REPOBLIKAN'I MADAGASIKARA
Fitiavana - Tanindrazana - Fandrosoana

SECRETARIAT GENERAL

DIRECTION GENERALE DE L'ENVIRONNEMENT

DIRECTION DU CHANGEMENT CLIMATIQUE

INCEPTION WORKSHOP REPORT

PHASE I and PHASE II

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

INTRODUCTION

The Government of Madagascar, through the United Nations Environment Programme (UNEP) which is a Multilateral Implementing Entity of the Adaptation Fund, had submitted into the Adaptation Fund Board a project entitled “Promoting Climate Resilience to the Rice Sector through Pilot Investments in the Alaotra-Mangoro Region”. This project seeks to address vulnerability of the Rice sub-sector climate variability and projected climate change. The project will be piloted in the Alaotra-Mangoro region located on the Central Highlands of Madagascar. The overall objective of the project is to initiate the transformation of the Rice sub-sector to make it more resilient to current climate variability as well as expected climate change and associated hazards. It contains three components: 1- Scientific and Technical Capacity; 2- Adapted and Resilient Rice Production Cycle; and 3- Leveraging Policy Change.

The project inception workshop was held on 24 and 25 October 2012 in Ambatondrazaka. Given the importance of this project for the Government, high authorities of the Malagasy State was attended the project inception workshop, including the Prime Minister and the Minister of Agriculture. The presence of these high authorities was an opportunity to show them the reality on the ground of climate change impacts on rice sub sector and the pertinence of the project to address these impacts. The two days were devoted to speech, project presentation and visits of the three project sites. Therefore, we did not have enough time to discuss in detail with stakeholders the project activities. That is why, the Ministry of Environment and Forests (MEF) organized a second workshop on 17 and 18 December 2012, still in the inception workshop and the objective is to improve stakeholders understanding of the project and confirm project activities, outputs and outcomes . So there are two reports for this inception workshop, Phase I report and Phase II report

INCEPTION WORKSHOP REPORT

PHASE I

24th and 25th October 2012

Venue: Ambatondrazaka, Madagascar

Photo; Prime minister of Madagascar (centre)

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1. INTRODUCTION

The Ministry of Environment and Forests (MEF), had organized the inception workshop phase I for this project, on 24-25 October 2012 in Ambatondrazaka, the nearest city to the project sites.The main objectives of the workshop are to (i) inform and mobilize stakeholders at local and central levels on the project contributions to increase the resilience of the rice sub-sector, particularly by addressing climate change impacts; (ii) strengthen and facilitate local stakeholders' understanding and support of project interventions; and (iii) confirm climate change issues and associated impacts that need to be addressed in the targeted region.

This report summarizes the activities undertaken during these two days of inception.

Officials during the opening ceremony. From left to right: H.E. Mr. M.RAVATOMANGA, Minister of Agriculture; H.E. Mr. J.O.BERIZIKY, Prime Minister and cartaker Minister of Environment and Forests; Mr. S. RANDRIANATOANDRO, *SecrétaireGénéral* of the Alaotra-Mangoro Region; and Mr. E.RABENAIVO from the District of Ambatondrazaka. Photo: MEF/DCC.

2. OPENING CEREMONY

Under the patronage of His Excellency Mr. Jean Omer BERIZIKY, Prime Minister, Head of Government and His Excellency Mr.MamyRAVATOMANGA, Minister of Agriculture, the official opening ceremony was held on 24th October, 2012, at Espace Royal Club Ambatondrazaka.These two Malagasy Government members, the UNEP Task Manager, as well as two local authoritiesrepresentatives (the Mayor of the *Commune Urbained'Ambatondrazaka*, and the *SecrétaireGénéral* of the *RégionAlaotra-Mangoro*) had made statements during the official opening ceremony.

- **Statement of Mr.JacquesANDRIAMANIRISON, Mayor of the *Commune Urbained'*Ambatondrazaka**

The Mayor of the *Commune Urbained'Ambatondrazaka*, Mr.JacquesANDRIAMANIRISON, welcomedalltheparticipants, particularly His Excellency Mr.Jean Omer BERIZIKY, to the city of Ambatondrazaka, which has the opportunity to be chosen for the implementation of this project. He stated that despite the political situation in the country, he hopes a successful implementation for the project.

- **Statement of Mr. Lars CHRISTIANSEN, UNEP Task Manager**

Mr. L.CHRISTIENSEN, UNEP Task Manager, during his allocution on the official opening ceremony. Photo: MEF/DCC.

The UNEP Task Manager, Mr.LarsCHRISTIANSEN, congratulated the Alaotra-MangoroRégion for being chosen among others, to host this important project. He also argued that Madagascar is yearly subject to extreme weather events related to current climate variabilitythat have severe impacts on its national economy. He then stated that the main goal of this project correspond to UNEP's objective on sustainable development related with a sustainable environment. He emphasized the importance of stakeholder involvement, at central and local levels, fora successfuland effective project implementation. He closed his statement with a word of thanks to the Government of Madagascar for the collaboration between the UNEP and Madagascar.

- **Statement of Mr.StanislasRANDRIANATOANDRO, *SecrétaireGénéral* of the RégionAlaotra-Mangoro**

The *SecrétaireGénéral* of the Alaotra-MangoroRegionwelcomed the participants. He then thanked the Government and the project initiators for the choice of the targeted region. He also stated thatlocal stakeholders should take into account the advices from the central level technicians; and the project's objectives will not be achieved without a close collaboration between these two entities.

- **Statement of His Excellency Mr.MamyRAVATOMANGA, Minister of Agriculture**

During his statement, the Minister of Agriculture re-affirms the importance of the project that will be implemented in the Alaotra-Mangoro Region, which is the national top rice producer. He encourages all stakeholders to maximally contribute to its implementation, which in turn will make the projectnot only a pilot initiative for Madagascar, but also for Africa. He emphasized theimportance of involvement stakeholders, at central and local levels, for the success and effectiveness of the project's initiatives.

- **Statement of His Excellency Mr.Jean Omer BERIZIKY, Prime Minister of the Malagasy Government of Transition and caretaker Minister of Environment and Forests**

During his statement, the Prime Minister indicated firstly the importance of this project due to rice's crucial position in the national economy. After that, he said that the climate change is due to human activities, and is among the main threat to the agricultural sector including rice. He stated that innovative techniques and scientific research are needed to identify the appropriate measure that needs to be implemented. Finally, he calls for an inclusive collaboration between the local authorities and the project stakeholders for a successful implementation, and declare the workshop open.

H.E. Mr. J.O.BERIZIKY, during his statement on the opening ceremony. Photo: MEF/DCC.

3. PRESENTATION OF THE PROJECT

Mr.Hery A. RAKOTONDRAVONY, technical collaborator at the Climate Change Department (DCC) of the MEF presented the project.Thefollowing pointswerehighlighted: (i) project justification, the Rice sub-sector being extremely vulnerable to climate change but playing a central role on the national economy; (ii) main goal: sustainably increase rice yield despite the negative impacts of climate change; (iii) componentsoverview; and (iv) the choice of the targeted region.

