couple of sites where pest problems were encountered, these methods have also been proven successful in the demonstration sites of the AF project. However, scientific and technological uncertainties remain a medium risk because of the unpredictability of environmental factors.
Political influences	Project decisions and choices are not particularly politically driven	Signs that some project decisions are politically motivated	Project is subject to a variety of political influences that may jeopardize project objectives	X						No signs of politically driven decisions have been observed during the mission. The limited changes made to the initial project document support that there is minor risk of political influence in the project.
Changes in government staff	Changes in government staff are rare and do not affect the project.	Political changes are common but the risks for the project support to be significantly lower is limited.	Political changes are common and the risks for the project support to be reduce in the medium term is high.			X				Consultations found that there is relatively high staff turnover within government authorities. For example, the three mayors consulted during the mission had been appointed a couple of months ago. As a result, they had very limited knowledge of the

INTERNAL RISK Project management										
Risk Factor	**Indicator of Low Risk**	**Indicator of Medium Risk**	**Indicator of High Risk**	Low	Medium	Substantial	High	Not Applicable	To be determined	**NOTES**
										project. Another example is that the Chief of Region consulted during the MTR mission was replaced shortly after the meeting. As a result, the support of the project by government authorities is limited which represents a risk for the sustainability of the AF project outputs.

7. Recommendations

Table 5. Recommendations to increase the progress rate and sustainability of the AF project.

Category	Observation	Recommendation	Timeline
Regarding project management			
Project Management Team functioning	The main PCT members do not work full-time on the project implementation and the distribution of the roles between the **members of the project coordination team** is unclear.	Detailed and clear **ToRs including explicit tasks and minimum work time allocation for each team member** should be developed in a participatory manner based on availability, salary, strengths and interests. Based on this process, a new budget line to fund the Monitoring and Evaluation (M&E) specialist will likely be necessary.	Dec 2015/Jan 2016
	Unclear distribution of the responsibilities within some specific processes such as quality control and ToRs' development between **the Project Coordinator (PC) and the CTA**.	During the CTA's next mission, the PC and the CTA should **clarify the responsibilities** for each of the unclear tasks – including the development of the ToRs – and discuss any coordination problems.	Dec 2015
	Three **PSC meetings** have been held since the beginning of the project, none of which occurred in 2014. The CTA and the UNEP Task Manager (TM) have not participated in any PSC meetings.	At least **two PSC meetings should take place every year** to increase: i) the coordination between the implementing partners; and ii) the progress rate of the project. The annual workplan should include the period for the organisation of each PSC meeting to enable the CTA and the TM to participate. Where possible, the CTA and TM should participate in two and one PSC meetings per year respectively.	Dec 2015 for next PSC meeting and every six months after that
	The decision making **process to make minor changes to the project document information** contributes to delays in the project's progress.	Establish with the TM and CTA what type of **changes to the project document** the PCT can make on their own and what type of changes necessitate the CTA and/or the TM's approval.	Dec 2015
Management of finances	The **request for cash advances** is another cause of delay in the project implementation[10].	The request for cash advances should always be **submitted early enough** to prevent the project implementation from being affected if there is some delay in the reception of the funds.	From Dec 2015
	Proof of expenditure is not systematically scrutinised before transferring money to **service providers**.	**Money transfers** should only be undertaken where the use of funds has been scrutinised and deemed appropriate.	From Dec 2015
	The **tools to automate and**	The project should fund **training for the**	Feb/Marc

[10] A duration of six weeks between the submission of the cash advance request and the reception of the funds led to the suspension of some activities (e.g. start of the contract of the experts in climate risk management expert and water management) for a couple of weeks.

	facilitate financial management are not used based on the financial audit of 2014.	**financial assistant** of the project on the use of financial management tools based on the advice of the financial auditor.	h 2016
Monitoring and evaluation	Several **targets from the baseline study** are not covered in the list of activities used by the PCT (e.g. broadcasting of climate forecast over three or four days) and/or not specified in the ToRs of the corresponding consultant (e.g. 4 crop models to be produced).	The baseline study should be consulted on a more frequent basis by the PCT. Additionally, the list of activities should be annotated to make sure that they **cover all the targets set at baseline**. The same approach should be used with the national and international consultants hired by the project.	Dec 2015
	In the progress reports produced by the PCT, there is **no report on the progress per activity** which prevents the progress and the gaps to be easily assessed.	The **table of progress per activity** provided in the present report (Appendix 10.1) should be updated on a regular basis by the PCT, CTA and TM.	Submitted every three months to CTA and TM from March 2016
	Field missions by the PCT do not include **focus groups** with local communities.	Focus groups should be organised in each commune during at least one 6-weekly M&E mission out of two (i.e. each three months minimum) to assess the **satisfaction and involvement of the beneficiaries as well as scope for improvement**.	From Jan 2016
	There is no system in place to **measure quantitatively the level of achievement of each target of the project**. The MoU signed by three of the Regional Directorates does not specify precisely what measurement will have to be done as part of the monitoring activities.	The MoUs with DREEMF, DRADR and DREAH should clearly specify that they are in charge of **monitoring the level of achievement of the targets in their sector**. For example, the erosion rate (Indicator 2.2.3) should be measured by the Regional Directorate of Environment. Similarly, the percentage increase in water availability and percentage decrease in water loss (Indicator 2.1.5 (b)) should be measured by the DREAH. The percentage increase in overall productivity of rice and non-rice crops, and livestock should be measured by DRADR and the Regional Directorate of Livestock husbandry respectively. The budget allocated should be amended accordingly. As part of the design process for the monitoring system for each target, those that will likely not be achieved by the end of the project (see Section 5) should be discussed, and SMART indicators and targets should be proposed and	March 2016

		validated by PRC. These revised indicators and targets should then be integrated into the afore-mentioned monitoring system.	
	No quantitative results of the comparison of the yield with **traditional vs. MIRR techniques** are available to date.	The rigorous comparison of these techniques is key to the use of MIRR techniques outside of the intervention sites. It is necessary to ensure that the **appropriate system to collect quantitative and scientifically sound data is in place**.	
Management of external experts	**Consultant reports** are reviewed by the PCT, CTA and TM who are not specialists in the field of rice cultivation.	Consultant reports should be submitted to **national specialists in the corresponding field for review** (e.g. PSC members, other government staff and non-government experts).	From Dec 2015
	National consultants do not always comply with the terms in their contracts (e.g. the consultant hired to test water quality on a yearly basis) and consultants expected to work in collaboration with are often not appointed in a timely manner (e.g. expert for the development of vulnerability maps and expert for the development of rice cropping system models). There is limited monitoring of their activities by the PCT.	A **thorough investigation of the links between consultants' assignments** is required to ensure that their works are undertaken in a logical sequential manner. The appointment of consultants should be based on such an investigation. In addition, **closer monitoring of consultant activities** relative to their tasks, workplan and deliverables is required.	From Dec 2015
	The **participation of national consultants in the recently initiated M&E mission** was not budgeted for in the ToRs. This was raised by several consultants during the MTR consultations.	**Extra travelling expenditures** should be budgeted for the participation of consultants in the 6-weekly M&E mission during the contract period.	From Dec 2015
Progress reporting	There are some errors in the **targets inserted in the worksheet "Indicators" of the PPR** (e.g. for Output 2.2) relative to the indicators from the baseline study.	Any mistake in the PPR should be corrected. Additionally, the CTA and the TM should clarify with the PCT **the purposes, differences and links between the excel worksheets of the PPR**. Following this training, each PPR worksheet should be completed by the PCT first and then reviewed by the CTA and the TM.	Dec 2015
Coordination with other projects and institutions	There is **insufficient initiative by the PCT and implementation partners to use existing experience and lessons learned** through the consultations of government	The **experience gained by other institutions or projects should be used systematically** for design activities to facilitate their implementation and increase the probability of success. Furthermore, the list of institutions and	From Dec 2015

	institutions from other sectors (e.g. MADR), national and local NGOs, and projects (e.g. PAPRIZ[11], PRODAIRE, PURSAPS[12]) with relevant experience regarding the AF project interventions.	projects to be consulted and to engage closely with should be included in the ToRs and MoUs of project partners.	
Regarding the on-the-ground interventions			
Integrated Rice Resilient Model	The project activities are currently being implemented at a **small scale**.	Based on the budget available, the scale of the project interventions should be increased particularly the number of rice farmers in order to reach **at least 200 beneficiaries per targeted commune**.	From Dec 2015
	The targets for the indicator of Output 2.1.1 is "CALA facilities and capacities are strengthened to develop at least five varieties that are tested and proven resilient in both laboratory and field settings in the three project sites". CALA mentioned during the MTR mission that the **production of seeds is limited by water availability** as some of their infrastructure is degraded.	Based on the budget available, **some activities to support CALA** could potentially be integrated into the project interventions if deemed necessary by the project team after consultation with CALA (Activities 2.1.1 to 2.1.5).	Feb/March 2016
	A clear **selection process and list of targeted individuals** is absent from the project. This list with clear selection criteria is necessary to: i) ensure that the communication campaign on the MIRR reaches each of them; ii) avoid conflicts within the community; and iii) clarify what is necessary to achieve the project targets (e.g. 80% of targeted people are trained).	Every source of available information should be used to **identify and estimate rapidly the number of "targeted people" referred to in the indicator targets**. The relevant sources of information include: i) the list of members in AUEs; ii) the list of participants at the training sessions; and iii) census reports at the communal level. Based on this estimation, the project targets (particularly for Indicators 2.1, 2.1.3, 2.2.1, 2.2.4 and 2.3.1) should be reassessed and clearly defined.	Jan/Feb 2016
	Women participation in the implementation of the project (e.g. MIRR interventions) is insufficient particularly in Manakambahini. This was observed during the focus group organised as part of the MTR mission in this particular site whereby only one woman	A strategy to **increase the benefits of the AF project to women** is required to promote gender equity and because they are particularly vulnerable to the effects of climate change. For example, additional training events specifically for women should be considered. The PCT could also consider organising focus groups for women.	From Jan 2016

[11] Project to Improve the Productivity of Rice Cultivation in Central Highlands.
[12] Emergency Project for Food Security and Social Protection.

