





INTRA-ACP GCCA+ PROGRAMME An initiative of the ACP Group of States funded by the European Union's European Development Fund







# PROJECT DOCUMENT MADAGASCAR

**Project Title:** Manitatra 2 – Up scaling CSA through Ecosystem Based Adaptation in Farming's systems to mitigate climate change and to improve food security in two ecosystems of the VAKINANKARATRA region in Madagascar (the Highland and Middle West)

Project Number: 01

Implementing partner: GSDM, Professionnels de l'Agro-écologie

**Key stakeholders:** Ministry of Agriculture and Livestock (MAEP), Ministry of Ecology, Environment and Forestry (MEEF), Directorate of General Meteorology, PAPAM project, NGO's (CEFFEL, APDRA, AVSF), Research institutions (Research platform in partnership SPAD: CIRAD, FOFIFA, FIFAMANOR).

2018

Start Date: XXXXX

BRIEF DESCRIPTION

End Date: 31 December 2020

The Climate Smart Agriculture (CSA) pilot program that is coordinated by the Common Market for East and Southern Africa (COMESA) is part of a regional undertaking involving five (5) Member States (MS). The other MS are Uganda, Seychelles, Swaziland and Zimbabwe. The new program will be implemented during the period 2018-2020. The programme is funded by the EU under the Intra Africa, Caribbean and Pacific countries (Intra ACP) Global Climate Change Alliance plus (GCCA+) programme.

In Madagascar, this program wishes to enhance the experiences and successes of the previous GCCA project (MANITATRA 1) that was implemented during the period 2014 -2016 targeting 4 communes in the Mid-West of the Vakinankaratra region and in 4 communes of the South East.

The main achievements from the previous project included the following: households with enhanced livelihood were improved: e.g. 3,355 farmers (20% women) were practicing CA/CSA in the Mid- West and 3,138 (42% women) in the South-East. Forestry, Agroforestry, CA, CSA and best practices were the most important activities adopted by these farmers. The project has promoted the use of best practices in particular bio-pesticides, composting and repellent plants. Advocacy for CSA have been enhanced through the organization of Field Days (one per region) attended by central and regional Authorities.

The new project called "MANITATRA 2" will target the  $\sqrt{AKINANKARATRA}$  region and will cover two different ecosystems: (*i*) le Mid-West (600 to 1000 m asl) which aims at up scaling the experiences of MANITATRA 1 and will cover new communes and (ii) the Highlands (1200 to 1800 m asl) which is a new

area without activities during MANITATRA 1 but with a high expansion of upland rice (districts of Antsirabe, Antanifotsy and Ambatolampy)

The proposed new project will be up scaling experiences gained during MANITATRA 1 and previous projects. Also experiences from other projects, partners or members of GSDM will be Incorporated in this new project.

Total beneficiaries of the project will be 18,000 farmers of which 15,000 are expected to adopt the technologies they have learnt in the Farmers Field School (FFS).

The following will be achieved with the project:

- Women benefiting the project is estimated at 50%
- Total area under CA is estimated at 2000 ha (500 ha for year 1, 1500 ha year 2 and 2000 ha year 3). Total erosion avoided is, therefore, estimated at 40.000 Metric tons during 3 years (based on average loss of 10 t/ha/year)
- 1,500,000 trees will be planted as forestry, agroforestry or hedgerows. Based on these achievements, the project will reduce emission by increasing the number of trees through afforestation (500,000 trees/year to make it 1.500.000 trees during the project term)
- The project will improve the farmer's ability to climate change adaptation by increasing cropping systems using CSA.
- Among significant benefits of the project will be to buffer the impact of erratic rainfall by soil permanent cover
- The projects will up-scale best practices like the use of bio-pesticides, repellent plants and all technology of composting.
- The project will contribute to the improvement of forages for dairy cattle in the highlands by introducing legumes and other types of forages, by improving cowsheds and by extending the area based on experiences of FIFAMANOR;
- The project will upscale or introduce fish rising in the paddy fields or in ponds based on experiences of APDRA and CIRAD.
- The project will update data on CSA upscaling in some strategic areas of the Country

The expected Results of the project are highlighted below:

Result 1: CSA and Best Practices are up-scaled in two ecosystems of the VAKINANKARATRA region; covering the Highland and Mid- West regions in Madagascar

Result 2: Capacity of various stakeholders is built in Climate Smart Agriculture, Conservation Agriculture and Agroforestry

Result 3: Farmer organizations are supported and linked to various stakeholders in the Agriculture Sector to support sustainability of project results.