During the presentation, the orator had reported that the project was extracted from national strategic document including NAPA and National Communications. He also argued that this initiative will serve as a pilot that will be replicated in other rice producing regions of the country. In addition, he said that the project will mostly deal with climate change impacts on the rice sub-sector; but that other measures to promote local communities resilience facing climate change willalso be addressed to obtain an optimal and successful implementation.

4. VISIT OF PROJECT SITES

4.1 THE ILAKANA MANAKAMBAHINY SITE

The visit of this site took place just after the official opening ceremony. All participants during the ceremony participated to the visit of the Ilakana site.

Ilakana (*Commune Rurale*[CR] *de* Manakambahiny) is localized 20 km south ofAmbatondrazaka, on the national road (RN) 44 between Ambatondrazaka and Antananarivo. All the visitors confirmed the importance of the project for the Ilakana site because of the advanced degradation of the arable surfaces due to erosion and siltation. The Regional Director of Environment and Forests explained the approximate Environmental conditionsof the land around Ilakana three to four decades ago, and the current situations: accelerated erosion and siltation; and change of the Ilakana river course after some part of it was totally silted during the last 10 to 15 years. The Director of Climate Change Department,Mr.Germain RANDRIASANDRATANA, stressed the need of overall and effective involvement of local communities to avoid the repetition of the problems. The Mayor of the *CR de* Manakambahiny argued the necessity to reforest the hills surrounding the Ilakana site.

Silted arable land due to uphill accelerated erosion at Ilakana-Manakambahiny. Photo: MEF/DCC.

4.2 VISIT OF THE AMBOHIJANAHARY SITE

The visit of the Ambohijanaharysitetook place after lunch. The visitors were composed of Antananarivo delegations from the MEF, the Ministry of Agriculture and their respective regional representatives; national experts on Agricultural sector;UNEP, the Ministry of Water; and representatives of local authorities including the *Chef duDistrictd'*Amparafaravola.

Irrigation infrastructure at Anony (Ambohijanahary) broken by a cyclone strike and flooding in 2009. Photo: MEF/DCC.

This site is located in the west of Ambatondrazaka, approximately 80 km along the RN 44 and RN 3a, on asphalted roads.The trip offers the opportunity to appreciate how important is the Alaotra-Mangoro region for the Rice sub-sector, based on arable land areas.

The Mayor of the *CR d'*Ambohijanahary had welcomed the visitors and thanks the Government and the donor for the investments that are to be undertaken in the *CR d'*Ambohijanahary. After that, he had mentioned the most important environmental threats facing Rice sub-sector in the surrounding areas: unpredictable change in rainfall regime, accelerated erosion and siltation, decreased soil fertility, and increased flooding. He told

also that an important irrigation infrastructure at Anony (6 km from the Ambohijanahary village) was broken by a cyclone strike and flooding in 2009 and is not yet rehabilitated.

The *DirecteurGénéraldel'Environnement*ofMEF, Mme Edmée C. RALALAHARISOA, thanks the Mayor of Ambohijanahary and the local communities at Anony for their hospitality. She indicated that the main benefits of the project will be for the local stakeholders, and she asked for an inclusive collaboration with local stakeholders for a successful project implementation.

4.3 VISIT OF THE BEMAINTSO SITE

On 25 October, the site of Bemaitso (District of Andilamena) was visited. The participants were composed of Antananarivo delegations from the MEF and the Ministry of Agriculture and their respective regional representatives; two national experts on Vulnerability and Adaptation, Agricultural sector; and one participant from the Ministry of Water.

The Bemaitso dam at Andilamena. Originally, its deepest part is at more than 7 meters below water level. Uphill accelerated erosion during the last two decades lead to the fact that any part of the dam cannot exceed more than 3 meters deep. Photo: MEF/DCC.

Andilamena is situated 65 km north of Ambatondrazaka, at the end of the RN 44, on a secondary road. This trip offers the opportunity to observe the environmental problems facing the Lake Alaotra, one of Madagascar's Ramsar site, and surrounding areas: deforestation, erosion and siltation, human pressures on natural forests and mineral resources, wild fires, etc.

The Bemaitso site is located approximately 10 km north of the Andilamena town, along a secondary road that is surely impassable during rainy season. The visitors were received by two persons, the head of BemaitsoCooperatives and the head of Water User Associations.

After their welcome words to the visitors, they directly evoked the environmental challenges facing rice cultivation for this site:

- uphill accelerated erosion leading to the siltation of the Bemaitso dam that need to be rehabilitated;
- unpredictable rainfall regime and drought; and
- newly emerging rice diseases during the last three to five years, which may provokeup to 80% production losses, and that need to be monitored and scientifically investigated (principally white borer and an unclear fungi/virus disease).

These representatives of local producers reported that more than 60% of the cultivators are practicing the "*Système de Riziculture Améliorée* (SRA)". Also, they stated that the "*Système de Riziculture Intensive* (SRI)" are not widely accepted because it is highly time consuming and requires an excellent ability to manage water resources. They signaled that most producers adopt actually some selected seeds such as "*hybrid*", "*tsemaka*", "*MK mailaka*", etc.

The *DirecteurGénéral de l'Environnement*of MEF thanks the local authorities and communities for their hospitality. She indicated that the main benefits of the project will be for the local

stakeholders, and she asked for an inclusive collaboration with local stakeholders for a successful project implementation.

5. BRIEFING TO PROJECT MANAGEMENT UNIT (PMU) ON ADAPTATION FUND PROCEDURES

A short briefing on the Adaptation Fund Procedures was conducted by the UNEP representatives, Ms.ShakiraKawaja and Lars CHRISTIANSEN, in the evening. Among other things, the following issues were covered:

- Project Cooperation Agreement (PCA) including full clarification of all agreements including terms and obligations of both MEF and UNEP;
- Procedures of AF Board for an AF funded-project;
- Procurement policies and reporting requirements for AF projects, including presentation and discussion of the UNEP supervision plan.
- Project Management Unit issues, including:banking and financial transfer arrangements;opening of an AF project account;nationalprocurement policies & plans; Work plan for 2013; status and plan for appointment of PMU staff and plans for conduction of stakeholder workshop (see below).

6. CONCLUSIONSAND PERSPECTIVES

The presence of His Excellence Mr Jean Omer Beriziky, Prime Minister, Chief of the Government of Madagascar and His Excellence Mr MamyRavatomanga, Minister of Agriculture and other eminent personages to the project inception workshop shows the importance the Government attaches to this project given the place that rice growing occupies in the food of the malagasy people and in the national economy:

This situation also explains the engagement of the Government to carry out this project thus facilitating its acceptance by the authorities and local communities as well as the integration of the latter in its implementation.