	participated (see Sections 5 and 9 for more information on women participation).		
	Based on the focus groups and field visit, it is visible that the **number of experts present on site to provide support to the farmers** is not sufficient. It is a limiting factor to the extent of project results.	The support provided to farmers should be strengthened. This can be done in two ways by CALA: i) increasing the **number of training sessions** based on the budget available; and ii) **training intensively some local community leaders for them to become trainers**.	From March/April 2016
	There is **limited communication** between CALA (FOFIFA regional) that tests the MIRR techniques on the ground and FOFIFA central that designed the MIRR.	The **collaboration between CALA and FOFIFA central** should be strengthened. The two groups should work together and with any other relevant institution on integrating the results of on-the-ground tests to finalise the MIRR and the corresponding technical guidelines.	From Jan 2016
Reforestation	The **labour force in the nurseries** are unsatisfied and unmotivated by the payment system that is weekly instead of daily.	A **daily payment system** should be implemented by SNGF. Additionally, there is the risk of a shortage in labour force during the rice cultivation period. It is therefore advised to increase the daily salary to motivate people to participate in reforestation activities during this period.	From Dec 2015
	Regarding the challenging programme for the reforestation activities in 2016 and 2017, it is necessary to **ensure that the number of people working in the nurseries and the equipment available are not limiting factors**. For example, two watering cans per nursery with 120,000 plants each and 10 to 20 people working simultaneously is insufficient. Some nurseries only had three people working during the visits. Increased labour force would prevent any risk of delays in the different reforestation steps.	The **equipment and the labour force per nursery should be maximised** by SNGF throughout the reforestation campaign.	From Dec 2015
	The **collaboration between SNGF, the Regional Directorate, local authorities and local communities** is insufficient. In addition, no consultations with institutions with previous experience in implementing reforestation activities in the targeted	SNGF should engage closely with the relevant stakeholders at the regional and local scales. Furthermore, **experienced institutions should be consulted to design the restoration interventions to benefit from successes, failures and lessons learned** thereby maximising the probability of success and sustainability of the activities.	From Dec 2015

	districts have taken place.		
	The **selected species for the current planting season** are exotic climate-resilient species (*Acacia mangium*, *Acacia leptocarpa* and *Eucalyptus robusta*).	The second season should focus on **indigenous, fast-growing, climate-resilient species** (e.g. *Khaya madagascariensis* as suggested by SNGF) for the following reasons[13]: i) diversify species in the ecosystem to make it more resilient to climate and environmental changes; ii) increase awareness on the purpose of the planting activities (long-term soil stabilisation vs woodfuel production); and iii) raise secondary benefits including tourism, environment protection and biodiversity.	From March 2016
	The **targets for the 2015-2016 and 2016-2017 planting season** are ambitious because of the problems encountered during the first planting season 2014-2015.	To increase the probability of success of the restoration activities, **DREEMF should be made responsible – potentially through amending the recently signed MoUs – for monitoring the reforestation activities**. This would: i) increase ownership of the activities by DREEMF and thereby increase the likelihood that the activities are sustainable; and ii) strengthen the presence of authorities and technical staff on the ground to stimulate and support the work of local communities. In early 2016, the performance of SNGF in achieving the project target should be assessed and the **restoration strategy should be amended for the 2016-2017 season if deemed necessary** by the PCT. A potential option is to cease the contract with SNGF and hire NGOs to lead the restoration of the remaining hectares to achieve the target.	From Jan 2016
	The **community-based reforestation activities** aiming for the restoration of 350 ha in each commune have not yet started.	An NGO experienced in community-based reforestation activities – such as the Support Service for Environment Management (SAGE) or the National Association for Environmental Activities	From Jan 2016

[13] The scientific research undertaken worldwide (see examples below) on the effects of *Eucalyptus* plantation initiatives on water resources and indigenous biodiversity should also be taken into account in the reforestation activities of the AF project.

1. Walden, L.L. et al. , Harper, R.J., Mendham, D.S., Henry, D.J. & Fontain, J.B. 2015. *Eucalyptus* reforestation induces soil water repellency. Soil Research 52(2): 168–177.
2. Proceedings, regional expert consultation on Eucalyptus, Volume 1. Group 1: Bio-physical and environmental impacts of *Eucalyptus* plantation. Food and Agriculture Organisation cooperate document repository, Rome.
3. Williams, R.A., 2015. Mitigating Biodiversity Concerns in *Eucalyptus* Plantations Located in South China. Journal of Biosciences and Medicines 3: 1-8.
4. Calder, I.R., Hall, R.L. and Adlard, P.G., Eds. (1992) Growth and Water Use of Forest Plantations. Wiley, New York.

		(ANAE) consulted during the MTR mission – should be hired to supervise the implementation of this activity. To achieve the ambitious target of 350 ha per commune in one planting season, **two to three NGOs could potentially be hired** – based on their capacity – to share the communes.	
Policy strengthening	This activity has not started yet and it is **a major element for the project** to shift from improving rice cultivation in three specific localities to improving the rice sub-sector in Madagascar.	There is some delay[14] in organising the **workshop for relevant actors of the rice sub-sector** (e.g. MADR, MEEMF, FOFIFA, CALA, NGOs, Africa Rice Centre (AfricaRice), other rice-related projects) to develop the strategy for the creation/strengthening of the national platform for resilient rice cultivation for a harmonised response to climate change in the rice sub-sector at the country scale. This activity should now be prioritised and be launched early 2016.	March 2016
Regarding the sustainability of the interventions			
Integrated Rice Resilient Model	**Local production of seeds** is required for the seeds to be affordable and for the project to be sustainable. However, based on the experience of other projects, it is difficult to implement and maintain[15].	**Consultations with beneficiaries – as well as local authorities, NGOs and other relevant institutions (e.g. FOFIFA)** – should be organised to identify in a participatory manner the most appropriate and sustainable model for local seed multiplication.	From Jan 2016
	Training on the climate-resilient techniques for rice cultivation should be provided in the long term for the benefits of the project to be maintained.	In addition to the training of extension services' staff, **extensive training of the associations' leaders** – from the agriculture associations created or strengthened by the project in each locality – is required to maintain the system of knowledge transfer. Furthermore, an **official agreement should be signed between MEEMF and FOFIFA** to maintain the support provided to farmers beyond the project end.	From April 2016
Reforestation	Based on the species selected by local communities for the restoration activities, a **strong preference was given to fast growing, woodfuel tree**	Awareness on the benefits of tree cover for rice cultivation and other agricultural activities should be raised in each targeted communes, Fokontany and relevant neighbouring communities. This	From Jan 2016

[14] Based on the workplan develop at inception, this activity should have been initiated at the end of 2014. Appointing the relevant expert to undertake this activity was rescheduled to mid-2015 based on the annual workplan. However, no progress has been done today regarding this activity.

[15] For example, based on the consultations during the MTR mission, the BVPI project has implemented rice-resilient techniques and supported the establishment of local seed-multiplication farmers. However, it did not work with these farmers did not have the capacity to advertise, commercialise and package their products in a professional way.

	species. The awareness-raising on the purposes of the restoration activities is insufficient. Inadequate awareness combined with the limited capacity of DREEMF to control wood exploitation activities results in a high risk that the reforestation interventions will be unsustainable.	could be done by **organising awareness-raising campaigns and documentaries** including testimony of community members that benefit from successful restoration activities.	
	Community-based natural resources associations (VOI)[16] are increasingly used in the country for the sustainable management of forest resources.	The **VOI system** is necessary for the maintenance of the restored sites after project implementation. These associations should be created in each of the three communes to manage the restoration sites.	From January 2016
	Slash-and-burn techniques are frequently used. This is a major threat to the success of the restoration activities.	As part of Activity 2.2.3.1 of the Project Document (see Appendix 10.1), **awareness-raising campaigns should focus on the effects of the slash-and-burn technique, and a comparative analysis of the efficiency – in the short and long term – of several techniques aiming to increase soil fertility** (e.g. slash-and-burn, natural fertilisers, compost, SCV) is required at each of the restoration sites.	From Jan 2016
Climate monitoring	There is **no system in place for the maintenance of the two automatic weather stations** funded by the project after the end of the project. The DNM has no budget for equipment maintenance.	An **after-project funding plan** to maintain this equipment should be developed by MEEMF and DNM in collaboration with local authorities and data users. Potential options include financial contribution by the DNM, the users and/or the beneficiaries.	From March 2016
Overall	There is a **major gap in coordination between sectors** and use of the expertise of governmental and non-governmental institutions, which is a barrier to the success and sustainability of the project.	The engagement of governmental and non-governmental institutions from all relevant sectors and from the national to the local scale in the project should be increased. This could be done through: i) creating a **Multi-Sectoral Technical Committee** which would meet two or three times per year; and ii) increasing the **participation of relevant sectors at the PSC meetings** as well as	From Jan 2016

[16] VOI are based on an agreement signed between MEEMF and the community. The corresponding law is the law 96-025 voted in 1997 stipulating that natural resource can be transferred to local communities on their demand. The VOI management area is determined by the community. The signed agreement gives them the right to manage natural resources within their management area, patrol and arrest people who would infringe the rules. The initial contract has the duration of three years after which the VOI is evaluated. If the natural resources are well managed a second contract is signed for 10 years. Thereafter, an evaluation takes place every 10 years. The first VOI was created in 2000. There are more than 1000 VOI in Madagascar today.

		the frequency of these meetings.	
	Local **community's ownership** of the interventions is the factor determining project sustainability. At the intervention sites, the project activities are still dependent upon the project funds[17].	Local communities to develop a **sustaining plan** to maintain the benefits of each project intervention particularly the use of MIRR techniques and the reforested sites. This plan should be developed at the beginning of 2016 and should be implemented immediately thereafter (see Section 8).	From Jan 2016
	Traditional chiefs have authority over their communities, and are not impacted by political changes. However, they have not been involved in the project to date.	Traditional chiefs should be engaged with as soon as possible to **ensure their full understanding and increase ownership of the project interventions**, and should be closely involved in the design of the awareness-raising campaigns and sustaining plan.	From Jan 2016

[17] It is important to note that a couple of times during the discussion with local communities, when they were asked about their opinion on the project that replied that it was a good project and they were "hoping that it would never end". It shows that they are in a position of short-term use of what the project provides rather than acting to use the support of the project to sustainably improve their livelihoods.

8. Lessons learned

Lessons can be derived from the first three years of implementation of the project. These lessons are of value for the following years of implementation of the AF project and future environment and agricultural projects.

Table 6. Description of the lessons learned including the context of the AF project in which they were learned and the corresponding prescriptive actions for on-going and future projects.

Theme	Context	Lessons learned
Involvement of all relevant stakeholders for the design of a project	**Ownership of the AF project by the Ministries of Agriculture and Water** is limited because they have not been involved in the design of the project. Their limited involvement contributes to the low progress rate and reduces the sustainability of the project.	Involving relevant stakeholders during the implementation of the project is not sufficient to promote ownership of the project. Stakeholders from each relevant sector have to be **involved in a project from the design phase** (e.g. participative identification of the priorities and activities of a future project).
Working with traditional chiefs and other community leaders	The **turnover in the local government authorities** results in insufficient ownership of the project at the local level to support project implementation and sustainability.	Relying mainly on government institutions can lead to limited project ownership. It is necessary to involve **non-government actors such as traditional chiefs and community leaders** to mitigate the vulnerabiltiy of a project to political changes.
Project management	The **main members of the project management team could not work full-time** on the implementation of the project because of other professional commitments. It results in a low progress rate in project implementation.	Project management is a considerable and complex task that requires a **fully-decidated team specifically hired for the implementation of the project** (i.e. not staff members already working for the executing agency).
Implementation planning	The first year of the project focused on developing the MIRR. The **reforestation activities were initiated in 2014** while the project started at the end of 2012. As a result of one unsuccessful planting season, not a single hectare of forest has been planted after three years of implementation. Therefore, the target has to be reduced because it is now unachievable within the remaining period of time.	To maximise the chances of success of planting activities and account for the difficulty and unpredictability of all activities involving living organisms, **planting interventions have to be prioritised** at project inception.

9. Project rating at mid-term and conclusion

Table 7. Table of evaluation of the AF project at mid-term.