#### **GRANT SUMMARY:**

*** · · ·	Total Resources required (EURO)	,	821.090,01
	Total resources allocated (EURO)		
		COMESA	727.271,49
	ć	Other sources:	
		(GSDM own Fund or State fund for taxes)	38 818,52
		FDAR	50.000
		In kind	5.000
		Un funded	

e.

# Agreed by (signature (s):

Implementing Partner	
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Date: 15 06 2018	Mr.

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# List of Acronyms and Abbreviations

ACP	Africa, Caribbean and Pacific countries
AFD	Agence Française de Développement (French Agency For Development)
AGRISUD	French NGO
APDRA	Born in 1996, APDRA Pisciculture Paysanne supports fish farming in southern countries and raises awareness among northern stakeholders of the challenges involved in this activity.
asl	above sea level
AU	African Union
AVSF	Agronomes et Vétérinaires sans Frontières (Agronomists and Veterinarians without borders)
BNCC	Bureau National du Changement Climatique (National Office of Climate Change)
CA	Conservation Agriculture
CAADP	Comprehensive Africa Agriculture Development Programme
CARD	Coalition for African Rice Development
CASEF	Appui aux chaînes de valeur et à la sécurisation foncière (Support to value chains and land security)
CEFFEL	Conseil Expérimentation Formation en Fruit et Légume (Experiment Council Training in Fruit and Vegetables) (association) Centre de Recherche Agronomique pour le Développement (Center for Agronomic Research for
CIRAD	Development)
COMESA	Common Market for East and Southern Africa
CSA	Climate Smart Agriculture
CSA	Centre de Service Agricole (Agricultural Service Center)
DGM	Direction Générale de la Météorologie (General Directorate of Meteorology)
DRAE	Regional Directorate for Agriculture and Livestock
DREEF	Regional Directorate for Ecology, Environment and Forestry
EBA	Ecosystem based Adaptation
EPA	National Public Administration Establishment
EU	European Union
FAO	Food and Agricultural Organization
FDA	Fond de Développement Agricole (Agricultural Development Fund)
FDAR	Fond de Développement Agricole Régional (Regional Agricultural Development Fund)
FFS	Farmers Field School
FIA	Foire Internationale Agricole (International Agricultural Fair)
FIER MADA	Foire internationale de l'économie rurale de Madagascar (International Fair of Rural Economy of Madagascar)
FIFAMANOR	Centre de recherche et de développement rural en agriculture et en élevage est basé à Antsirabe (The Agricultural Research and Development Center for Agriculture and Livestock
FIFATA	Association pour le Deveoppement des Paysans (Association for the Development of Farmers) FOFIFA - CENRADERU - Centre national de Recherche appliquée au développement rural (FOFIFA
FOFIFA	- CENRADERU - National Center for Research in Rural Development )
GCCA +	Global Climate Change Alliance plus
GDP	Gross Domestic Product
GSDM	Formerly "Groupement Semis Direct of Madagascar", changed to " <b>GSDM</b> , <i>Professionnels de l'Agro- écologie</i> " (without development of the acronym GSDM)
IRD	Institut de Recherche pour le Développement (Research Institute for Development)
LF	Lead Farmer
LRI	Laboratoire de Radio Isotope (Radio Isotope Laboratory)
M&E	Monitoring and Evaluation
MEEF	Ministère de l'Ecologie, de l'Environnement et des Forêts (Ministry of Ecology, Environment and Forests)
MEN	Ministère de l'Education Nationale (Ministry of Education)
MPAE	Ministère auprès de la Présidence en charge de l'Agriculture et de l'Elevage (Ministry to the Presidency in charge of Agriculture and Livestock)

MS	Member State
NCATF	National Conservation Agriculture Task Force
NEPAD	New Partnership for Africa's Development
NGO	Non Government Organisation
PAPAM	Projet d'Appui à la Productivité Agricole à Madagascar (Support Project for Agricultural Productivity in Madagascar)
PAPRIZ	JICA project on Irrigated Rice in Madagascar
PMU	Person Month Unit
PND	Plan national de Développement (National Plan for Development)
PNIEP	Plan national d'Investissement Agriculture Elevage et Pêche (National Investment Plan Agriculture Livestock and Fisheries)
PSAEP	Programme Sectoriel Agriculture Elevage et Pêche
ROVA	Ronon'i Vakinankaratra (Milk of Vakinankaratra)
SPAD	Système de Production d'Altitude et Durabilité (Altitude Production System and Sustainability)
SST/TrC	South to South Cooperation Triangular Cooperation
тν	Television
UN	United Nations
UPDR	Unité de Programme du Développement Rural (Rural Development Program Unit)
VFTV	Association FIFATA qui s'occupe des intrants dont les semences (FIFATA association that deals with inputs including seeds)