In addition, this workshop allowed the participants and the local authorities to express what they expected from this project and to thank the Government for having chosen Ambatondrazaka for the realization of the project and UNEP for its assistance and its presence on the site.

Currently, the MEF is preparing a workshop aiming at confirming the activities of the project and eventually collecting other points of view from local actors in order to improve project activities and to facilitate their implementation. This workshop will be held in Ambatondrazaka on December 13rd and 14th 2012.

.**ANNEX I :PROGRAMME FOR THE INCEPTION WORKSHOP**

Date	**Time**	**Content /Ressource**
October-24th-2012	08H30- 09H30	Registration
	09H30-10H:am	Opening Ceremony
	09H30-09H35:am	Welcome words by the Mayor of Ambatondrazaka
	09H35-09H40:am	Opening Remarks by the Secretary General of AlaotraMangoro
	09H40-09H45:am	Statement by UNEP Task Manager, Mr. Lars Christiansen
	09H45-09H50am	Statement by HE Mr Ravatomanga Rolland, Minister of Agriculture
	09H50-10Ham	Opening Statement by HE Mr Omer Beriziky, Prime minister
	10H-10H0:am	Presentation of the Project
	1030-11H00:am	Coffee/tea/ break
	11H00-13H00:am	Visit of the first project site (Ambatondrazaka)
	13H00:am-14H30:pm	Lunch
	14H30:17H30:pm	Visit of the Second project site (Ambijanahary/ Amparafaravola)
October 25th-12	08H30:am-16H30:pm	Visit of third project site (Andilamena)

Annexe II: List of Participants

N	Name	Institute	Position
01	BERIZIKY Omer	Primature	Prime Ministre
02	RAVATOMANGA Rolland	Ministry of Agriculture	Minister
03	RAKOLOLAHY Charles C.S	Primature	Director of Cabinet
04	RANDRIANATOANDRO Stanislas	Region AlaotraMangoro	Secretary General
05	RALALAHARISOA Christine	Ministry of Environment	General Director
06	ANDRIAMANIRISON Jacques	District Ambatondrazaka	Deputy Chief of District
07	RABENAIVO E.	District Aparafaravola	Chief of District
08	ANDRIAMAINTY Fils Jean Maurice	District Andilamena	Chief of District
09	RASOLONIRINA Ramenason	DREF AlaotraMangoro	Director
10	RakotobeNirhy	DRDR AlaotraMangoro	Director
11	RASOLOFO Louis Stella	Commune of Andilamena	Mayor
12	RABEARISON Sarindraniaina Luc	Direction of Communication	Director
13	Jacque Andriamanirison	Commune of Ambatondrazaka	MAYOR
14	RANAIVOSOLO	Commune of Andilamena	Deputy MAYOR
15	RAkotomaharoHaingo	Direction of Communication	Director
16	RabetokontanyJeriniaina	DRDR AlaotraMangoro	Collaborator
17	BeraArisaona	Direction of Pollution Management	Director
18			
19	RAKOTOMAHARO Haingo	Direction of Communication	Collaborator
20	RanaivosonFameno	Direction of Meteo	Chief service
21	Razafindrakoto Benjamin	FOFIFA	Collaborator
22	AURELIE	DGTAAmbatondrazaka	Representative of DGTA
23	Rabeson Raymond	FOFIFA	Expert
24	RandriasandratanaGermain	Direction of Climate Change	Director
25	Raholiarivony Julia	Direction General of Environnement	Collaborator
26	RakotozafyHarimisa	Ministry of Environment	Collaborator
27	Ramahavalisoavalerie	Directorate of information and communication	Collaborator
28	LalasonAiméMarcellin	Direction of Climate Change	Collaborator
29	Mara Edena	Direction of Climate Change	Collaborator
30	HeryRakotondravony	Direction of Climate Change	Collaborator
31	TahiryLalaina	Direction of Climate Change	Collaborator
32	Lars Christiansen	UNEP	Task Manager

INCEPTION WORKSHOP REPORT

PHASE II

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

Date: 13th and 14th December 2012

Venue: Ambatondrazaka, Madagascar

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ACRONYMES

DRDR: Regional Directorate of Rural development

MINAGRI: Ministry of Agricultural

MINEAU: Ministry of water

AUE: Association of Water User

1. INTRODUCTION

After the launching workshop of theproject **«Promoting resilience of rice sector to climate change in the region of Alaotra Mangoro"**during which we could not achieve as expected the workshop's target to discuss with the participants the project activities, the Ministry of Environment and Forests organized a two-day workshop on 13rd and 14th December 2012 at Royal Hotel, Ambatondrazaka.

The purpose of the workshop was to improve the understanding of the project and to confirm the related activities.

The workshop was attended by local authorities(Region,District,Commune,Fokontany), the decentralized Services (Regional Directorate of Agriculture,Regional Directorate of Environment and Forestry, Regional Directorate of Water), the associations of water users in the three project sites and representatives of government departments at the central level (Ministry of Agriculture, Ministry of Water, Ministry of Environment and Forests,national Research Centre on Agriculture,national Experts on the adaptation of agriculture to climate change impacts).

2. OPENING CEREMONY

After welcoming all the participants and thanking them for their attendance at the workshop, Mr.Germain Randriasandratana, Director of Climate Change (DCC), explained the reasons of the postponement of the workshop. Indeed, the presence of the Prime Minister and the Minister of Agriculture was an opportunity to show them the reality in the field regarding the impacts of climate change on rice and the relevance of the project. Thus, there was not enough time to discuss in detail the project activities and to know the respective opinions of the participants about the project

After that, the representative of the Head of the Region AlaotraMangoro, Mr.Razafindramanitra Daniel Christophére, Director of Administrative and Territorial Management welcomed all the participants and thanked the Government of the important initiative to reduce the impacts of Climate Change on rice growing. He encouraged the participation of the communities and technicians at all stages in order to develop a new policy on rice at the same time taking into account climate change and reaching the development of the region.

3. PLENARY SESSION 1

3. 1 Présentation of the project

Ms Jane Razanamiharisoa, Head of Department of Adaptation to Climate Change Effects made a detailed presentation of the project. She first presented an overview of the project, mentioning the project sites and the reasons for their selection, the cost and duration of the project, the technical and financial partners, in particular UNEP, which plays the role of the implementing entity of the Adaptation Fund in the project. Then, she talked about the background of the project, the project's objectives, its components, outcomes and outputs and the various related activities of the project.

3-.2 Questions and answers session

Theproject presentationwas followed by a session of questions andanswersduring whichparticipants made commentsand recommendations. The questionscould be answered inthe project documentbut it was necessary to add some explanationsfora better understandingof the activities, which will be undertakenunder theproject.

Some questionsasked:

Doesthe projecttake into accountthe existence of theNational Policyof Rice growing? How does the projectconsider themanagement, the rehabilitation, and the construction of rice growing infrastructure, which is themajor problemof ricein the region?

Question/answers session

It seems that mostofthe problems mentionedand recognizedontherice matter are not related to climate change.How do you explainthis situation in relation tothe objective of the project?