Criterion	Comments	Score
Quality of project formulation	• Some of the activities proposed in the Project Document are not described and are unclear. • Not all of the project indicators are considered SMART[18]. For example, percentage change in erosion rate in paddies is not Specific (it is not clear where this erosion rate should be measured) and difficult to Measure (it is a costly and time consuming process). The Attainability of the target is also uncertain considering that the measurement of effects on erosion rate would have to be made at a very fine scale – in the paddies adjacent to the reforested hillsides – while the reference measurement is at a national level. • Further consultations with the agricultural and water sectors would have enabled greater ownership of the project and involvement by these sectors. • More guidance on the potential role of each institution and collaboration with other projects would have been beneficial to the institutional framework. • The baseline study report pointed out that the budget initially allocated to hard interventions (US$575,000 for Output 2.1.5) compared to soft interventions (US$535,000 for Output 2.1.3, US$375,000 for Output 2.2.1 and US$330,000 for Output 2.2.3) within the project document was inappropriate.	MS
Attainment of project objectives and results (overall rating)	The project interventions are aligned with the initial objectives. However, the progress rate has to be increased and a results-based approach should be adopted to enable the realisation of the expected benefits for Malagasy communities.	MU
Overall Quality of Project Outcomes		
Relevance	The project is aligned with each AF's strategic priorities and objectives. It is addressing adaptation needs – as identified by the national stakeholders – in an important socio-economic sector where droughts and floods are causing economic losses every year. The community-based activities and training implemented by the project aim to sustainably decrease the vulnerability of local communities in the targeted communes. Training is also provided to national and local authorities to enable sustainable development planning of the rice sub-sector and natural resources under the scenario of climate change, as well as strengthen local capacity to implement an integrated approach for adaptation. The project is aligned with the following National Adaptation Programme of Action (NAPA) priorities: i) Priority 1: implementation and mobilisation of water management associations; ii) Priority 3: support to the intensification of crop and livestock production (through material acquisition, input distribution and development of income generating activities in different sectors at regional level). Support to the promotion of the bovine vaccination campaign; iii) Priority 4: implementation of erosion control measures through soil conservation techniques and dune stabilization; and iv) Priority 8: reforestation of rural areas with their specific reforestation plans based on locally appropriate species (NB: it is not clear if exotic species are part of the category of locally appropriate species; the sites for reforestation were chosen in consultation with local communities but are not based on a district or communal reforestation plan). Additionally, it is advised to promote the creation of VOIs for the sustainable management of restored areas, which would align with Priority 9 "Promoting the transfer of forest management to local communities (GELOSE, GCF)".	S

[18] Specific Measurable Achievable Relevant Time-bound; Meyer, P.J. 2003. What would you do if you knew you couldn't fail? Creating S.M.A.R.T Goals. Attitude is Everything: If you want to succeed above and beyond. Meyer Resources Group, Inc. ISBN: 978-0-89811-304-4.

Criterion	Comments	Score
Effectiveness	The progress towards achieving the sub-objectives is rated as follows: • "Strengthening the scientific and technical capacities of Malagasy authorities to understand, analyse and manage climate risks to the rice sub-sector, as well as to determine further adaptation options for the sector": MS, only one theoretical training event was organised on the MIRR at the beginning of the project; • "Implementing and disseminating a series of concrete changes to the rice production practices, from input to harvest management, including measures designed to restore and maintain ecological services around rice ecosystems": MU, there is good progress in the implementation of the techniques but it is at a very small scale and the dissemination of knowledge of the practices outside of the project intervention sites has not yet started; and • "Identifying and addressing the key policy barriers, gaps or maladaptations in order to create the conditions for upscaling adaptation in the rice subsector": N/A, no progress yet. The progress towards achieving the overall objective of the project which is to "demonstrate pathways towards the transformation of the rice sub-sector to make it more resilient to current and future effects of climate change through implementation of pilot investments in the Alaotra-Mangoro region that have the potential for being upscaled at national level" is rated as MS.	MU
Efficiency	No changes were made to the PD except for budget changes based on recommendations from the baseline study. Based on the Second National Communication and the climate scenario, the rice yield is going to decrease which is expected to increase food insecurity. The recommendations for adaptation in the SNC that are aligned with the project include: i) improve water management through strengthening existing management institutions; ii) strengthen the system of protection against floods and droughts; and iii) improve the resilience of the rice sub-sector through better management of water and soil, use of climate-resilient seed varieties, and strengthening farmers' technical capacity to implement climate-resilient practices. Erosion of hillsides and sedimentation of crop land and irrigation infrastructure is cited as the first environmental barrier in the Regional Development Plan of Alaotra-Mangoro (2005). The management system has improved significantly since April 2015 with the implementation of monitoring and quality control systems. There is still some scope for improvement including a better workplan for the organisation of PSC meeting and request for cash advances. Increased synergy between the PCT members, consultants and government stakeholders, as well as consultations with community members could increase the progress rate of the project. A system for monitoring quantitative indicators is also missing (see Section 7). The involvement of the other sectors to date has been very limited. Relevant institutions have not been sufficiently consulted during the project design to enable ownership of the project. An MoU was recently signed with DREEMF, DRADR and DREAH which is expected to improve the situation.	MS
Sustainability of Project outcomes (overall rating) **Sub criteria (below)**	To date, the sustainability of the project activities is questionable. The PCT and project partners did not develop a sustaining plan yet.	MU
Financial	There is no financial system in place to maintain the benefits of the project interventions to date.	U

Criterion	Comments	Score
Sociological, Political, Economic	The selection process for the beneficiaries is not clearly defined which can potentially create conflicts within local communities. Awareness-raising activities have been insufficient particularly regarding the reforestation activities for which there is a high risk of cutting for woodfuel. The limited involvement of government institutions in the project increases the risk of political changes negatively influencing the sustainability of the project.	MU
Institutional framework and governance	Based on the multiple projects focusing on rice cultivation and the importance of this sector in the national economy and diet, it is considered a development priority and is not expected to change in the near future. The creation or strengthening of the climate-resilient rice cultivation platform under Component 3 will support the sustainability of the project. Institutional arrangements at the government level with the DNM, Regional Directorate of Environment and communes are under discussion but nothing concrete has yet been proposed.	MU
Environmental	The project focuses on improving soil and water quality. Soil conversation techniques including no tillage, SCV and reforestation, and natural fertilisers are therefore being promoted. This will have a positive effect on the environment. The only risk to the environment – particularly to tree species diversity – is the use of exotic species at a large scale for the reforestation activities. This has to be balanced by planting indigenous species during the next season.	L
Climate uncertainties	The project activities will improve resilience of rice cultivation to floods and droughts. These techniques will attenuate the negative effects of extreme climate events on productivity but will not pre-empt them. Increased frequency and intensity of floods and droughts in the near future will negatively affect agricultural activities despite the new techniques introduced by the project.	ML
Achievement of outputs and activities	Rigorous monitoring, analysis of experience gained, and communication on the project successes and failures have not been undertaken to date. The project remains local, and the progress toward achieving outputs and outcomes is limited.	Not yet
Production of a public good (yes/no)	The project has been implemented at a small scale to date and limited communication was done on the interventions. However, at the local scale, targeted communities appear to be convinced of the benefits that the techniques have introduced.	Not yet
Demonstration (yes/no)	The training provided has been successful with the majority of trainees applying the new techniques during the following agricultural season. Some farmers who participated in the training but did not receive seeds, have applied the techniques on their land at their own expense. The demonstration sites have had the expected effects. Indeed, the number of people interested in the learning about the MIRR techniques has increased significantly from 2014 to 2015 and is expected to increase even more significantly in 2016. The observation of the demonstration sites was identified as the main cause of this change.	Yes
Replication (yes/no)	The distribution of thematic technical guidelines and lessons learned on the MIRR has not yet been done. The technical and financial capacity, as well as communication on the project interventions, are too limited to enable the replication of the activities in other sites at present.	Not yet
Scaling up (yes/no)	The scaling up strategy is part of Component 3 and should be designed and implemented in 2016.	Not yet
Monitoring and Evaluation (overall rating)	Rigorous M&E of progress toward achieving the expected targets has not taken place to date. This system is required to increase the probability of achieving the project outputs and outcomes.	MS

Criterion	Comments	Score
Sub criteria (below)		
Result framework design	The indicators as defined in the results framework are diverse and cover most of the project activities. However, they are often difficult to measure because for a large proportion of these indicators, the scale of measurement – such as the number of people in the targeted communities or the geographic scale for measurement – is missing.	MS
M&E Design	The initial M&E system included the basic baseline study, mid-term review and terminal evaluation. There is no budget for continuous M&E throughout the project implementation period.	MS
M&E Plan Implementation (use for adaptive management)	Outside of the baseline study and MTR, the indicators have not been monitored. In August 2015, an M&E system based on an M&E mission every six weeks to follow the progress of the interventions and of the consultants was initiated. Significant progress in the project implementation has been made since then. This M&E should also monitor the progress toward achieving each of the project targets. The recommendations provided by the baseline study and PSC meetings have also been used for adaptive management. A response strategy was for example developed to address the recommendation made as part of the baseline study. The main changes made based on these recommendations are: i) establishing MoUs with DREEMF and DRADR in October 2015 to involve them in the implementation and monitoring of project interventions; ii) appointing an LTA in each commune as well as the provision of a motorbike; iii) designing and implementing a communication strategy on adaptation opportunities for agricultural communities; iv) increasing the budget for the hard infrastructure from US$565,000 to US$923,000 while reducing the budget for Outputs 2.1.3, 2.2.1 and 2.2.3 (see Table 2); v) the organisation of two awareness-raising events for government and community representatives on climate change and on the project[19]; vi) attempting to undertake soil quality analysis[20]; vii) promoting SCV farming techniques under the MIRR; and viii) updating the PDCs for each communes, planned for 2016 as part of the implementation of interventions under Component 3. Three of the recommendations of the baseline study did not lead to changes in the project. Firstly, activities focused on the rehabilitation and support of CALA facilities to promote research on and production of seed varieties have not been planned. Secondly, the development of a climate model with a higher resolution was not integrated in the project following the baseline study recommendation because it was planned under the development of the Third National Communication. However, no draft of this document is available for consultation by the evaluator to date to check that this climate modelling activity was undertaken. Thirdly, the baseline study pointed out the necessity to identify the institutions responsible for the maintenance of the automatic weather station, as well as collection and analysis of the climate data. However, this has not yet been resolved. Few recommendations were made during PSC meetings. During the first PSC meeting, it was advised to collaborate with the BVPI[21] project. However, this project was ending and was continued by PURSAPS. Consequently, the PCT consulted PURSAPS. The two projects are currently collaborating on the development of a Regional Reforestation Plan for Alaotra-Mangoro by PURSAPS. Partnership with other projects – particularly PRODAIRE – was also advised during the second PSC meeting. However, it does not seem that consultations with	MS

[19] This awareness-raising events were organised in Ambatondrazaka rather than the town hall of each commune as suggested in the recommendation of the baseline study.
[20] This activity has not been successful to date because of contracting and billing problems with the selected service provider (i.e. CALA) for these tests. It is necessary to solve this problem rapidly because this soil analysis needs to be undertaken yearly to provide reliable results on the effects on the MIRR techniques on soil properties.
[21] Project for Development of Watershed and Irrigated Perimeters