# I- DEVELOPMENT CHALLENGE

### I.1 Background

Madagascar is an agricultural country in which nearly 80% of the population is rural, involved in agriculture, essentially in rice production and food crops. The Malagasy people are among the largest consumers of rice in the region with a consumption of 138 kg per capita per annum in rural area and 118 kg per capita in the cities (UPDR/FAO, 2001). Eighty per cent of the population are living in rural area and 85% grow rice (Dabat et al, 2005). The agricultural sector contributes 26% of national Gross Domestic Product (GDP) and employs 78% of the labor force. The Agricultural calendar is very sensitive to climatic changes and affects major crops, in particular rice cultivation. The reduction of the production may occur in some regions due to the late start of the rainy season, periods of drought during the rainy season, and hail or flood in some regions.

The area for irrigated rice fields is not enough to face population growth. Farmers are therefore more and more involved in upland rice cultivation. However, growing rice or any rainfed crop in the hillsides (*tanety*) with traditional techniques is very destructive for the soils and creates a lot of erosion. The use of Conservation Agriculture (CA) has been proven to be very efficient to combat erosion and to protect the infrastructure in the low lands. Among CA techniques were the Stylosanthes based CA system and the rotation between high biomass legume crops associated with maize and followed by upland rice. It is now clear that CA has proven to have potential for increasing production and productivity, mitigating climate change and protecting natural resources. In Madagascar, CA techniques are actually promoted to enhance crop production, to respond to environmental issues, especially soil erosion, biodiversity conservation and slash and burn alternatives. Rice being the staple food, farmers are mainly interested in rice-based cropping systems. Data collected from farmers show that CA plots provide better yield and good profitability for farmers compared to conventional tillage under rain-fed conditions. Among the success stories of CA were soil regeneration, decrease of weeds impact (particularly a parasitic one called *Striga asiatica* in the Mid-West), mitigation of climate change and alternatives to slush and burn around protected areas (RAHARISON T. et al, 2012).

#### I.2 Climate change challenges and impacts in Madagascar

Climate change effects vary from region to region in Madagascar. The status and trends of climate change are based on the project study carried out and completed by the Directorate General of Meteorology in 2008 which indicates that:

- Significant increase in temperature has occurred in the South of Madagascar from 1950s and in the North from 1970s.
- High variability in the precipitation pattern whereby the dry season is longer on the East coast and the central highlands (prolonged by 20-60 days in 45 years) and shifting rain season or rainfalls are more intense in the western part of Madagascar.
- The number of extreme weather events (cyclones, droughts, floods) has increased during the period 1994 2005. Since 1994, though the annual frequency of landing cyclones remains unchanged, increase in the frequency of intense ones (>150 km per hour) are recurrent resulting in flooding in many areas like in the South East.

# I.3 CSA practices and technologies in Madagascar (current and those to be promoted in this project)

In Madagascar, the new project called MANITATRA 2 will target the VAKINANKARTRA region and will cover two different ecosystems: (i) the Mid-West (800 to 1100 m above sea level (asl) which aims at up scaling the experiences of MANITATRA 1 and will cover new communes and (ii) the Highlands (1200 to 1800 m asl) which is a new area without activities during MANITATRA 1 but with a high expansion of upland rice.

**The Mid-West of Madagascar**, between 800 and 1100 m asl, has high potential for crop production in terms of available land but with a strong threat for *Striga asiatica* due to the decline of soil organic matter and as a result a decline of soil fertility. Due to recurrent bush firing and mining agriculture practices, there is a lot of erosion accelerating the decline of fertility and also there are almost no more trees for fuel in most of households leading to high use of crop residues for fuel and for livestock. This region has been affected by climate change especially in terms of rainfall pattern such as short rain or erratic rainfall and gulley erosion. Bush fires and cattle free-grazing are among problems of this region. The total area under upland rice is 15,000 ha and increases every year, but majority is still under conventional tillage.

**The Highlands of Vakinankaratra** is a highly populated area (80 to 100 inhabitants per km<sup>2</sup>). Population pressure, high demand in rice (the staple food) and insufficient irrigated paddy fields oblige farmers to increase pressure in the upland for rice production. For the agricultural year 2014-2015, the acreage under upland rice was about 12.000ha (30% more than the previous agricultural year). The good adaptation of one cold tolerant variety from Nepal (Chhomrong Dhan) was one of the reasons for this increase of rain-fed rice. However, the current conventional practice is based on mining agriculture practices leading to soil fertility decline and soil erosion during high rainfall intensity. Lack of rotations with legume crops and no use of Agroforestry and quality manure are not in favor of sustainable agriculture.