We would like tostrengthen the organizationsfor the water management (Water Users Association, Federations, etc...), what does the project can do to supportthe

functioning of these organizations

We hope thatthe project will generateincome activitiesfor local communities in the

region

Summary of answers to the above questions

TheNational Policyon Rice growingis one of the targets of the project. This National policy is taken into account with the third Component of the project ‘’leveraging policy change on rice subsector’’. We need to incorporate climate change in the policy of rice subsector.

The problem related to the construction and rehabilitation of rice growing infrastructure is considered by the project through its second component. The Project will support the rehabilitation of degraded irrigation and drainage infrastructure as well as the construction of new water storage facilities where necessary. This will be accompanied by measures to promote sustainable water management and conservation.

Most of problems mentioned and recognized on rice sector in the region are not related to climate change, but these factors or problems contribute enormously to the vulnerability of rice sector to

climate change and therefore, we need to tackle of these factors in order to achieve the project objective.

4. **PLENARY SESSION 2**

4.1 .Working group

In the afternoon, participants weredivided into four workinggroups, one group for each project component and a fourth group forthInstitutionalArrangementissue. The first threegroups were asked to focus ontwo documents: logical framework andwork planfor the firstyear. They were requested toshare their opinions on theproject activities, if theyreflect the realitiesand respondto theirexpectations, and if not, to propose changes. It is the same for the workplan; theparticipants gave their opinionsand madeproposalsin casethey did not agree with thetiming preset.

As for the fourth group working on the institutional arrangement, participants wereaskedto**(i)** describe the existing institutionalarrangementunderrice growingthe region andparticularly atthe project sites**(ii)** identifyweaknesses andstrengths to these arrangements, and **(iii)** to suggest improvements in the institutional arrangements that could improve the chances of project success.

4-2 Recommendations on project outcomes,outputs, activities and indicators

Group 1:Scientific and technical capacities

Outputs :The group emphasized on technology to be selected and validated in order to reflect really the need of the region.

Activities :The group underline the importance of some activities mentioned in the first component : assessment through existing data , Identification of constraints , Identification of experts , Installation / rehabilitation of meteorological stations

Groupe 1 on Scientific and Technical capacities

Indicators: the group suggested to add as indicators: Number of validated technical for recipients and participants, a test of adaptability in other regions, at least 10 themes of training are identified, at least 100 people per site are chosen to follow the training, at least 10 experts are identified, one meteorological station operational

Group 2: Resilient and adapted rice production cycle

Activities: The group recommended to add in the component 2 the following activities: research of adapted seeds to landquality, alternationof cultures, improvement of arable lands using new techniques, adoption of incentive approach and method for local community to tackle concerns regarding watershed protection.

Groupe 2 on resilient and adapted rice production

I**ndicators** : It is suggested to add as indicators : **At least** 5 rice varieties tested and proved resilient in the laboratory and under land conditions, superficie of restored watershed, 400 trained farmers on integrated pest management, 3 water tanks and infrastructures rehabilitated and supplied.

Group 3: leveraging the change of policy

The group didn't have any recommendation on that component

Group 4: Institutional arrangement

Group 4 on Institutional arrangement

The group has focused its work on three points:

- Description of the existing structure which is in charge of the rice sub sector in the region
- Identification of strengths and weakness of this structure
- Improvements to be brought to this existing structure to facilitate the achievement of the projectobjectives .

The group suggested to integrate others institutions in the management of the riziculture in the region. Indeed, the existing structure shows that only the DRDR (DirectionRegionale pour le DeveloppementRural) cope with this sub sector and it is recommended that DREF (Direction Regionale de l'Environnement et des Forets) and DIREAU (Direction Regionale de l'Eau) should be integrated in the structure to be set up

The MEF took note of the many good and interesting suggestions made by the groups and will do its best to accommodate the views expressed in the implementation of the project. As needed and feasible, changes to project outcomes, outputs, activities and indicators will be discussed and approved by the PSC".

4-3 recommendations on first annual work plan

Based on the log frame and the proposed work plan, each group recommended the following first annual work plan for each component**:**

Group 1: Technical and scientific capacity

OUTPUTS	ACTIVITIES	CHRONOGRAM			
		Q1	Q2	Q3	Q4
Output1: Best Available Technologies and Integrated Resilient Rice Model (MIRR) selected and publicized	1. Undertake a participatory comparative analysis of rice production techniques and technologies available in relation to their resilience and cost-effectiveness		X		
	2. Organize a seminar of on resilient rice model (MIRR)		X		
	3. Publishtechnical guidelines for MIRR		X	X	
Output 2: Crop models are available for rice vulnerability mapping	1. Acquire software and deliver training sessions on ORYZA 2000 (10 staff at central level)		X		
	2.Perform data collection for DSSAT and Oryza model population			X	
	3.Develop and publish to alternative models, using DSSAT and Oryza for 2050 and 2100 for the region			X	
	4 Develop a climate based hydrological model for the Alaotra region for 2050 and 2100				
Output 3: Uupdated, dynamic agricultural calendars and climate early warnings taking into account current and projected variability disseminated to local population	1 Adapt and disseminate agricultural calendars in relation to new climate trends and data, as per agreed methodology				
	2 Acquire , install and operate climate and hydrological monitoring equipment for early warnings				
	7.Ensure the transmission of climate and weather bulletins through radio.				
Output4: Agricultural extension staff trained on climate risk management in an agro-ecosystem context.	1Climate Risk Management and agro-ecosystem approach training for decentralized personnel				

Group 2: **Adapted and resilient rice production cycle**

OUTPUTS	**ACTIVITIES TO BE IMPLEMENTED**	**CHRONOGRAM**			
		Q1	Q2	Q3	Q4
Output 1: Climate resilient varieties selected through participatory field testing	1.Pre-select adapted varieties among existing strains			X	
	2.Procure inputs and materials (seeds, tools)				X
	3.Perform participatory field test of the adapted varieties in relation to identied climate stresses.				
	4.Monitor the participatory variety selection programme over 2 seasons.		X		
Output 2 : An operational multiplication and dissemination scheme for adapted seed varieties	1.Participatory variety selection validation (from a shortlist of resistant varieties				
	2.Production of pre-base and foundation seeds				
	3.Multiplication and distribution of certified seeds				
Output 3: Uupdatedfertilization guidelines according to best available standards and taking climate conditions into consideration	1.Update fertilisation formulas, guideline and packets using climate change and MIRR models, considering socio-economic aspects				X
	2.Use locally available fertilizer (ex. compost, manure, agricultural residues, including rice straws and by products				
Output4: Integrated pest management is implemented	1.Implementationof Integrated Pest Management Best Practices			X	X
Output 5: Water efficiency, management and conservation technologies and infrastructures are implemented	1.Rehabilitation of damaged gravitational irrigation infrastructure and canals				X
	2.Clearing-out of the water reservoirs silted up				X
	3.Installation of new irrigation, drainage and water conservation structures				X
	4.Implementation of irrigation and water conservation (including water harvesting) practices adapted to new climate and conditions with related training of water.				
Output 6 : Best available land preparation, production and harvesting techniques disseminated to reduce deforestation, maintain soil fertility and integrity, and to provide adequate growing conditions	1.Implement Integrated Resilient Rice Model (MIRR) for production	X			
	2.Introduce rice-vegetable rotation systems using disease resistant, water efficient reslient crops (leafy vegetables, legumes)				
	3.Develop and distribute technological packets and information documents				