Criterion	Comments	Score
	PRODAIRE were organised before the MTR mission. The main recommendations made during the third PSC meeting are: i) increasing the involvement of Regional Directorates in project implementation; ii) strengthening the reforestation interventions by appointing a second service provider to collaborate with SNGF and increasing SNGF supervision on sites; and iii) increasing collaboration with other projects and relevant institutions. MoU with Regional Directorates were developed and have recently been signed off. The strategy for strengthening the reforestation activities is under development. Collaboration with other projects and institutions should still be increased.	
Budgeting and Funding for M&E activities	No changes have been made to the budget for the baseline study and MTR. However, amending the budget to fund the newly implemented M&E system might be necessary.	S
Overall Quality of Project Implementation/ Execution	There have been lengthy delays during the first two years of the project. However, the progress rate has recently increased and the first MIRR results, even if at a small scale, are encouraging.	MS
Implementing Agency Execution and CTA	The transfer of the latest cash advances was significant delayed by the adoption of the UMOJA system by UNEP which resulted in a delay in the implementation of several activities. Insufficient guidance has been provided to the PCT to: i) maximise the alignment of the project activities with the project targets defined in the baseline study; and ii) monitor the progress of the project activities in achieving these targets. Additionally, the PCT has limited understanding of the structure of the PPR and how the information within each worksheet of the report is articulated. This is a barrier to the efficient use of the PPR exercise for adaptive management.	MS
Executing Agency Execution	The members of the PCT have a strong knowledge of the project and are rigorous in the execution of their tasks. There were initial problems with the procurement system, however, the system has been corrected and made more transparent in 2015. There has been a delay recently in requesting the cash advances. Limited attention has been given to the indicators and targets from the baseline study by the PCT. Consultations with other institutions or projects is insufficient. Increased coordination with other institutions would enable increased efficiency of the project, benefits to communities, and sustainability. A clearer distribution of the roles within the project team and weekly planning of tasks is necessary to increase efficiency in the implementation of the project.	MS
Financial planning	The use of the funds has been undertaken in a transparent manner. The financial audit undertaken in July 2014 confirmed the alignment between the project activities, receipts and expenditures. However, the auditor pointed out that the financial management system was inappropriate and several tools to make it more automatic and less prone to human errors were required. No measures have been undertaken to date by the PCT to address these recommandations. A second audit is planned for early 2016. Delays in submitting the cash advance request has recently led to a shortage of funds for a couple of weeks to progress on some activities.	MU
Country ownership /driveness	The project addresses national priorities regarding food security and sustainable development in the country. However, the participation of government stakeholders in the design of the project was limited. Additionally, there has been some irregularity in the occurrence of PSC meetings, few participants, and insufficient involvement of other sectors. As a result, government ownership of the project outside of the environment sector is low.	MS

Criterion	Comments	Score
	The local communities' members met during the MTR mission support the project in each of the Fokontany. There has been relatively good participation in the focus groups with 20 to 50 participants each.	
Stakeholders involvement	There is limited involvement of the relevant sectors such as agriculture and water in the implementation of the project. However, the recently implemented MoU system is a step towards improving the involvement of decentralized government staff in project implementation. The reliance upon institutions and projects with prior experience and lessons learned is inadequate. The national consultants appear to work closely with the local communities. However, the involvement of the PCT with local communities (e.g. through focus groups) is insufficient.	MU
Mainstreaming	The beneficiaries of the project during the 2014-2015 season have declared that they received direct economic benefits through a significant increase in rice production. The number of women participating in the resilient rice and non-rice cultivation training is ~5% in Manakambahiny, ~20% in Ambohijanahary and ~40% in Bemaitso. During the focus groups organized as part of the MTR mission, one women attended in Manakambahiny, while approximately 40% of attendees were women in the two other communes. Men were the main participants in the discussion except when a question was explicitly addressed to women. The low participation of women was point out by the consultants and the PCT. However, sufficient participation by women has not been a condition for holding training workshops.	MS
Overall Rating	Significant improvement in the management system has been made since the beginning of 2015. The majority of the project interventions are underway. However, to enable the targets to be achieved timeously and achieve the initial objective of increasing the climate resilience of the rice sub-sector in Madagascar, the following actions are required: rigorous progress monitoring, immediate response to problems, and an increase in communication and collaboration within and between relevant institutions.	MS

RATING OF PROJECT OBJECTIVES AND RESULTS

- Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Highly Unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results **may not be higher** than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the AF project funding ends. The Mid-term review will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

Rating system for sustainability sub-criteria

On each of the dimensions of sustainability of the project outcomes will be rated as follows.

- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately Likely (ML). There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT M&E

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.

Evaluation is the systematic and objective assessment of an on-going or completed project, its design, implementation and results. Project evaluation may involve the definition of appropriate standards, the examination of performance against those standards, and an assessment of actual and expected results.

The project M&E system will be rated on 'M&E Design', 'M&E Plan Implementation' and 'Budgeting and Funding for M&E activities' as follows:

- Highly Satisfactory (HS): There were no shortcomings in the project M&E system.
- Satisfactory(S): There were minor shortcomings in the project M&E system.
- Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly Unsatisfactory (HU): The Project had no M&E system.

"M&E plan implementation" will be considered a critical parameter for the overall assessment of the M&E system. The overall rating for the M&E systems will not be higher than the rating on "M&E plan implementation."
All other ratings will be on the six point scale.

Conclusion

Despite some malfunctions during the first phase of the project, the management system has recently been improved resulting in an increase in the progress rate. Indeed, multiple activities have been initiated in 2015 through the appointment of a team of 13 national consultants covering the majority of the remaining activities of the project. Consequently, the percentage of achievement of the project targets should increase significantly by mid-2016. Despite the number of recommendations provided, no major changes to project functioning is required. No delays are expected from the management adjustments following the MTR. The last two years of the project will have to be strongly focused on mainstreaming the MIRR techniques, achieving the target of 4,000 hectares of reforested land and implementing a robust sustaining plan for the project to be considered as successful at Terminal Evaluation.

10. Appendices

10.1. Table of progress per activity

Table 8. Description of the progress towards achieving each activity of the AF project.

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
Component 1. Scientific and Technical Capacity			
Outcome 1.1. Knowledge base on best practices for climate resilience in rice, based on existing local knowledge and international research			
Output 1.1.1. Best Available Technologies and Integrated Resilient Rice Model (Modèle Intégré de Riziculture Résiliente - MIRR) selected and publicized			
Activity 1.1.1.1. Undertake a participatory comparative analysis of rice production techniques and technologies available in relation to their resilience and cost-effectiveness	Jun 2013	100%	This comparative analysis of agricultural practices was undertaken by two consultants in 2013.
Activity 1.1.1.2. Organization of a seminar on resilient rice model (MIRR)	Jun 2013	100%	The consultants who undertook the comparative analysis worked in collaboration with IRRI to produce guidelines and training on MIRR. The report was submitted in 2015.
Activity 1.1.1.3. Publish technical guidelines for MIRR	Nov 2013	40%	The guidelines have not been published yet. The result of the tests in the field will be integrated in the model and the guidelines to finalise these documents.
Outcome 1.2. Malagasy government, research institutions and local communities have the tools and methods to assess, monitor, and understand climate change impacts on rice.			
Output 1.2.1. Crop models are available for rice vulnerability mapping			
Activity 1.2.1.1. Acquire software and deliver training sessions on Oryza 2000 (10 staff at central level)	Jun 2013	50%	The Decision Support System for Agrotechnology Transfer (DSSAT) and Oryza 2000 software and the corresponding IT systems were purchased and installed. Training on Oryza was provided to 15 people including the six national and regional staff of MEEMF, two staff from MADR, two from FOFIFA, two from the National Institute of Geography and Hydrography, and three from National Institute of Statistics. A national consultant was appointed to compile the climate data. Once the data has been compiled and analysed, a second training session will take place. NB: The link between Oryza and the MIRR is unclear to the project stakeholders. Clarification by the expert from FOFIFA is required.
Activity 1.2.1.2. Perform data collection for DSSAT and Oryza model population	Sep 2013	30%	The national consultant that undertook the installation of the automatic weather station will also be responsible for data compilation and analysis.

[22] Variance refers to the difference between the expected and actual progress at the time of reporting.

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
Activity 1.2.1.3. Develop and publish two alternative models, using DSSAT and Oryza for 2050 and 2100 for the region	Sep 2013	0%	This will be done after completion of the second training session and discussions with national stakeholders.
Activity 1.2.1.4. Develop a climate based hydrological model for the Alaotra region for 2050 and 2100	Sep 2014	100%	A national consultant completed this activity in 2014.
Output 1.2.2. Updated, dynamic agricultural calendars and climate early warnings taking into account current and projected variability disseminated to local population			
Activity 1.2.2.1. Adapt and disseminate agricultural calendars in relation to new climate trends and data, as per agreed methodology	Dec 2014	30%	The development of the agricultural calendars started in June 2015, however, they have not yet been finalised.
Activity 1.2.2.2. Acquire, install and operate climate and hydrological monitoring equipment for early warnings	June 2014	40%	Two automatic weather stations have been installed (one in Ambohijanahary and one in Bemaitso). The LTA are collecting the data. However, there is no system in place to analyse this data, no transmission system for use of this data by the DNM, and no dissemination system in place yet.
Activity 1.2.2.3. Disseminate climate and weather bulletins through radio	June 2017	0%	No activities have been implemented for the dissemination of 3-4 day climate forecasts including early warnings[23].
Output 1.2.3. Agricultural extension staff trained on climate risk management in an agro-ecosystem context			
Activity 1.2.3.1. Climate Risk Management and agro-ecosystem approach training for decentralized personnel (including application of agroforestry principles and livestock management in a rice context)	Dec 2014	20%	A national climate risk management expert was selected. The PCT was awaiting the reception of the cash advances to initiate the contract. The consultant will work in collaboration with the agroforestry specialist to design and hold the training workshops for the extension specialists in 2016. The exact needs in term of training on climate risk management have not yet been identified.
Component 2. Adapted and resilient rice production cycle			
Outcome 2.1. Sustainable increase in rice yields (using MIRR)			
Output 2.1.1. climate resilient rice varieties selected through participatory field testing			
Activity 2.1.1.1. Pre-select adapted varieties among existing strains (rice and non-rice)	Sep 2013	100%	Multiple climate-resilient rice varieties have been created and tested by CALA in the lab. Three of them were then selected by the farmers in the intervention sites and tested in the field. These varieties are SEBOTA 231, X265 and Madikatra. Non-rice varieties were also selected by local communities in mid-2015.
Activity 2.1.1.2. Procure inputs and materials (seeds, tools)	Dec 2015	30%	A total of 2.4 tonnes of rice seeds has been provided since 2014 to: i) test the MIRR techniques during the 2014-2015 season; and ii) for the 2015-2016 season. According to CALA, based on the increasing number of people interested in adopting the MIRR,

[23] The wording of this activity is not precise. However, based on the baseline information, farmers have access to daily forecasts. The target regarding climate information is to provide access to three to four days forecasts for the farmers.