## I.4 Lessons learned

The previous GCCA project (MANITATRA 1), a pilot Project that was implemented during the period 2014 - 2016, offers many lessons. This pilot project, although too short for a development project, achieved success, as acknowledged by the farmers. These successes are highlighted below:

- Significant innovations have been adopted and need to be up-scaled in other districts and communes in Madagascar
- Some innovations may be transferred to the COMESA region, such as CA system to combat Striga, compost and use of repellent plants and orange flesh sweet sweet potatoes.
- For future interventions we strongly recommend that the duration of a CSA project be at least 3 years because CA will show significant changes after 3 years.
  - Recommendations to streamline future interventions and support for example:
    - Policy orientation:
      - Advocacy for CSA at regional and national level
      - All programmes/projects should include CSA
      - Holistic vision of CSA towards ecosystem based adaptation: CA + Best practices + fuel at the farm level
    - Capacity building:
      - CSA be taught at the secondary school to prepare future farmers which is now implemented by GSDM under the PAPAM project
      - More capacity building for technicians and higher staff which is now implemented by GSDM in 5 professional training centers under the PAPAM project
- The use of science in promoting CSA: more research in CSA
- Seeds of cover crops and plantlets for Forestry and Agroforestry and some special equipment like rollers for Stylosanthes have to be supported by the project.
- Finally, it is clear that the implementation of a project needs involvement of diverse stakeholders, including public actors, private sectors, in different level (local, national, regional) farmers, trainers as well as plantlets producers.

# **II- STRATEGY**

#### II.1 Project Alignment

The project is aligned to the National Plan for Development (PND 2015 - 2019). It is clearly cited in the PND and in its strategic priority or Axis N°5: "Enhancing Natural Capital and Strengthening Risk Resilience of disasters". The gender dimension and the principles of equity and sustainability are integrated across the five strategic axes of this PND.

In Axis N°5, the valorization of natural capital and strengthening resilience to the risks of disasters is based on the observation that the country's economic growth is highly dependent on the situation of the environment and natural capital. Axis 5 is focused on putting in place appropriate arrangements and strategies, and targeted to preserve natural capital, reduce the negative effects of climate change and strengthen the resilience of the populations and territories concerned. The project will bring a part of responsibility on this appropriate arrangements and strategies.

This Project is also aligned to the Sectorial policy and the National plan for Investment in Agriculture, Livestock and Fisheries (PSAEP/PNIAEP 2016-2020), itself aligned the New Partnership for Africa's Development (NEPAD) and Comprehensive Africa Agriculture Development Programme (CAADP).

The first programme of this national plan PSAEP/PNIAEP is the "Programme 1: Rational and Sustainable Exploitation of Production Spaces and Resources". Sub-programme 2 of this programme aims to preserve spaces and make integrated developments. It is clearly cited in this sub-programme that: *"For agriculture, several successful experiments will be pursued, especially for soil conservation as well as watershed protection. The promotion of conservation agriculture based on agroecology, including organic farming, will be scaled up"*. This is the main objective of this Project.

The second programme of the PSAEP/PNIAEP aims at the sustained Improvement of Productivity and Promotion of Competitive Production Systems. The objective is to increase sustainably the productivity and promote competitive production systems by considering all production factors and different services to producers. Sub-programme 2.3 of this second programme is "*Mitigating Disaster and Hazard Risks*". It is planned that appropriate measures will be put in place to adapt agricultural infrastructure to climate disturbances and extreme events, such as cyclone, drought, flood, locust invasion. Sub-program 2.4 is "*Increase rice production*". This sub-programme tried to have an effect on increasing rice productivity and production. The "Manitatra 2" Project takes part of this second Programme by developing system to adapt to climate disturbances and to increase rice production through accompanying upland rice development systems.

This Project is also aligned to the National Action Plan to Combat Desertification, which is itself aligned with the 2008-2018 Strategic Framework Plan by Countries Parties to the UN Convention to combat desertification. The second Strategic orientation of this National Action Plan is "Improving productivity and restoration of concerned areas". Even if the Mid-West of Madagascar is not considered as a priority area, it still is considered as an affected area by desertification of the mode of exploitation if it is not improved. In this Strategic orientation 2, many actions are planned to be developed, such as: "A development and management plan of watershed is developed involving all local actors, appropriate technologies for sustainable land management are applied and up-scaled, actions will be carried out to generate additional income for the local communities, the impacts of erosion are decreasing, reforestation and agro-forestry activities in the target areas are carried out, etc.". This Project is in line with these objectives.