Output 7: Watershied management and rehabilitation in productive landcscape introduced, including through reforestation, wetlands restoration and protection	1 Participatory Revegetation of degraded slopes and forests, using multi-purpose resilient trees, grasses (vetiver) and participatory management of forests resources				
	2 Training on sustainable agroforestry and landmanagement (including in a climate change context)				
Output 8 : Soil conservation and livestock management techniques adapted to topography and landscape in light of future climate conditions	1 Adaptation and reintroduction of soil conservationmethods for erosion control (tillage, sedimentbarriers, mulching) in upland and lowland uses				
	2 Training on the sustainable land use of inactive orstage 2 lavakas and tanety agriculture (for uplandcommunities)				
	3 Assessment of resilience in livestock managementwithin rice cultivation systems and adaptation ofpractices for resilience, erosion control, andincreased productivity				
Output 9: Revitalization of producer's cooperatives and water user associations for collaborative natural resources allocations (e.g land and water) and management	1.Training, legal support and provision of administrative means for producers cooperatives and water user associations				
Output 10: Water quality monitoring and management is introduced locally for disease vector control	1.Introduce local level water quality monitoring methods		X	X	X
Output 11 : Increased utilization of rice by-product especially rice straw	1.Introduction of the techniques and technologies for the use of rice straws in animal feed and for energy production				
Output 12: Post-harvest storage facilities with phytosanitary control, serving as trading points and markets	1.Rehabilitation of storage facilities using upgraded phytosanitary and climate resilience norms on basis of an inventory			X	

Groupe3 :Leveragingpolicychange

OUTPUTS	ACTIVITIES	CHRONOGRAM			
		Q1	Q2	Q3	Q4
Output 1: Gaps and possible maladaptations in the current rice policy are identified and recommendations on rice policy reform are made	1.Create a multi-partner and interministerial task form on rice resilience, including government, NGOs, private sector and local representatives)				
	2.Develop recommendationson the rice sector transformation and propose a rice policy				
Output 2: A report on best practices and lessons learned for rice adaptation in Madagascar	1.Engage a dialogue on the socio-economic conditions required for project sustainability.				
	2.Identify local best practices in the three sites of intervention				
	3.Develop contract with the local financial institutions.				

5. CLOSING REMARKS

In closing the workshop the representative of the Region thanked all the participants for their active participation. He thanked particularly the MEF team for organizing this workshop, which help them to well understand the project and to make some suggestions in order to improve it.. He encouraged every body to work together to achieve the project objective. He also thanked GEF and UNEP for their assistance making this project possible. Withthis, he declared the workshop closed and finally

ANNEXE I: AGENDA

DATE	TIME	THEMES
December 13rd .2012	09H00-09H30	Registration
	09H30-10H00	Opening ceremony
	10H00-10H30	Presentation of the project
	10H30-10H45	Coffee-break
	10H45-12H30	Questions /Answers
	12H30-14H30	Lunch break
	14H30-17H00	Group work
December 14th. 2012	09H00-12H00	Group work
	12H00-14H00	Lunch
	14H00-15H30	Restitution
	15H30-16H00	Closing remarks

ANNEXE II: Lists of the participants

N	Name	Institute	Position
01	Razafindramanitra Daniel Christophere	Region of AlaotraMangoro	Director
02	RaherinjanaharyAndriamparany	District Amparafaravola	ChiefDistrct
03	Randriasandratana Germain	Directorate of climate change	Director
04	RakotobeNirhy	Regional Direction of Rural Development	Director
05	Ravelonahanitrininosy	Federation of Ambohijanahary	cultivator
06	Ratsihavana Daniel	Commune of west MANKAMBAHINY (Ilakana	Mayor
07	Randriamiarina Jean Claude	Commune of west MANKAMBAHINY	cultivator
08	Ratsiarina	FokontanyMiaramanjaka	Chief of Fokontany
09	Randriamahafalisoa Gabriel	FokontanyAmbohidehilahy	Chief of Fokontany
10	RasamimananaMasindraibeHerytina	Federation of soamaharitra West m/hitsy	Responsible of federation for managing
11	Rakotonirina Samuel	Federation of fokontanyMiaramanjaka	Deputy President
12	RandriamandimbySylvestre	Federation Madimbisoa,Miaramanjaka	Secretary
13	Rabetokontany Gilbert	Commune Ambohidehilahy	cultivator
14	Randriamarolahy Gilbert	Federation of Mandimbisoa and Miaramanjaka	President
15	Ratsimbazafy Jean Pierre	Expert in Agricultural	Expert in Agriculture
16	Ravelonkasina Dina	Regional Direction of Environment and Forest	Colaborator
17	RamanamisataNantenaina	Regional Direction of Environment and Forest	Regional Direction of Environment and Forest
18	RakotoharisoaHerizoaLalaina	FOFIFA/CALA	Collaborator
19	HasinaRanaivojaona	Ministry of Water	Technical Staff
20	RajaonahNirina	Miistry of Agricultural	Technical Staff
21	BetokontanyJeriniaina	Regional Direction of Rural development	Technical Staff
22	RandriamanjakavolaEdouard	Commune Ambohijanahary	Cultivator
23	Randimbiharimanana Victoria	Commune Ambohijanahary	Cultivator
24	LalasonAiméMarcellin	Direction of Climate change	Technical Staff
25	Razanamiharisoa Jane	Direction of Climate change	Chief of Adapatationservice
26	HerilalainaTahirinjanahary	Direction of Climate change	Colaborator

27	Randriamila Armand	Commune Bemaitso	Mayor
28	Randriambola	Member of AUE MandrosoBemaitso	Cultivator
29	Ranarivony Marcel	Federation TsimolahyAmbohijanahary	President
30	Razafindrakoto Charlotte	FOFIFA/CALA	Director
31	RandriamalalaRodolphe	Commune Ambohijanahary	Mayor

ANNEXE III: **FIVE YEARS WORK PLAN**

COMPONENT	OUTPUT	ACTIVITIES	CHRONOGRAM																				RESPONSABLE
			2013				2014				2015				2016				2017				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
PROJECT INCEPTION	**Official and effective launching of the project**	Organization of project inception workshop	X																				MEF
		Setting up of PMU	**X**																				MEF
		Purchasing of equipment and informatics materials		**X**																			PMU
		Recruitment of STA and Consultant for baseline study	**X**	**X**																			PMU-UNEP-Agric
SCIENTIFIC AND TECHNICAL CAPACITY	**Best Available Technologies and Integrated Resilient Rice Model (MIRR) selected and publicized**	Undertake a participatory comparative analysis of rice production techniques and technologies available in relation to their resilience and cost-effectivenes		**X**																			national rice experts
		Organization of a seminar on resilient rice model (MIRR)		**X**																			international rice experts; national agriculture and rice experts