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
			the target of 5000 tonnes/year will be met next year. Non-rice seeds were also produced and distributed by CALA to local communities to be tested in the field between July and November 2015. No tools have been provided for agriculture to date. [To be confirmed by the PCT]
Activity 2.1.1.3. Perform participatory field test of the adapted varieties in relation to identified climate stresses	June 2013	60%	The first rice-cultivation test period took place during the 2014-2015 rice-cultivation season. The first non-rice cultivation test period took place between July and November 2015. All of these on-the-ground activities are community based. However, the result of these tests – including the response of the new varieties to particular climate stresses – have not been rigorous measured or appropriately disseminated to date.
Activity 2.1.1.4. Monitor the participatory variety selection programme over 2 seasons	Dec 2013	40%	The application of MIRR techniques is being monitored by CALA over the 2014-2015 and 2015-2016 seasons. NB: At the time of the MTR mission, no quantitative information on the direct benefits of the MIRR practices compared to the traditional practices were available. It is necessary to check that quantitative information will be collected rigorously to compare the production using traditional practices (e.g. measures made within the comparative analysis produced in 2013 under Activity 1.1.1.1) to the production under the MIRR.
Output 2.1.2. An operational multiplication and dissemination scheme for adapted seed varieties			
Activity 2.1.2.1. Participatory variety selection validation (from a shortlist of resistant varieties)	Jun 2014	100%	Local communities selected three climate-resilient seed varieties among the hundreds of varieties produced by FOFIFA.
Activity 2.1.2.2. Production of pre-base and foundation seeds	Sep 2013	50%	CALA has produced pre-based and foundation seeds for both rice and non-rice crops since 2014.
Activity 2.1.2.3. Multiplication and distribution of certified seeds	Sep 2017	50%	CALA has distributed seeds to farmers for the 2014-2015 and 2015-2016 rice seasons. Additionally, CALA has provided rice and non-rice seeds for the 2015 counter-season. Seed certification is done systematically every year for each variety.
Output 2.1.3. Updated fertilisation guidelines according to best available standards and taking climate conditions into consideration			
Activity 2.1.3.1. Update fertilisation formulas, guidelines and packets using climate change and MIRR models, considering socio-economic aspects	Sep 2014	0%	These guidelines have not yet been produced. After integration of the results of the on-the-ground experiments in the MIRR, the thematic guidelines will be produced, including the guidelines for fertilisation practices.
Activity 2.1.3.2. Use locally available fertiliser resources (e.g. compost, manure, agricultural residues, including rice straws and by products)	Jun 2015	70%	The national consultant hired to undertake this activity has provided training to community members on the production of compost at a medium scale (60,000 to 140,000 kg/site). The composition of the compost is 40% manure, 10% rice straws, 5%

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
			aches, 20% leaves of green grass species, and 20% leaves of green leguminous species. This compost was used for the counter-season cultivation and for the 2015-2016 rice season. Additional training was planned soon after the MTR mission. This training should enable the production of compost at the local scale by local community with minimum external supervision in 2016 and 2017.
Output 2.1.4. Integrated pest management is implemented			
Activity 2.1.4.1. Implementation of Integrated Pest Management Best Practices through training and dissemination of technological packets	Jun 2014	10%	Steps towards the improvement of pest management have been made through the provision of pest management information by the MIRR expert during the training workshops. However, the expert on pest management that is expected to provide specific training and guiding documents for integrated pest management has not yet been appointed.
Output 2.1.5. Water efficiency, management and conservation technologies and infrastructures are implemented			
Activity 2.1.5.1. Rehabilitation of damaged gravitational irrigation infrastructure and canals and continued monitoring	Jun 2015	10%	A national specialist to undertake the feasibility study was appointed at the end of September 2015. Cash advances were required to start the contract. The specialist will select the interventions to be implemented by the project among the list of priority interventions prepared at the communal level through consultations with farmers.
Activity 2.1.5.2. Dredging of silted water reservoirs	Mar 2015	10%	See comment for Activity 2.1.5.1.
Activity 2.1.5.3. Installation of new irrigation, drainage and water conservation structures	Jun 2015	10%	See comment for Activity 2.1.5.1.
Activity 2.1.5.4. Implement enhanced irrigation methods and management and water conservation practices (including water harvesting) adapted to new climate trends and conditions through acquisition and operation of upgraded irrigation equipment and training of water users	Mar 2016	10%	See comment for Activity 2.1.5.1 regarding the improvement of water management infrastructure. The consultant in charge of strengthening the institutional and technical capacity of AUEs is at mid-term of his contract (June 2015 to May 2016). The strengthening strategy was developed during the first few months of the contract and implementation of this strategy started with the renewal of the members of the AUEs. The technical training on improved water management was planned for after the MTR mission (December 2015).
Outcome 2.2. Ecosystem services maintained			
Output 2.2.1. Best available land preparation, production and harvesting techniques disseminated to reduce deforestation, maintain soil fertility and integrity, and to provide adequate growing conditions			
Activity 2.2.1.1. Implement and disseminate Integrated Resilient Rice Model (MIRR) for production through training and extension services	Mar 2017	40%	The MIRR has been developed. The tests of the model on the ground have been on-going since 2014. The next step before dissemination is the integration of the results of the tests into the initial model and the production of technical guidelines.

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
			23 agriculture extension staff have received training on the MIRR at regional level in August 2015. Training tools are currently being prepared by the MIRR consultant to support the training of farmers by agriculture extension staff.
Activity 2.2.1.2. Introduce rice-vegetable rotation systems using disease resistant, water efficient resilient crops (leafy vegetables, legumes)	Sep 2014	80%	The first training campaign on non-rice cultivation took place during June and July 2015. After the training workshops, experimentation activities for non-rice cultivation practices were implemented on a limited number of hectares in each commune. The cultivated crops include cabbage, carrots, beans, potatoes, onions and tomatoes. Considering the interest shown by local communities in non-rice cultivation within the last month, the number of people participating in the training workshops next year is expected to be significantly higher. At the time of the MTR mission, the implementation of demonstration sites and training in agroforestry was scheduled to commence in December 2015.
Activity 2.2.1.3. Develop and distribute technological packets and information documents	Dec 2016	0%	This activity has not yet started. NB: This activity should be clarified. In the Activity-based budget file, the corresponding budget line is “sub-contract for extension services”. This implies that these regional services will be in charge of developing the technological packets and information documents. The subject of these documents is not specified yet, however, will probably focus on MIRR practices including both rice and non-rice cultivation.
Output 2.2.2. Watershed rehabilitation in productive landscapes introduced, including through reforestation and adaptation of agroforestry practices			
Activity 2.2.2.1. Participatory revegetation of degraded slopes and forests, using multi-purpose resilient trees, grasses (vetiver) and participatory management of forest resources	Sep 2016	10%	The restoration activities in Bemaitso for the 2014-2015 season failed because of a combination of inadequate practices regarding: i) duration of stay of the plant in the pots before planting on site; ii) size of planting holes in the restoration sites; and iii) planting time within the rainy season. 10 Tree nurseries are in place in each of the communes. Each nursery contains 120,000 plants: *Eucalyptus robusta* (100,000 plants), *Acacia mangium* (10,000 plants), and *Acacia leptocarpa* (10,000 plants). Approximately 2,000 plants are planned per hectare, therefore the capacity of each nursery corresponds to ~60 hectares of reforested land. The 2015-2016 reforestation season is expected to cover 600 hectares/commune. The remaining 400 hectares per commune will have to be planted during the 2016-2017 season to achieve the target of 3,000 hectares in total. An additional 350 hectares are expected to be restored by local communities under

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
			the supervision of communes and NGOs during the 2016-2017 season. An MoU between the PCT and local authorities (municipalities) was presented to the mayor during the MTR mission. Importantly, the mayor of Ambohijanahary signed the MoU immediately.
Activity 2.2.2.2. Training on sustainable agroforestry and land management (including in climate change context)	Sep 2017	20%	Training on agroforestry has not yet been undertaken. The national consultant was hired and a combined training workshop on agroforestry, compost production and MIRR cultivation techniques has been planned for December 2015. However, no specific training session on agroforestry is planned to date. The on-the-ground demonstration activities on the benefits of agroforestry using an integrated approach were scheduled to commence at the end of November.
Output 2.2.3. Soil conservation and livestock management techniques adapted to topography and landscape in light of future climate conditions			
Activity 2.2.3.1. Adaptation and reintroduction of soil conservation methods for erosion control (tillage, sediment barriers, mulching) in upland and lowland uses	Jun 2017	70%	Techniques of crop rotation and soil conservation such as the use of vetches to increase nitrate concentration, no tillage and conservation of vegetation waste on site (e.g. leaving the trunk on site when collecting beans) have been tested at a small scale in each commune in 2015. As a result of these demonstration activities, the number of users of these methods is expected to increase significantly in 2016. Guidelines will be produced and disseminated after finalisation of the MIRR.
Activity 2.2.3.2. Training on the sustainable land use of inactive or stage 2 lavakas and tanety agriculture (for upland communities)	Sep 2016	10%	The demonstration activities for agroforestry using an integrated approach will include a gradient from upland to lowland of reforestation activities, agroforestry activities (including a combination of beneficial trees, shrubs and crops), non-crop and crop cultivation from upland to lowland. In lavakas[24], reforestation activities are planned but no agricultural activities.
Activity 2.2.3.3. Assessment of resilience in livestock management within rice cultivation systems and adaptation of practices for resilience, erosion control, and increased productivity	Dec 2016	30%	Three national consultants have been appointed to collaborate on the design and implementation of a training campaign on improved livestock management to reduce erosion and the use of agricultural waste for livestock feeding. The first months of their contracts focused on literature reviews and surveys to assess the current livestock management practices and scope for improvement. The training campaign is expected to start in December 2015.
Output 2.2.4. Revitalization of producer's cooperatives, natural resources and water user associations for collaborative natural resources allocations (e.g. land and water) and management			
Activity 2.2.4.1. Training, legal support and provision of	Dec 2017	20%	The consultant in charge of strengthening the institutional and technical capacity of

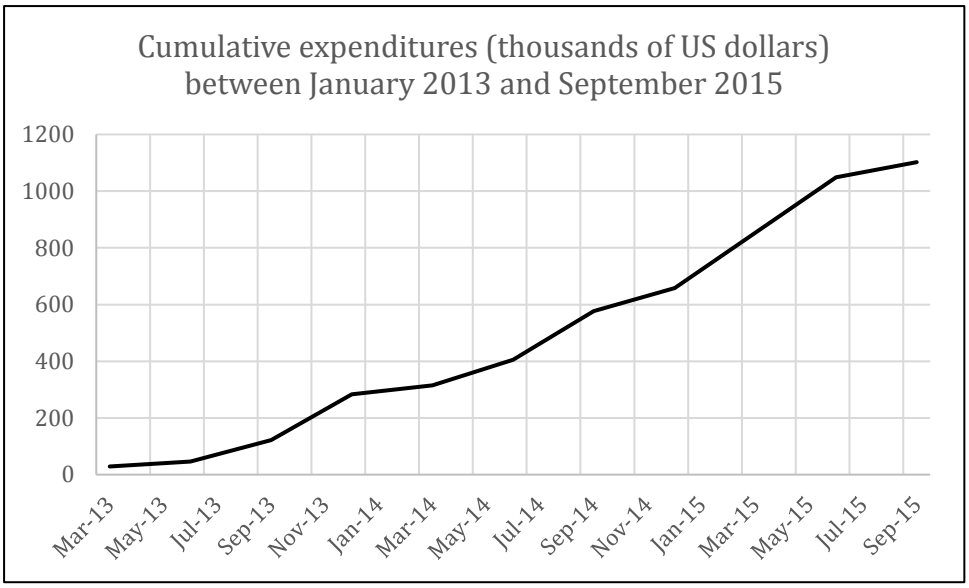
[24] Deep gullies on hillsides resulting from erosion.