This Project is finally aligned to the National Adaptation Action Programme for Climate Change and the National policy to fight against Climate Change. The implementation of Madagascar's Climate Change Policy requires measures (strategic axis), namely: i) strengthening of climate change adaptation actions taking into account real needs of the country; ii) the implementation of mitigation actions for the development of the country; iii) integration of climate change at all levels (empowerment of the different parties at all levels in the fight against climate change, strengthening the integration of climate change issues into the different sectors, amplification of Information, Education and Communication on the climate change); iv) the development of sustainable financing instruments; and v) the promotion of research, the development and transfer of technologies and the adaptive management. This Project will be based on these 5 strategic axis of the National policy.

# II.2 Theory of change and Intervention logic

Theory of Change is essentially a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. For the Manitatra 2 Project, the final and long-term goal is the sustainable development, through poverty reduction, food security, climate change adaptation and natural resources protection. To achieve this long-term goal, the specific objective of the project is "Ecosystem-based adaptation up scaled for the agriculture development and soil and forest smart conservation in the Mid-West and the Highlands of the VAKINANKARATRA Region, Madagascar".

To achieve the project goal and the project objective, GSDM will work with many varied stakeholders. GSDM will work closely with the government through the responsible Ministries (essentially the Ministry of Agriculture and Livestock, the Ministry of Ecology and Environment and the Ministry of Meteorology). GSDM will further work with different kinds of territorial actors, both public (Regional branch of Ministries, State promote development mechanisms such as FDAR, CSA<sup>1</sup>) and private sector actors (seed and plantlet provider, manufacturers, NGOs). The GSDM will play the role of CSA extension, with the help of key stakeholders specialized in CSA technologies. GSM will also work with key researchers.

The barriers to overcome are numerous as shown in the risk and assumptions section of this document. The suggested corrective measures are also developed in this proposal.

The activities to meet the project goal are varied. For example: GSDM will link the on- ground activities with research and development, through training activities and capitalization of the action. GSDM will also link public policy advocacy between the public and private sector. The GSDM also plans to develop the lead farmers with skills, seeds and plantlets will be provided. GSDM will also develop communication and visibility actions to accompany the extension, sensitization and advocacy actions.

Advocacy for CSA will be through field days which will be very helpful in engaging the local and national authority for up-scaling and to mainstream CSA in other projects.

There is a need to have a national data base on CSA and ecosystem-based adaptation in the Country. This is lacking for Madagascar and need to be done at national level to support advocacy.

#### Expected results to achieve the goal are:

Result 1: CSA and Best Practices are up-scaled in two ecosystems of the VAKINANKARATRA region; covering the Highland and Mid- West regions in Madagascar

Result 2: Capacity of various stakeholders is built in Climate Smart Agriculture, Conservation Agriculture and Agroforestry

Result 3: Farmer organizations are supported and linked to various stakeholders in the Agriculture Sector to support sustainability of project results

The figure below shows our pathway of change.

<sup>&</sup>lt;sup>1</sup> CSA: Centre de Services Agricoles: meaning Agricultural Service provider

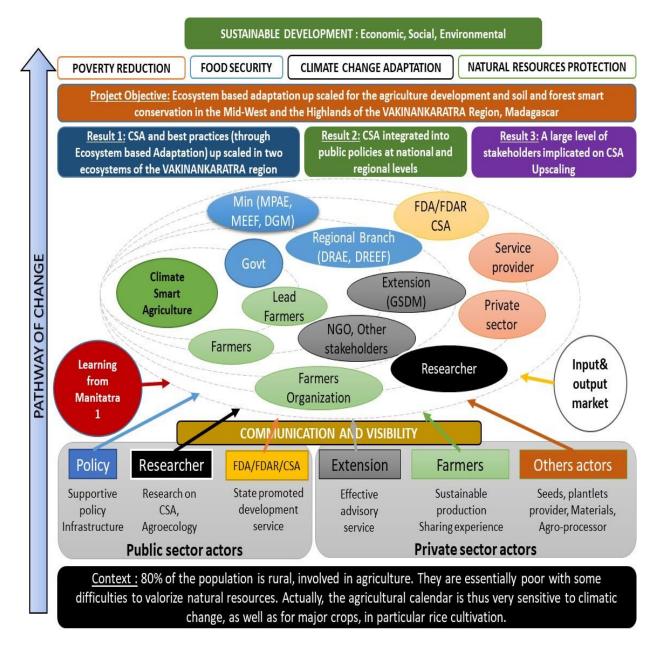


Figure 1: Pathway of change

## II.3 Strategic Interventions

The strategic interventions will be based on GSDM experiences in managing projects.