		Publish technical guidelines for MIRR		**X**	**X**																	internationalrice expert
	Crop models are available for rice vulnerability mapping	Acquire software and deliver training sessions on Oryza 2000 (10 staff at central level)		**X**																		
		Perform data collection for DSSAT and Oryza model population			**X**																	internationalexpert on DSSAT &Oryza 2000
		Develop and publish to alternative models, using DSSAT and Oryza for 2050 and 2100 for the region			**X**																	mappingconsultant& national technical staff on DSSAT &Oryza
		Develop a climate based hydrological model for the Alaotra region for 2050 and 2100						**X**	**X**													nationalhydrological experts
	Updated, dynamic agricultural calendars and climate early warnings taking into account current and projected variability disseminated to local population	Adapt and disseminate agricultural calendars in relation to new climate trends and data, as per agreed methodology							**X**	**X**												grouptraining
		Acquire, install and operate climate and hydrological monitoring equipment for early warnings						**X**														internationalCRM expert
		Ensure the transmission of						**X**				**X**				**X**				**X**		rural radio network

		climate and weather bulletins through radio																					
	Agricultural extension staff trained on climate risk management in an agro-ecosystem context.	Climate Risk Management and agro-ecosystem approach training for decentralized personnel (including application of agro-forestry principles in a rice context)							**X**														national consultants
ADAPTED AND RESILIENT RICE PRODUCTION CYCLE	**Climate resilient varieties selected through participatory field testing**	Pre-select adapted varieties among existing strains (rice and non-rice crops)			**X**																		nationalagricultureresearchers
		Procure inputs and materials (seeds, tools)				**X**			**X**				**X**										national agriculture researchers
		Perform participatory field test of the adapted varieties in relation to identified climate stresses		**X**																			national rice expert
		Monitor the participatory variety selection programme over 2 seasons				**X**																	IRRI & FOFIFA
	An operational multiplication and dissemination scheme for	Participatory variety selection validation (from a shortlist of resistant varieties						**X**															
		Production of pre-base and foundation			**X**																		

	adapted seed varieties	seeds																				
		Multiplication and distribution of certified seeds																				
	Updated fertilization guidelines according to best available standards and taking climate conditions into consideration	Update fertilisation formulas, guideline and packets using climate change and MIRR models, considering socio-economic aspects				**X**			**X**													
		Use locally available fertilizer (ex. compost, manure, agricultural residues, including rice straws and by products			**X**				**X**			**X**										
	Integrated pest management is implemented	Implementation of Integrated Pest Management Best Practices through training and extension						**X**														internationalIPM experts
	Water efficiency, management and conservation technologies and infrastructures are	Rehabilitation of damaged gravitational irrigation infrastructure and canals							**X**			**X**										privatefirm
		Dredging of silted water reservoirs								**X**	**X**											privatefirm
		Installation of new irrigation, drainage										**X**										privatefirm

	implemented	and water conservation structures																				
		Implementation of irrigation and water conservation (including water harvesting) practices adapted to new climate trends and conditions with related training of water users												X	X							group training
	Best available land preparation, production and harvesting techniques disseminated to reduce deforestation, maintain soil fertility and integrity, and to provide adequate growing conditions	Implement Integrated Resilient Rice Model (MIRR) for production		X			X				X				X				X			International rice expert
		Introduce rice-vegetable rotation systems using disease resistant, water efficient resilient crops (leafy vegetables, legumes)						X	X													Group training
		Develop and distribute technological packets and information documents								X				X					X				national rice experts
	Watershied management and rehabilitation in productive landcscape introduced,	Reforestation of degraded slopes and forests, using grasses (vetiver) and participatory management of forest resources						X	X			X	X			X	X						Ministry of Environment and Forests

	including through reforestation, wetlands restoration and protection	Trainingon sustainable agroforestry and landmanagement (including in a climate change context)						X	X			X	X			X	X			X	X		local NGO
	Soil conservation and livestock managemen t techniques adapted to topography and landscape in light of future climate conditions	Adaptation and reintroduction of soil conservation methods for erosion control (tillage, sediment barriers, mulching) in upland and lowland uses						X				X				X				X			
		Training on the sustainable land use of inactive or stage 2 lavakas and tanety agriculture (for upland communities)							X				X				X						
		Assessment of resilience in livestock management within rice cultivation systems and adaptation of practices for resilience, erosion control, and increased productivity								X				X				X					
	Revitalization of producer's cooperatives and water	Training, legal support and provision of administrative means for producers								X				X				X				X	group training

	user associations for collaborative natural resources allocations (e.g land and water) and management	cooperatives and water user associations																				
	Water quality monitoring and management is introduced locally for disease vector control	Introduce local level water quality monitoring methods		**X**	**X**	**X**	**X**					**X**	**X**	**X**	**X**					**X**	**X**	**X**	Ministry of Water
	Increased utilization of rice by-product especially rice straw	Introduction of techniques and technologies for the utilization of rice straws in animal feed and for energy production								**X**				**X**									national agriculture expert; socio-economist; livestock expert
	Post-harvest storage facilities with phytosanitary control, serving as trading points and markets	Rehabilitation of storage facilities using upgraded phytosanitary and climate resilience norms on the basis of an inventory			**X**				**X**				**X**										economist; private sector firm; group training

LEVERAGING POLICY CHANGE	Gaps and possible maladaptations in the current rice policy are identified and recommendations on rice policy reform are made	Create a multi-partner and interministerial task form on rice resilience, including government, NGOs, private sector and local representatives)								**X**				**X**				**X**				**X**	national consultants
		Identify options for upscaling and replication from MIRR application in broader Alaotra basin and in otherregions							**X**				**X**					**X**				**X**	
		Developrecommendations on the ricesector transformation and propose a ricepolicy																**X**				**X**	national consultants
	A report on best practices and lessons learned for rice adaptation in Madagascar	Engage a dialogue on the socio-economic conditions required for project sustainability																				**X**	national consultants

ANNEXE IV: BUDGET

		Expenditure by project component/activity (provide description)	*Insert actualyear	
		Add additional components/activities as required	Add additional years as required	