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
administrative means for producers cooperatives, sub-basin management committees, water user associations and natural resources user associations			AUEs is at the mid-term of their contract (June 2015 to May 2016). The strengthening strategy was developed during the first months of this contract and implementation commenced with the renewal of the members of the AUEs. The institutional and technical training activities were planned shortly after the MTR mission (December 2015). NB: The ToRs of the consultant refer to capacity strengthening but do not refer specifically to administrative training. It is necessary to assess whether such training is still necessary based on communities' consultations and the consultant's assessment report. If so, the ToRs of the consultant could be amended to include this administrative training activity. The aforementioned consultant focuses on water user associations. A consultant in charge of training producers' cooperatives, sub-basin management committees and natural resources user associations has not yet been appointed. CALA is providing support for the creation of agricultural associations where needed. A national consultant should be appointed to provide training in administrative and water management to the existing and newly created agricultural associations.
Output 2.2.5. Water quality assessments			
Activity 2.2.5.1. Perform local level water quality monitoring (including sediment content)	Dec 2017	30%	A consultant from the National Centre for Environment Research was appointed to monitor water quality annually from 2014. However, no information on their progress has been provided to the PCT in 2015. NB: The DREAH should be in charge of monitoring this particular activity. It is necessary to check that this is part of their MoU with the AF project.
Outcome 2.3. Harvest losses reduced			
Output 2.3.1. Increased utilization of rice by-product especially rice straw			
Activity 2.3.1.1. Introduction of techniques and technologies for the utilization of rice straws in animal feed and for energy production (training and extension)	Dec 2015	20%	The two consultants responsible for the agricultural and social studies regarding the use of rice by-products were appointed and have now completed the literature reviews and surveys. The training session on the use of agricultural by-products for livestock feeding and as an alternative source of energy was planned shortly after the MTR mission (December 2015). It is not clear yet if the briquetting activity is part of the techniques selected by the consultants to reduce the waste of rice by-products. NB: It is necessary to clarify what the word "extension" refers to in the activity name.
Output 2.3.2. Post-harvest storage facilities with phytosanitary control, serving as trading points and markets			

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
Activity 2.3.2.1. Rehabilitation of storage facilities using upgraded phytosanitary and climate resilience norms on the basis of an inventory	Sep 2015	20%	The sites for the construction of a storage facility have been selected in each commune in close proximity to the municipality offices for security purposes. The national consultant in charge of conducting the feasibility assessment for the construction of this infrastructure has not been appointed yet. The diffusion of the ToRs was planned soon after the MTR mission (December 2015). NB: It is advised to check that the consultant's contract includes a proper inventory of existing infrastructures, and description of the considerations of climate resilience in the design. The term "upgraded" norms is unclear too and it is necessary to double check if such climate resilience norms exist.
<u>Component 3. Leveraging policy change</u>			
Outcome 3.1 Technical norms and standards in rice cultivation reviewed and where necessary modified to take climate change into account			
Output 3.1.1. Gaps and possible maladaptation in the current rice policy are identified and recommendations on rice policy reform are made			
Activity 3.1.1.1. Create a multi-partner and inter-ministerial task form on rice resilience, including government, NGOs, private sector and local representatives)	Dec 2017	0%	Interventions towards the development of a multi-partner and inter-ministerial task form on rice resilience have not yet been started.
Activity 3.1.1.2. Identify options for upscaling and replication from MIRR application in broader Alaotra basin and in other regions	Sep 2017	20%	A first initiative towards future upscaling and replication of the project activities in the other sites of the Alaotra Mangoro regions has been undertaken by the PCT. Indeed, a concept note is currently under development by the PCT for submission to funding entities in 2016. The three components of this concept note are: i) upscaling the intervention sites in the districts of intervention of the AF project; ii) replication of the AF project intervention in the other two districts of Alaotra-Mangoro region; and iii) developing a sustaining strategy. Action plans, other options within the region and options in other regions have not yet been identified.
Activity 3.1.1.3. Develop recommendations on the rice sub-sector transformation and propose a rice policy	Dec 2017	0%	Interventions towards the development of recommendations on the transformation of the rice sub-sector and of a rice policy have not yet been started.
Outcome 3.2. Conditions in place for a full adaptation of the rice sub-sector			
Output 3.2.1 a report on best practices and lessons learned for rice adaptation in Madagascar			
Activity 3.2.1.1. Engage a dialogue on the socio-economic conditions required for project sustainability	Dec 2017	10%	Discussions with project partners and beneficiaries on the requirements for project sustainability were initiated during the MTR mission (e.g. discussions on the maintenance of the automatic weather stations after project implementation, community-based production of seeds to maintain the project, and long-term technical support through training of trainers from extension services and local

Component/Outcomes/Output/Activities	Expected completion date	Implementation status at mid-term	Comments on progress and explanation if variance[22]
			communities). NB: The activity is not aligned to the Outcome and Output.

10.2. Cumulative expenditures of the project until September 2015.



10.3. Agenda of the evaluation mission to Madagascar

Date	Time	Activity	Location
Wed 04.11.15	**16.00**	Arrival of the evaluator.	Antananarivo
	17.00	First meeting with the Project Coordinator: Mme Jane RAZANAMIHARISOA.	Antananarivo
Thu 05.11.15	**08.00**	Meeting with the PCT at the National Office for the Coordination of Climate Change (BNC-CC): - Mme Jane RAZANAMIHARISOA : Project Coordinator ; - M. Tahiry LALAINA : Financial assistant ; - M. Marcellin LALASON : Administrative assistant; - M. Haja MANAMPISOA and Mme Chantal RAZANAMARIA : M&E assistants ; and - M. Hery RAKOTONDRAVONY : National Director of the Project.	Antananarivo
	11.00	Meeting with the representatives of MADR and MEAH.	Antananarivo
	15.00	Meeting with the STOI partner – working as a national consultant for the project – on the promotion of the use of natural fertilisers.	Antananarivo
Fri 06.11.15	**08.00**	Meeting with the Director General of Meteorology and one the DNM experts.	Antananarivo
	10.00	Meeting with nine of the national consultants appointed by the project.	Antananarivo
	13.00	Meeting with the Director of the Support Service for Environment Management (SAGE).	Antananarivo
Mon 09.11.15	**07.00**	Departure for Ambatondrazaka.	
	16.00	Arrival at Ambatondrazaka.	
	18.00	Meeting with the members of the PCT.	Ambatondrazaka
Tue 10.11.15	**08.00**	Meeting with the Chief of Region Alaotra-Mangoro.	Ambatondrazaka
	09.00	Meeting with the Regional Directorates of Environment, Agriculture and Water (DRDA, DREAH, DREEMF) at the offices of DREEMF.	Ambatondrazaka
	12.00	Meeting with the Director of CALA (national consultant MIRR for the project) and visit of CALA building.	Ambatondrazaka
	14.00	Departure for Manakambahiny.	
	15.00	Meeting with the new Mayor of Manakambahiny West and the Chief of two Fokontany.	Manakambahiny

	15.30	• Visit of the following intervention sites :
		  ○ MIRR demonstration sites of CALA (FOFIFA) for rice and non-rice cultivation in Ambalavato ; and
		  ○ Six nurseries of SNGF in Ambalavato and Miaramanjaka.
		• Focus groupe in Ambalavato.
			Manakambahiny

	18.00	Départ pour Ambohijanahary.	
	21.00	Arrivée à Ambohijanahary.	
Wed 11.11.15	**08.00**	Meeting with the Mayor of Ambohijanahary.	Ambohijanahary

	09.00	• Visit of the following intervention sites :
		  ○ Automatic Weather Station;
		  ○ MIRR demonstration sites of CALA (FOFIFA) for rice and non-rice cultivation in Miarinavo;
		  ○ Three nurseries of SNGF in Ambatoharanana [To be confirmed by the PCT because the same name was provided for Ambohijanahary and Bemaisto]
		  ○ Compost production site.
		• Two focus groups took place in Ambohijanahary, one in	

		Miarinarivo and one in Ambatoharanana.	
	16.00	Departure for Bemaitso.	
	20:30	Arrival in Bemaitso.	
Thu 12.11.15	**07.30**	Meeting with the Director of the Centre of Agricultural Services.	Bemaitso
	08.30	Meeting with the Mayor of Bemaitso.	Bemaitso

	10.00	• Visit of the following intervention sites :
		  ○ Automatic Weather Station;
		  ○ MIRR demonstration sites of CALA (FOFIFA) for rice and non-rice cultivation in Ambatoharanana;
		  ○ Six nurseries of SNGF in Ambodisakoana and Fiadanana; and
		  ○ Compost production site.
		• Two focus groups took place in Bemaitso, one in Ambatoharanana and one in XX [To be added by the PCT].
			Bemaitso

	16.00	Return to Ambatondrazaka.	
	20.00	Arrival in Ambatondrazaka.	
Fri 13.11.15	**8.00**	Meeting with the Coordinator of Project PRODAIRE.	Ambatondrazaka
	8.30	Meeting with the Director of Agricultural Cooperative ANDRI-KO.	Ambatondrazaka
	10.00	Visit of the Commercial and Agricultural Society of Ambohimangakely (SCAA).	Ambohimangakely
	11.00	Visit sites of soil conservation with Vesces.	Manakambahiny
Sat 14.11.15	**7.00**	Meeting with the Coordinator of Project PURSAPS.	Ambatondrazaka
	8.30	Retour Antananarivo.	
Mon 16.11.15	**08.00**	Meeting with Tahiry LALAINA to discuss the finances and other members of the PCT to collect complementary information at the BNC-CC.	Antananarivo
	11.00	Meeting with ANAE.	Antananarivo
	13.00	Meeting with the Director of SNGF.	Antananarivo
	14.30	Meeting with M. Rabaison and M. Jaqueline from FOFIFA who developed the first draft of MIRR.	Antananarivo
	16h	Meeting with the National representative of AfricaRice.	Antananarivo
Tue 17.11.15	**08.30**	Presentation of the preliminary results and recommendations regarding the project activities to the PCT and partners.	Antananarivo
	10.30	Presentation of the preliminary evaluation table, results and recommendations regarding project coordination to the PCT and partners.	Antananarivo

NB: During the field visits, the Evaluator and the PCA where accompanied by the national consultants of SNGF, CALA, STOI, Rural Communication, Agroforestry, Meteorology and the TLA of the commune.

10.4. Terms of Reference of the International Consultant responsible for the MTR

Mid-term Review of the UNEP/AF project:
"Promoting Climate Resilience in the Rice Sector through Pilot Investments in Alaotra-Mangoro Region"

1. PROJECT BACKGROUND AND OVERVIEW

1.1. Project background

Madagascar is a large mountainous island located in the South West Indian Ocean, off the South-Eastern coast of Africa. It extends over 1600 km from north to south and 580 km from east to west. Madagascar is renowned for its highly endemic biological diversity, rich forests and a wealth of natural resources. However, the country is also plagued by environmental degradation, low agricultural productivity and poverty, ranking it 145th out of 177 countries according to the Human Development Index. Recent political instability has further undermined economic development, amid a global financial crisis that has accentuated impacts on the poor, leading to increasing food insecurity. Already vulnerable to climate variability and extreme weather events (e.g. cyclones), the country is at risk of increased vulnerability and degradation from anticipated climate change.

In the framework of the implementation of its NAPA, the Government of the Republic of Madagascar has received support from the Adaptation Fund for the implementation of the project 'Promoting Climate Resilience in the Rice Sector through Pilot Investments in Alaotra-Mangoro Region', The project is implemented in the Alaotra-Mangoro region, the primary rice production area in Madagascar, in three pilot districts. The project is implemented through the Ministry of Environment and Forests and works at the local level with producers and local partners, along with decentralised ministries and regional technical partners.

The Alaotra Mangoro region is located in the center-East of Madagascar. The region covers 33 054 Km². and is comprised of 5 Districts themselves sub-divided into 79 communes. The regional capital is Ambatondrazaka, approximately 250 Km from Antananarivo. The project is working in the three districts of Andilamena (8 communes), Amparafaravola (20 communes), and Ambatondrazaka (20 communes). The Alaotra Mangoro contains many bodies of water and rivers, Lake Alaotra being the most important lake in the region, with an area of 20 000 ha.