GSDM will develop the "farmer-to-farmer approach" through lead farmers to help the local community. Selection and capacity building of the lead farmers will be done by the technicians and experts from other stakeholders. The lead farmers will train their peer farmers as part of their responsibilities. Among the lead farmers, GSDM will solicit women and youth.

Exchange visits will be organized to complete these capacity building sessions for technicians and farmers.

In terms of beneficiaries, the project is expected to target at least 50% women and 50% men. GSDM will collaborate with PAPAM project in the same region that GSDM has implemented in since 2017 as part of a programme for streamlining Agro-ecology in secondary schools. Young farmers from the project will be exposed to this programme as part of their capacity building.

Knowledge Exchange and management will be shared by leaflets, roll ups, technical manuals, training manuals printed on tarpaulin for field training by technicians and lead farmers.

A *Communication Plan* will be developed which includes radio, TV and participation in many national and regional events like Agricultural fora, workshops and conferences. Films on the project achievements will be elaborated and shared in different means.

For mass communication and advocacy, GSDM will continue updating the following websites:

- <u>http://gsdm-mg.org/</u>
- https://www.facebook.com/GSDM-838300569533063/
- <u>http://open-library.cirad.fr/gsdm/</u>
- https://www.youtube.com/results?search\_query=GSDM

# **III- OBJECTIVES, RESULTS AND PARTNERSHIPS**

## III.1 Project Objective

The project main objective is: to support the up scaling of CSA in order to mitigate climate change and to improve food security in Madagascar.

#### III.2 Specific objective

Ecosystem-based adaptation is up scaled for agriculture development and soil and forest smart conservation in the Mid-West and the Highlands of the VAKINANKARATRA Region, Madagascar.

#### III.3 Project Results

The project will aim to undertake the following interventions indicated as Result 1 to 3 as described below:

#### III.3.1 <u>Result 1: CSA and Best practices are up scaled in two ecosystems of the VAKINANKARATRA</u> region, covering the Highland and Middle West regions in Madagascar

To achieve this Result, some of the best practices from the MANITATRA 1 project will be upscaled or replicated in the 2 regions. The following activities are therefore proposed:

#### Activities

- Conduct awareness raising, exchange visits and field days to facilitate experience sharing and learning between the beneficiaries on the new project and the ones on the previous project. Some of the exchange visits will take place in the training sites of GSDM. The exchange visits will also target policy makers and development actors (technicians) and farmers in COMESA and other regions
- 2. Upscale Conservation Agriculture to support the growing of upland rice and other crops
- 3. Upscale agroforestry and forestation (equipment and seed support to nurseryman and adopting farmers)
- 4. Promote other best practices (bio-pesticides and repellent plants, technology of composting, improved organic fertilizers, forages, and species for food safety as orange flesh sweet sweetpotatoes..., regenerative income activity as vegetables...)
- 5. Collect data on CSA in some strategic area at National level in a view to update data on upscaling of CSA and best practices in the Country
- 6. Purchase principal mean for upscaling activity

#### Indicators of Progress

- i. Number of participants in exchanges visits inside communes
- ii. Number of participants exchanges visits between commune
- iii. Acreage of full Conservation Agriculture (ha of CA)
- iv. Number of farmers provided seeds of cover crops
- v. Number of group of farmers provided stylosanthes rollers
- vi. Number on tree nurserymen/women supported
- vii. Number of trees plantlets for reforestation (Acacia, eucalyptus...)
- viii. Number of fruit plantlets for adopting farmers
- ix. Number of farmers provided seeds of hedgerows (Cajanus, Tephrosia....)
- x. Number of farmers provided seeds of mucuna, crotalaire, others plants used as biopesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)
- xi. Quantity of worms for composting

- xii. Number of dairy farmers benefiting improved cowsheds for quality manure for composting
- xiii. Number farmers provided seeds of forage (grasses and legumes and off season forage...) and food safety plants (orange flesh sweetpotatoes) based on experiences of FIFAMANOR
- xiv. Number of farmers provided equipment and fry for fish raising in the paddy field or in ponds (based on the experiences of APDRA and CIRAD)
- xv. Number of expertise contract to conduct National survey in some strategic agro-ecological areas
- xvi. Number of convention contracting with CIRAD to integrate data in MANAMORA database
- xvii. Number of DRAE trained in the use of the data base MANAMORA
- xviii. Number of equipment for field team (technician and lead farmers)