									Expenditure by calendaryear						
UNEP Budget Line			1	2	3	PM	M&E	Total	Year 1*	Year 2*	Year 3*	Year 4	Year 5	Total	Notes
10	**PERSONNEL COMPONENT**														
	1100	Project personnel													
	1101	projectcoordinator				90,000		90,000	18,000	18,000	18,000	18,000	18,000	90,000	1
	1102	national financial manager				75,000		75,000	15,000	15,000	15,000	15,000	15,000	75,000	2
	1199	**Sub-total**	**-**	**-**	**-**	**165,000**	**-**	**165,000**	**33,000**	**33,000**	**33,000**	**33,000**	**33,000**	**165,000**	
	1200	Consultants												-	
	1201	national agriculture and rice experts	60,000					60,000	60,000	-	-	-	-	60,000	3
	1202	international rice experts	60,000					60,000	60,000	-	-	-	-	60,000	4
	1203	mapping services consultancy (NC)	35,000					35,000	35,000	-	-	-	-	35,000	5
	1204	national hydrological experts	35,000					35,000	-	35,000	-	-	-	35,000	6
	1205	internationalcrm expert	85,000					85,000	-	85,000	-	-	-	85,000	7
	1206	national extension specialists)	20,000					20,000	-	20,000	-	-	-	20,000	8
	1207	national agriculture researchers		75,000				75,000	25,000	25,000	25,000	-	-	75,000	9
	1208	national agriculture experts (4)		50,000				50,000	-	50,000	-	-	-	50,000	10
	1209	national agriculture experts		100,000				100,000	50,000	50,000	-	-	-	100,000	11
	1210	nationalfertilisation expert		65,000				65,000	25,000	25,000	15,000	-	-	65,000	12
	1211	international IPM expert		35,000				35,000	-	35,000	-	-	-	35,000	13
	1212	International Rice Expert (CTA)		150,000				150,000	30,000	30,000	30,000	30,000	30,000	150,000	14
	1213	nationalriziculture experts (4)		60,000				60,000	-	20,000	20,000	20,000	-	60,000	15
	1214	legal expert		20,000				20,000	-	-	20,000	-	-	20,000	16

	1215	national water expert		20,000				20,000	20,000	-	-	-	-	20,000	17
	1216	national agriculture expert		35,000				35,000	-	20,000	15,000	-	-	35,000	18
	1217	socio-economist		40,000				40,000	-	25,000	15,000	-	-	40,000	19
	1218	livestock expert		35,000				35,000	-	20,000	15,000	-	-	35,000	20
	1219	economist		20,000				20,000	20,000	-	-	-	-	20,000	21
	1220	national agriculture policy consultants			80,000			80,000	-	20,000	20,000	20,000	20,000	80,000	22
	1221	national agriculture policy consultants			30,000			30,000	-	-	-	20,000	10,000	30,000	22
	1222	national agriculture policy consultants			30,000			30,000	-	-	-	-	30,000	30,000	22
	1223	national agro-forestry experts	25,000	60,000				85,000	-	45,000	20,000	20,000	-	85,000	23
	1224	Soil conservation consultancy		200,000				200,000	-	50,000	50,000	50,000	50,000	200,000	24
	1225	Resilientlivestock management expertise		70,000				70,000	-	25,000	25,000	20,000	-	70,000	25
	1299	**Sub-total**	**320,000**	**1,035,000**	**140,000**	**-**	**-**	**1,495,000**	**325,000**	**580,000**	**270,000**	**180,000**	**140,000**	**1,495,000**	
	1300	Administrative Support						-							
	1301	administrative support				50,000		50,000	10,000	10,000	10,000	10,000	10,000	50,000	26
								-						-	
								-						-	
	1399	**Sub-total**	**-**	**-**	**-**	**50,000**	**-**	**50,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**50,000**	
	1600	Travel on official business												-	
	1601	Travel				25,000		25,000	5,000	5,000	5,000	5,000	5,000	25,000	27
	1602	travel	20,000					20,000	-	20,000	-	-	-	20,000	28
	1699	**Sub-total**	**20,000**	**-**	**-**	**25,000**	**-**	**45,000**	**5,000**	**25,000**	**5,000**	**5,000**	**5,000**	45,000	

1999	**Component total**		**340,000**	**1,035,000**	**140,000**	**240,000**	**-**	**1,755,000**	**373,000**	**648,000**	**318,000**	**228,000**	**188,000**	**1,755,000**	
														-	
20	**SUB-CONTRACT COMPONENT**													-	
	2100	Sub-contracts (MOUs/LOAs for cooperating agencies)												-	
	2101	sub-contract for extension services		45,000				45,000	-	15,000	15,000	15,000	-	45,000	29
	2102	sub-contract Ministry of forests		255,000				255,000	-	85,000	85,000	85,000	-	255,000	30
	2103	Sub-contract Ministry of water		45,000				45,000	15,000	-	15,000	-	15,000	45,000	31
	2199	**Sub-total**	**-**	**345,000**	**-**	**-**	**-**	**345,000**	**15,000**	**100,000**	**115,000**	**100,000**	**15,000**	**345,000**	
	2200	Sub-contracts (MOUs/LOAs for supporting organizations)												-	
	2201	sub-contract with IRRI (and FOFIFA)		65,000				65,000	65,000	-	-	-	-	65,000	32
	2202	Sub-contract for SLM Community Training		105,000				105,000	-	-	35,000	35,000	35,000	105,000	33
	2203	sub-contract with Rural Radio Network	80,000					80,000	-	20,000	20,000	20,000	20,000	80,000	34
	2299	**Sub-total**	**80,000**	**170,000**	**-**	**-**	**-**	**250,000**	**65,000**	**20,000**	**55,000**	**55,000**	**55,000**	250,000	
	2300	Sub-contracts (for commercial purposes)												-	
	2301	publication services	10,000					10,000	10,000	-	-	-	-	10,000	35
	2302	sub-contract with BIOTECH Madagascar (for Taroka)		185,000				185,000	-	100,000	85,000	-	-	185,000	36
	2303	sub-contract with GUANOMAD (for Guano)		185,000				185,000	-	100,000	85,000	-	-	185,000	37
	2304	sub-contract with water		200,000				200,000	-	100,000	100,000	-	-	200,000	38

		engineering firm													
	2305	sub-contract with civil engineering firm		200,000				200,000	-	200,000	-	-	-	200,000	39
	2306	sub-contract with water engineering firm		50,000				50,000	-	-	50,000	-	-	50,000	40
	2307	sub-contract private sector firm		50,000				50,000	25,000	25,000	-	-	-	50,000	41
	2399	**Sub-total**	**10,000**	**870,000**	**-**	**-**	**-**	**880,000**	**35,000**	**525,000**	**320,000**	**-**	**-**	**880,000**	
2999	**Component total**		**90,000**	**1,385,000**	**-**	**-**	**-**	**1,475,000**	**115,000**	**645,000**	**490,000**	**155,000**	**70,000**	**1,475,000**	
														-	
30	**TRAINING COMPONENT**													-	
	3200	Group training												-	
	3201	training workshop (IRRI)	18,000					18,000	18,000	-	-	-	-	18,000	42
	3202	group training	50,000					50,000	-	50,000	-	-	-	50,000	43
	3203	IPM training workshops		40,000				40,000	-	40,000	-	-	-	40,000	44
	3204	water management training workshops		35,000				35,000	-	-	35,000	-	-	35,000	45
	3205	MIRR training		60,000				60,000	-	60,000	-	-	-	60,000	46
	3206	Water user Association training workshop		20,000				20,000	-	-	20,000	-	-	20,000	47
	3207	training on community-managed reserves		15,000				15,000	-	15,000	-	-	-	15,000	48
	3208	Training and monitoring on adaptation of soil conservation in various land use types		60,000				60,000	-	20,000	20,000	20,000	-	60,000	49
								-						-	
	3299	**Sub-total**	**68,000**	**230,000**	**-**	**-**	**-**	**298,000**	**18,000**	**185,000**	**75,000**	**20,000**	**-**	**298,000**	
	3300	Meetings/Conferences												-	