Studies undertaken during the Second National Communication on rice vulnerability indicate that in the Alaotra region, rice yields will be negatively affected by climate changes, namely because of a decrease in water availability, in particular in the dry season, and an increase in erosion from sudden rainfall and flooding. The increase in temperature and a delayed onset of rains will also affect the growing cycle of most rice varieties as well as other crops.

1.2. Project Activities

The project is providing integrated solutions to the issues mentioned above in the sub-region of Alaotra-Mangoro, by piloting a strengthened rice cultivation model (or Modèle Intégré de

Riziculture Résiliente – MIRR) that will help achieve sustainable yield increases under all climate scenarios. Project activities was designed to achieve resilience both directly and indirectly. First, by introducing additional elements of resilience, including in tree species selection (for reforestation), livestock management, and land management, these are becoming resistant to climate shocks in and of themselves (drought and flood resistance, disease resistance); second, by providing additional ecosystem services to rice production, they are contributing to the resilience of communities by providing added economic development through increased productivity, even in times of climate hardship. This pilot application is deployed initially in the three sites in the Alaotra Lake Region with a view to future upscaling and replicating: first, to the broader region, and second, to the rest of the country's rice production areas.

The model is implemented with the support of producers and communities in the pilot region of Alaotra-Mangoro using a participatory and integrated approach that involves both paddy cultivators (low land) and other land users such as livestock herders and tanety cultivators (uphill) whose practices have an impact on the health of the rice ecosystem. The model is also integrating aspects of environmental management, including reforestation, watershed management, integrated pest management and water management, so as to ensure the resilience of the ecosystem that forms the basis of all rice productivity. This is also allowing the project to address barriers to adaptation and resilience, namely erosion and siltation, both factors that are leading to decreased yields and losses in arable surface, decreased soil fertility, and increased flooding.

Finally, the project is engaging regional partners and national policy-makers in a dialogue and reflection on potential maladaptations and policy gaps in the rice sub-sector, with a view to achieving a policy on rice resilience that will help multiply and replicate project achievements throughout the country. This will form the basis of a two-tiered replication strategy, that will first seek to apply the project outcomes in the broader Alaotra region, and secondly to integrate the results into broader rice policy-making for the country.

The project is organized around the following objective and associated outcomes:

Objective: "*To demonstrate pathways towards the transformation of the rice sub-sector to make it more resilient to current climate variability as well as expected climate change and associated hazard, through implementation of pilot investments in the Alaotra-Mangoro region that have the potential for being upscaled at national level*"

Outcomes:

Component 1: Scientific and Technical Capacity
Outcome 1.1. Knowledge base on best practices for climate resilience in rice, based on existing local knowledge and international research
Outcome 1.2. Malagasy government, research institutions and local communities have the tools and methods to assess, monitor, and understand climate change impacts on rice

Component 2: Adapted and resilient rice production cycle
Outcome 2.1. Sustainable increase in rice yields (using MIRR)
Outcome 2.2. Ecosystem services maintained
Outcome 2.3. Post Harvest losses reduced

Component 3: Leveraging policy change
Outcome 3.1. Technical norms and standards in rice cultivation reviewed and where necessary modified to take climate change into account
Outcome 3.2. Conditions in place for a full adaptation of the rice sub–sector

An updated project results framework, with revised indicators, confirmed baseline values and updated targets, was presented in the document: "Implementation of a Baseline Survey and Development of Indicators and Targets" and endorsed by the Project Steering Committee in December 2013. The revised results framework is included in annex 5. Furthermore, the project will be tracking a number of generic AF indicators (refer to the AF Results Framework and Baseline Guidance document available at www.adaptation-fund.org) which can be found in annex 6.

1.3. Budget

	AF
Component 1: Scientific and Technical Capacity	**US$ 577,760**
Component 2: Adapted and resilient rice production cycle	**US$ 3,512,930**
Component 3: Leveraging policy change	**US$ 236,460**
Project Management and M&E	**US$ 377,850**
Total	**US$ 4,705,000**

1.4. Funding and implementing institutions

The project is funded by the Adaptation Fund (AF), which primary objective is to finance concrete adaptation projects and programmes in developing country Parties to the KP, in an effort to reduce the adverse effects of climate change facing communities, countries and sectors

The project began implementation in October 2012 and is due to close in October 2017. UNEP is providing implementation support for the project as Multilateral Implementing Entity of the Adaptation Fund. The project has produced a number of regular internal progress and financial reports to UNEP and has twice submitted its formal monitoring report to the donor (so-called PPR report) in January 2014 and January 2015 covering one full year of project implementation.

1.5. Executing Arrangements

The project is implemented by the UNEP under National Execution (NEX) Modality procedures. The project is a five year intervention expected to run from October 2012 to October 2017. The Executing Entity in Madagascar is MEEMF through its Climate Change Coordination Office. The project is executed in close collaboration with key line ministries (in particular MADR), regional and district authorities in Alaotro-Mangoro as well as commune councils in the targeted pilot communities.

For additional information on project background, project activities, budget, executing arrangements and institutional setup, please refer to the UNEP/AF project document available at https://www.adaptation-fund.org/project/madagascar-promoting-climate-resilience-rice-sector.

2. TERMS OF REFERENCE FOR THE REVIEW

2.1. Objective and Scope of the Review

The objective of this mid-term review (MTR) is to assess implementation progress and progress towards the project objective. The MTR will:

a) Assess achievements and challenges at mid-point and in particular assess the implementation of planned project planned outputs and project performance against actual results. The risks to achievement of project outcomes and objectives will also be appraised (see Annex 3).
b) Focus on identifying the corrective actions needed for the project to achieve maximum impact. Review findings will feed back into project management processes through specific recommendations and 'lessons learned' to date.
c) Consider sustainability issues and 'exit strategy'

The review should focus on the following main questions:

A. Project formulation:

- Were the project's objectives and components clear, practicable and feasible within its time frame?
- Were the capacities of the executing institution(s) and its counterparts properly considered when the project was designed?
- Were lessons from other relevant projects properly incorporated in the project design?
- Were the partnership arrangements properly identified and roles and responsibilities negotiated prior to project approval?
- Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?
- Were the project assumptions and risks well articulated in the project document?

B. Assumptions and risks:

- An assessment of the stated assumptions and risks, whether they are logical and robust, and have helped to determine activities and planned outputs.
- Externalities (i.e. effects of climate change, global economic crisis, etc.) which are relevant to the findings.

C. Project implementation:

- The logical framework used during implementation as a management and M&E tool
- Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region
- Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation Feedback from M&E activities used for adaptive management.

C.1. Finance/co-finance

The evaluation report should clarify the financial particulars of the project, including extent of co-financing (if any - not a requirement for AF projects) across the portfolio. Project cost and funding data should be presented, including annual expenditures. Variances between planned and actual expenditures should be assessed and explained. Observations from financial audits as available should be considered.

The evaluator should briefly describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

C.2. MIE and EE execution:

- The evaluator should assess and rate **(R)** the quality of the Multilateral Implementing Entity (MIE) and Executing Entity (EE) execution (refer to Annex 1 for the ratings table and section 1.4 and 1.5 for definition of MIE and EE). The assessment should be established through consideration of the following issues:
- Whether there was an appropriate focus on results by the implementing and executing entities
- The adequacy of MIE & EE supervision
- The quality of risk management
- Responsiveness of the managing parties to significant implementation problems (if any)
- Quality and timeliness of technical support to the project team
- Candor and realism in supervision reporting
- Suitability of chosen executing entity for project execution
- Any salient issues regarding project duration, for instance to note project delays, and how they may have affected project outcomes and sustainability

C.3. Monitoring and evaluation:

The evaluator should assess and rate **(R)** the quality of M&E (refer to Annex 1 for the ratings table). The evaluation team should be expected to deliver an M&E assessment that provides:

1. An analysis of the M&E plan at project start up, considering whether baseline conditions, methodology and roles and responsibilities are well articulated. Is the M&E plan well conceived? Is it articulated sufficient to monitor results and track progress toward achieving objectives?
2. The quality of M&E plan implementation: Was the M&E plan sufficiently budgeted and funded during project preparation and implementation?
3. The effectiveness of monitoring indicators from the project document for measuring progress and performance;
4. Compliance with the progress and financial reporting requirements/ schedule, including quality and timeliness of reports;
5. The value and effectiveness of the M&E reports and evidence that these were discussed with stakeholders and project staff;
6. The extent to which follow-up actions, and/or adaptive management, were taken in response to monitoring reports (PPRs) ;
7. Check to see whether PPR self-evaluation ratings were consistent with the MTR and TE findings. If not, were these discrepancies identified by the project steering committee and addressed?

8. Terminal Evaluations for full size projects should also include consideration of the M&E analysis carried out for the mid-term review and whether changes were made to project implementation as a result of the MTR recommendations.

C.4. Stakeholder involvement:

The evaluation should include findings on the role and involvement of key project stakeholders. Two aspects can be considered:

1. A review of the quality and thoroughness of the stakeholder plan presented in the project document which should be reviewed for its logic and completeness.
2. The level of stakeholder participation during project implementation.

Questions regarding stakeholder participation include:

- Did the project involve the relevant stakeholders through information sharing and consultation and by seeking their participation in project design, implementation, and M&E? For example, did the project implement appropriate outreach and public awareness campaigns?
- Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities?
- Were the perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and powerful supporters and opponents of the processes properly involved?

C.5. Adaptive management:

The evaluation team should take note whether there were changes in the project framework during implementation, why these changes were made and what was the approval process. In addition to determining the reasons for change. The evaluator should also determine how the changes were instigated and how these changes then affected project results. A few key questions to consider:

- Did the project undergo significant changes as a result of recommendations from the mid-term review? Or as a result of other review procedures? Explain the process and implications.
- If the changes were extensive, did they materially change the expected project outcomes?
- Were the project changes articulated in writing and then considered and approved by the project steering committee?

D. Project results:

Results as measured by broader aspects such as: country ownership, mainstreaming, sustainability, catalytic role and impact.

D.1. Country ownership:

- Was the project concept in line with development priorities and plans of the country (or countries)?
- Were the relevant country representatives from government and civil society involved in project implementation, including as part of the project steering committee?

- Was an intergovernmental committee given responsibility to liaise with the project team, recognizing that more than one ministry should be involved?
- Has the government(s), enacted legislation, and/or developed policies and regulations in line with the project's objectives?

D.2. Mainstreaming:
The section on mainstreaming should assess:
1. Whether it is possible to identify and define positive or negative effects of the project on local populations (e.g. income generation/job creation, improved natural resource management arrangements with local groups, improvement in policy frameworks for resource allocation and distribution, regeneration of natural resources for long term sustainability).
2. Whether there is evidence that the project outcomes have contributed to better preparations to cope with natural disasters.
3. Whether gender issues had been taken into account in project design and implementation, (i.e. project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc). If so, indicate how.

D.3. Sustainability:
The evaluator should assess and rate **(R)** the overall risks to sustainability (refer to Annex 1 for the ratings table). Sustainability is considered to be the likelihood of continued adaptation benefits after the AF project ends. Consequently the assessment of sustainability considers the risks that are likely to affect the continuation of project outcomes. Four areas can be considered as risks to sustainability: Financial risks; socio-economic risk; institutional framework and governance risks; and environmental risks. Each should be separately evaluated and then rated on the likelihood and extent that risks will impede sustainability.