ACTIVITIES	SUB- ACTIVITIES	PROCESS INDICATORS	OUTPUTS/ INDICATORS OF SUCCESS
<b>Activity 1.1</b> : Conduct awareness raising, exchange visits and field	Exchanges visits inside communes	8000 farmers participating in exchanges visits inside communes	
days	Exchanges visits between communes	500 farmers participating in exchanges visits between communes	
Activity 1.2: Upscale Conservation Agriculture to support the growing of	Provide seeds of cover crops (mucuna, stylosanthes, cowpea)	5000 beneficiaries of seeds of cover crops	
upland rice and other crops	Support group of farmers for stylosanthes rollers	5 group of farmers for stylosanthes farmers	
Activity 1.3: Upscale	Support tree nurserymen (potting bags, other materials)	50 nurserymen supported	CSA and best practices
agroforestry and forestation (equipment and seed support to nurserymen and adopting farmers)	Support adopting farmers in tree plantlets for reforestation (Acacia, Eucalyptus)	1 500 000 tree plantlets	are up scaled in two ecosystems of the Vakinankaratra region in Madagascar: 18 000 farmers are trained of which 15 000 are expected to adopt the technologies they have learnt in the Farmers Field School (FFS). 50% of beneficiaries are women 2 000 ha in CA (500 ha for year 1, 1 500 ha year 2 and 2000 ha year 3). 1.500.000 trees planted as forestry, agroforestry or hedgerows.
	Support adopting farmers in fruit plantlets	50 000 fruit tree plantlets distributed	
	Provide seeds of mucuna, crotalaria, others plants used as bio- pesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)	5 000 farmers provided for seeds of plants used as bio-pesticides/repellent plants	
Activity 1 4: Dromoto	Provide worms for composting	10 kg of worms for composting distributed to farmers	
Activity 1.4: Promote other best practices (bio- pesticides and repellent plants, technology of	Participate to improve cowsheds for quality manure and composting	300 cowsheds improved for quality manure and for good hygiene of dairy cows	
composting, improved organic fertilizers, forages, and species for food safety as orange flesh sweet sweetpotatoes, regenerative income activity as vegetables)	Provide seeds of forage (grasses and legumes and off season forage) based on experiences of FIFAMANOR		
	Provide plants of orange flesh sweetpotatoes based on experiences of FIFAMANOR	of orange flesh sweetpotatoes cuttings	
	Provide fry and other equipment for farmers for fish raising in the paddy field or in ponds (base on the experiences of APDRA and CIRAD)	150 farmers provided fry and other equipment for fish raising	

Table 1: Activities, sub-activities	, process indicators,	outputs and indicators of	f success for Result 1
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Activity 1.5: Collect data on CSA in some strategic area at National level in a view to update data on upscaling of CSA and best practices in the Country	Contract with a firm to conduct National survey in some strategic agro- ecological areas	1 Expertise contract to conduct National survey	Data on CSA up scaling updated in some strategic areas of the Country. The database MANAMORA improved and transferred to the DRAE's in strategic areas Data on CSA updated at regional and national level
	Integrate data in MANAMORA database - and include database improvement by contracting with CIRAD	1 contract with CIRAD to integrate data in MANAMORA database - and include database improvement	
	Train regional directorates of MPAE (DRAE) in the use of the data base MANAMORA	1 training in the use of the data base MANAMORA and	
	National database transfer to DRAE (Ministry regional branch)	transfer to regional directorates of MPAE/DRAE	regional and national level
Activity 1.6: Purchase principal mean for upscaling activity	Number of equipment for field team ( technician and lead farmers)	8 motos 50 bicycles	Field personnel and lead farmers equipped

#### III.3.2 <u>Result 2: Capacity on various stakeholders in built in Climate Smart Agriculture Conservation</u> (Conservation Agriculture and Agroforestry)

Result 2 will focus on building CSA, CA and AF capacity among all stakeholders in the agriculture sector. These will include the farmers, nurserymen, local service providers and development actors. Secondary school students will also be targeted thereby exposing the youth to good farming practices that they will use in future. The following activities are proposed

#### Activities

- 1. Train nurserymen/women in the technology of tree nurseries and in the choice of the appropriate tree species
- 2. Train lead farmers and farmers in CSA, CA agroforestry and forestation
- 3. Train secondary school students in CSA, CA agroforestry and forestation
- 4. Organize training sessions targeting development actors such as farmer's organizations, NGO and services providers
- 5. Involve regional Directorate of Meteorology in Climate Smart Agriculture Conservation Agriculture and Agroforestry
- 6. Involve the Ministry of Agriculture and livestock (MPAE) and Ministry of Environment and Forestry (MEEF) and regional directorates
- 7. Participate to CSA integration into public policies