	3301	MIRR selection and validation workshop	35,000					35,000	35,000	-	-	-	-	35,000	50
	3302	ClimateRisk Management workshop	50,000					50,000	-	50,000	-	-	-	50,000	51
	3303	inception and steering meetings					17,000	17,000	5,000	3,000	3,000	3,000	3,000	17,000	52
	3304	meetings and workshops (replication plan)						-	-	15,000	15,000	15,000	15,000	60,000	53
	3399	**Sub-total**	**85,000**	**-**	**-**	**-**	**17,000**	**102,000**	**40,000**	**68,000**	**18,000**	**18,000**	**18,000**	**162,000**	
3999	**Component total**		**153,000**	**230,000**	**-**	**-**	**17,000**	**400,000**	**58,000**	**253,000**	**93,000**	**38,000**	**18,000**	**460,000**	
														-	
40	**EQUIPMENT AND PREMISES COMPONENT**													-	
	4100	Expendableequipment												-	
	4101	agricultural inputs (seeds, fertilizers, land and tools)		50,000				50,000	50,000	-	-	-	-	50,000	48
	4102	agricultural inputs		300,000				300,000	50,000	100,000	100,000	50,000	-	300,000	48
	4103	trees and seedlings		50,000				50,000	-	25,000	25,000	-	-	50,000	49
	4104	equipment and office supplies		60,000				60,000	-	15,000	15,000	15,000	15,000	60,000	50
	4105	laboratory and expendableequipment		15,000				15,000	5,000	-	5,000	-	5,000	15,000	51
	4106	Incremental operating costs				20,000		20,000	4,000	4,000	4,000	4,000	4,000	20,000	52
	4199	**Sub-total**	**-**	**475,000**	**-**	**20,000**	**-**	**495,000**	**109,000**	**144,000**	**149,000**	**69,000**	**24,000**	**495,000**	
	4200	Non-expendableequipment												-	
	4201	software and hardware acquisition	20,000					20,000	20,000	-	-	-	-	20,000	53

	4202	synopticweather stations	200,000					200,000	-	200,000	-	-	-	200,000	54
	4203	irrigation equipment		90,000				90,000	-	-	90,000	-	-	90,000	55
	4204	equipmentrental		50,000				50,000	-	-	25,000	25,000	-	50,000	56
	4205	equipment and construction material		45,000				45,000	25,000	20,000	-	-	-	45,000	57
	4299	**Sub-total**	**220,000**	**185,000**	**-**	**-**	**-**	**405,000**	**45,000**	**220,000**	**115,000**	**25,000**	**-**	**405,000**	
4999	**Component total**		**220,000**	**660,000**	**-**	**20,000**	**-**	**900,000**	**154,000**	**364,000**	**264,000**	**94,000**	**24,000**	**900,000**	
														-	
50	**MISCELLANEOUS COMPONENT**													-	
	5500	Evaluation												-	
	5501	Baseline					30,000	30,000	30,000	-	-	-	-	30,000	58
		mid-termevaluation					35,000	35,000	-	-	35,000	-	-	35,000	59
		final evaluation					35,000	35,000	-	-	-	-	35,000	35,000	60
	5502	audit					15,000	15,000	3,000	3,000	3,000	3,000	3,000	15,000	61
	5581	0					-	-	-	-	-	-	-	-	
	5599	**Sub-total**	**-**	**-**	**-**	**-**	**115,000**	**115,000**	**33,000**	**3,000**	**38,000**	**3,000**	**38,000**	**115,000**	
5999	**Component total**		**-**	**-**	**-**	**-**	**115,000**	**115,000**	**33,000**	**3,000**	**38,000**	**3,000**	**38,000**	**115,000**	
														-	
99	**GRAND TOTAL**		**803,000**	**3,310,000**	**140,000**	**260,000**	**132,000**	**4,645,000**	**733,000**	**1,913,000**	**1,203,000**	**518,000**	**338,000**	**4,705,000**	
													MIE fee	399,925	
													TOTAL	5,104,925	

ANNEXE V: INSTITUTIONAL ARRANGEMENT

The Ministry of Environment and Forests (MEF) through the Climate Change Directorate (DCC) ensure the coordination of all actions related to climate change in Madagascar. In this sense, the current projectisunder the coordination of the DCC with a Project Management Unit (PMU). This PMU iscomposed by a National Director of the project, a TechnicalCoordinator , a Financial assistant and an administrative assistant.

The MEF worksat central level in close collaboration withconcerned institutions particularly, the ministry of agriculture, the ministry of water, the agricultural research institution (FOFIFA), the forestinstitutions(SNGF). These institutions willberepresented in the Project SteeringCommittee (PSC). The AlaotraMangoroRegion and UNEP willalsoberepresented in this PSC.

Atregionallevel, as recommended by the participant during the inceptionworkshop,the MEF willwork in close collaboration withRegional Direction of rural development (DRDR), Regional Direction of water (DREAU), Regional Direction of Environment an Forest, Regional Direction of FOFIFA and the AlaotraMangoroRegion.

At local level , as recommendedalso by participants during the inception workshop, therewouldbe a platformthat combines representatives of water users, the water federations, local experts in various relevant fields, municipal officials, to ensure coordination and implementation of activities in the field

ANNEXE 6: PROGRESS TO DATE ON PROJECT ESTABLISHMENT AND START-UP ACTIVITIES

Just aftertheprojectinception workshopswhich were heldrespectivelyon 24-25 October 2012 and 13-14 December 2012, the MEFhas establishedtheProject ManagementTeam (PMU) .As mentioned above, the PMUis composed of theNational Project Director, theTechnical Coordinator of theproject, theFinancial AssistantandAdministrative Assistant

On November 2012, the PMU in collaboration with the ministry of agriculture (FOFIFA) and UNEP (Task manager) proceed to the selection of the Senior Technical Adviser for the project (STA) and the International consultant for the baseline study. Actually, these two consultants are selected and contracts will be signed this week (week of 25 feb 2013).

The PMU is now finalizing the five-year work plan, the project procurement plan and the inception reports taking into account of UNEP’s comments.

In addition, the PMU has developed some TORs draft on project activities that will be sent to UNEP for comments before proceeding to the call for applications