Relevant factors to improve the sustainability of project outcomes include:
- Development and implementation of a sustainability strategy.
- Establishment of the financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the AF assistance ends (from the public and private sectors, income generating activities, and market transformations to promote the project's objectives).
- Development of suitable organizational arrangements by public and/or private sector.
- Development of policy and regulatory frameworks that further the project objectives.
- Incorporation of environmental and ecological factors affecting future flow of benefits.
- Development of appropriate institutional capacity (systems, structures, staff, expertise, etc.).
- Identification and involvement of champions (i.e. individuals in government and civil society who can promote sustainability of project outcomes).
- Achieving social sustainability, for example, by mainstreaming project activities into the economy or community production activities.
- Achieving stakeholders' consensus regarding courses of action on project activities.

D.4. Catalytic effect
The evaluator should complete the ratings table **(R)** on whether or not the project has had a catalytic effect (refer to Annex 1 for the ratings table). The reviewer should consider the extent to which the project has demonstrated: a) production of a public good, b) demonstration, c) replication, and d) scaling up. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are

replicated within the same geographic area but funded by other sources). Examples of replication approaches include:

- Knowledge transfer (i.e., dissemination of lessons through project result documents, training workshops, information exchange, a national and regional forum, etc).
- Expansion of demonstration projects.
- Capacity building and training of individuals, and institutions to expand the project's achievements in the country or other regions.
- Use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions.

D.5. Impact

The reviewer should discuss the extent to which projects are achieving impacts or are progressing toward the achievement of impacts among the project beneficiaries. Impacts in the context of adaptation projects refer to the extent to which vulnerability to climate change has decreased, as measured by the indictors included in the Results Framework, and other quantitative and qualitative information. Process indicators, such as regulatory and policy changes, can also be used to measure impact.

E. Conclusions, Recommendations and Lessons

Conclusions should be comprehensive and balanced, and highlight the strengths, weaknesses and outcomes of the project. They should be well substantiated by the evidence and logically connected to the evaluation findings. They should respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNEP and AF.

The evaluation report should provide practical, feasible recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.

The evaluation report should include, if available, lessons that can be taken from the evaluation, including best (and worst) practices that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other AF and UNEP interventions.

Further guidelines for preparation of AF evaluations can be found here: https://www.adaptation-fund.org/sites/default/files/Guidelines%20for%20Proj_Prog%20Final%20Evaluations%20final%20compressed.pdf

2.2. Deliverables

1. An inception report should be prepared by the evaluation team prior to the main evaluation mission. It should detail the evaluators' understanding of the project being evaluated and why, showing how each evaluation question (detailed in Section 2.1 of this ToR) will be answered by way of: proposed methods, proposed sources of data and data collection procedures. The inception report should include a proposed schedule of tasks, activities and deliverables,

designating a team member with the lead responsibility for each task or product. The inception report should annex the signed code of conduct agreement form – attached at Annex 4.

2. A draft mid-term review report, which includes the evaluation scope and method, findings, conclusions and recommendations. The report should cover the following five major criteria: relevance, efficiency, effectiveness, results and sustainability, applied to a) project formulation b) project implementation and c) project results.

3. A final mid-term review report**.**
Section 2.4 below contains directions on the outline of the report. The draft report is considered complete, in contractual terms, only when it has achieved acceptable standards.

2.3. Methodology

A detailed methodology for meeting the objectives of the MTR should be proposed by the consultant in the MTR inception report as outlined in Section 2 above. As a minimum the following is expected:

- An 'evaluation mission' should be scheduled, providing an intensive 10 days to two weeks for the evaluation team to hold interviews and visit intervention sites. The evaluation mission should be planned far enough in advance to enable interviews to be properly set up, especially to request meetings with senior Ministry officials. A detailed plan for the mission should be included in the MTR inception report, which should be revised based on UNEP TM, project team and AF Designated Authority inputs.

- Field visits are expected to the intervention site or a select sampling if there are multiple sites. The decision on which sites to visit should be done jointly with the UNEP TM, and project team and outlined in the inception report as outlined in Section 2 above.

- The MTR will properly examine and assess the perspectives of the various stakeholders. Interviews should include a wide array of interested persons including civil society, NGOs and the private sector, local ministry officials as relevant, and national ministry officials (in addition the AF Designated Authority).

- Data analysis should be conducted in a systematic manner to ensure that all the findings, conclusions and recommendations are substantiated by evidence. Appropriate tools should be used to ensure proper analysis (e.g. including a data analysis matrix that records, for each evaluation question/criteria, information and data collected from different sources and with different methodology).

- By the end of the evaluation mission and prior to submitting a first draft evaluation report, a wrap up discussion should be organized with the country office and project team to present initial findings and request additional information as needed.

This mid-term review will be conducted as an in-depth project review using a participatory approach whereby the UNEP staff associated with the project, key representatives of MEESF, MADR and other ministries, other relevant stakeholders are kept informed and regularly consulted throughout the review. The review consultants will liaise with UNEP on any logistic

and/or methodological issues to properly conduct the review in as effective way as possible, given the circumstances and resources offered. The draft report will be delivered to UNEP in English and then circulated to project management staff. Any comments or responses to the draft report will be sent to UNEP for collation and the consultant will be advised of any necessary revisions.
Following the review of the draft evaluation report, the evaluation team should indicate how comments have been addressed in the revised evaluation report.

2.4. Review report format and review procedures

The report should be brief, to the point and easy to understand. It must explain; the purpose of the review, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the review took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. The review report shall be written in English, be of no more than 50 pages (excluding annexes), use numbered paragraphs and include:

i) An **executive summary** (no more than three pages) providing a brief overview of the main conclusions and recommendations of the review;
ii) **Introduction and background** giving a brief overview of the evaluated project, for example, the objective and status of activities;
iii) **Scope, objective and methods** presenting the review, the review criteria used and questions to be addressed;
iv) **Project Performance and Impact** providing factual evidence relevant to the questions asked by the reviewers and interpretations of such evidence. This is the main substantive section of the report and should provide a commentary on all review aspects (Section 2 above). The current status of all outcome and output indicators (see annex 5 and 6) should be assessed as part of this analysis.
v) **Conclusions and rating** of project implementation success giving the reviewers' concluding assessments and ratings of the project against given review criteria and standards of performance. The conclusions should provide answers to questions about whether the project is considered good or bad, and whether the results are considered positive or negative;
vi) **Lessons learned** presenting general conclusions from the standpoint of the design and implementation of the project, based on good practices and successes or problems and mistakes. Lessons should have the potential for wider application and use. All lessons should 'stand alone and should:

- Specify the context from which they are derived
- State or imply some prescriptive action;
- Specify the contexts in which they may be applied (if possible who when and where)

vii) **Recommendations**. High quality recommendations should be *actionable* proposals that are:
1. Implementable within the timeframe and resources available

2. Commensurate with the available capacities of project team and partners
3. Specific in terms of who would do what and when
4. Contain results-based language (i.e. a measurable performance target)
5. Include a trade off analysis, when its implementation may require utilizing significant resources that would have otherwise been used for other project purposes.

viii) **Annexes** include Terms of Reference, list of interviewees, documents reviewed, brief summary of the expertise of the review team, a summary of co-finance information etc. Dissident views or management responses to the review findings may later be appended in an annex.

Examples of UNEP GEF and AF Mid-Term Review Reports are available at www.unep.org/eou.

2.5. Review of the Draft Review Report

The draft mid-term review report is submitted to UNEP and further to the MEESF Climate Change Coordination Office. The UNEP TM and MEESF will then provide initial feedback and comments on the mid-term review report with a primary emphasis on any errors of fact and may highlight the significance of such errors in any conclusions. The comments may also address the feasibility of the recommendations suggested.

2.6. Submission of Final Mid-term Review Report

The final report shall be submitted in electronic form in MS Word format in English and should be sent to the following persons:

J. Christophe Bouvier, Director,
Office for Operations and Corporate Services
United Nations Environment Programme
Nairobi - Kenya
Tel: 254-20-7623880
Email: christophe.bouvier@unep.org

Ms. Ermira Fida
Head,
GEF Climate Change Adaptation Unit
Division for Environmental Policy and Implementation (DEPI)
United Nations Environment Programme (UNEP)
P.O.Box 30552, Nairobi, Kenya
Tel: (254-20) 762 3113
Fax: (254-20) 762 3162/762 4041/762 4042
email: ermira.fida@unep.org

The final Review report will further be disseminated to: Relevant Government representatives, the project's Executing Agency (MEESF), Technical Staff (PMO and PMUs) and the AF Designated Authority.

2.7. Resources and schedule of the review

International Reviewer

This mid-term review will be undertaken by one reviewer (or potentially a small team) contracted by the UNEP DEPI. The contracts for the reviewers will tentatively begin on October 19, 2015 and end no later than April 2016 (50 days - 10-14 days of travel to Madagascar and 36-40 days of desk study). The reviewer shall submit a first draft report no later than December 23, 2015 to UNEP/DEPI Task Manager. Comments to the first draft report will be sent to the consultants by January 24, 2015. A second draft report should be submitted by February 28, 2016, after which, UNEP/DEPI Task Manager together with the consultant will evaluate the need for further revisions. The work is expected to be completed with a final report no later than April 30, 2016

The reviewers should not have been associated with the design and implementation of the project. The reviewers should have the following minimum qualifications:

Education

Masters degree in environmental management, natural resources management, agricultural development, development studies or other relevant social or natural sciences field.

Experience

A minimum of at least 5 years relevant work experience in:

- Conducting independent evaluation of rural/agricultural development management projects, especially donor-funded projects (preferably with some experience in relation to CC-adaptation).
- Project management cycle (designing, implementation, M&E)

Competency profile

- Demonstrated solid knowledge of climate change adaptation or development.
- Demonstrated experience in project development, implementation or management.
- Good understanding of climate change, environment and food security issues. Practical experience with issues pertaining to rice production in developing countries is an added advantage.
- Experience from working with the Government, NGOs, donors or the UN system in East Africa/Madagascar is also an added advantage.
- Conversant with M&E of projects, including developing results-oriented targets and indicators and collecting quantitative and qualitative data.
- Fluency in oral and written English and French.

2.8. Schedule Of Payment

The reviewer will paid a total lump sum of **USD35,000** (travel inclusive – to undertake one travel to Madagascar) and the payment schedules will be as follows:

- First payment (20%): submission of work plan (including a confirmed dates for field mission)
- Second payment (40%): Submission of first draft
- Third payment (40%): Satisfactory completion of work responding to all comments from UNEP and executing agency.

The fee is payable under the individual Special Service Agreement (SSA) of the reviewer and IS **inclusive** of all expenses such as travel, accommodation and incidental expenses.

In case, the reviewer does not provide the products in accordance with the TORs, the timeframe agreed, or his products are substandard, the payment to the reviewer could be withheld, until such a time the products are modified to meet UNEP's, standard. In case the reviewer fails to submit a satisfactory final product to UNEP the product prepared by the reviewer may not constitute the final report.

10.5. Sample of pictures taken during the MTR mission 9–14 November 2015.

Focus groups in Manakambahiny (top left), Bemaitso (top right) and Ambohijanahary (bottom)

Nurseries built by SNGF in each communes for hillside reforestation, with one of the selected reforestation sites in the background of the picture on the bottom right.

Rice seeds produced by CALA (top left) and tests of counter-season rice cultivation in Ambohijanahary (top right and bottom left) and Bemaitso (bottom right).

Automatic Weather Station (top left) with console in Ambohijanahary (top right) and compost production sites in Ambohijanahary (bottom left) and Bemaitso (bottom right).

Non-rice cultivation tests in Ambohijanahary and Bemaitso including cabbage (top left), beans (top right), carrots (bottom left), and potatoes and tomatoes (bottom right)