#### Indicators of progress

- i. Number of Nurserymen/women trained (disaggregated by gender)
- ii. Number of farmers trained (disaggregated by gender)
- iii. Number of diagnosis to select beneficiary schools
- iv. Number of Events to engage each parties and to sign commitment
- v. Number of secondary school reached
- vi. Number of session organized for training of Ministry Branch (OEMC/DREMC/BEMC)
- vii. Number of session organized for training of teachers (ToT)
- viii. Number of film for communication produced
- ix. Number of cartoon strips produced for school students
- x. Number of competition organized for best school
- xi. Number of participants from development actors trained (FOs, NGO, local service provider)
- xii. Number of participants to exchange visit in the training sites of GSDM
- xiii. Number of local stakeholders sensitized on Climate change by regional Meteorology officer
- xiv. Number of information bulletins shared and distributed

ACTIVITIES	SUB- ACTIVITIES	PROCESS INDICATORS	OUTPUTS/ INDICATORS OF SUCCESS	
Activity 2.1: Train nurseryman in the technology of tree nurseries and in the choice of the appropriate tree species;	Train nurserymen/ women	50 nurserymen/women trained	Capacity in CSA built for: - 50 nurseryman - 50 lead farmers - 12 600 adopting farmers	
Activity 2.2 . Train load	Train Lead farmers ( by project Technicians and others stakeholders)	50 Lead farmers trained		
Activity 2.2 : Train lead farmers and farmers in CSA, CA agroforestry and forestation	Support cost of farmers training by Lead farmers (farmer to farmer approach, based on man- day spent on training of their peer farmers)	Cost of 12 600 farmers training by Lead farmers supported		
	Make diagnosis to select beneficiary schools	1 diagnosis to select beneficiary schools		
	Number of events organized	2 events organized with commitment charter event		
	Organize training for Ministry Branch ( OEMC/DREMC/BEMC)	1 session of training for Ministry Branch		
	Train teacher's (3 sessions of training)	3 sessions training of Teachers (ToT)	6 old <sup>2</sup> secondary schools accompanied in CSA 1007 students trained, 500 parents sensitized 6 new <sup>3</sup> secondary schools trained and accompanied 1200 new Students trained, 600 parents sensitized	
Activity 2.3: Train	Training Tools (tarpauling, booklet, teacher guideline, langage-photo) - 6 new schools	6 sets of training tools targeting 6 schools		
	Produce and edit Communication tools (tarpaulin, Roll up)	2 sets of communication tools produced and edited		
secondary school students in CSA, CA agroforestry	Produce Film for communication	1 film of 30 mn produced during 3 years		
and forestation	Produce Cartoon strips for school children	1 cartoon strips produced		
	Provide some kits and inputs for demonstration	6 sets of kits and inputs for demonstration plots targeting 6 schools		
	Accompany students in the implementation	6 schools accompanied		
	Exchange visits between School	3 exchanges visits realised		
	Organize competition of best school (demonstration plot and student knowledge)	1 competition organized		
	Organize annual workshop ( capitalisation, experience exchange)	1 workshop per year organized		
Activity 2.4: Organize training sessions targeting development actors such as farmers organizations,	Organize training sessions targeting development actors as farmers organizations, NGO, local service provider	3 training sessions 20 participants per session	Farmers organizations, NGO and services providers trained in CSA	

 $<sup>^2</sup>$  Old secondary schools are the ones which have been supported as pilot schools in 2017/2018

 $<sup>^{3}</sup>$  New secondary schools are the ones to be selected under MANITATRA 2 project

NGO, and services providers	Organize exchange visit in the training sites of GSDM	60 participants Exchange visit in the training sites of GSDM organized	
Activity 2.5: Involve regional Directorate of Meteorology in Climate smart Agriculture Conservation (Agriculture and Agroforestry)	organize Information/sensitization of local stakeholders	3 sessions of Information/sensitization of local stakeholders organized	Project staff, lead farmers and adopting farmers informed in prevailing climate data
	Organize Training workshops for local stakeholders	3 training workshop organized	
	Provide Regional Meteorological information bulletins (quarterly)	800 bulletins of Regional Meteorological information provided	
Activity 2.6: Involve the Ministry of Agriculture and livestock (MPAE) and Ministry of Environment and Forestry (MEEF) or regional directorates	Organize field collaboration and exchange targeting MPAE and MEEF authorities	1 exchange per year	Authorities sensitized and informed on project achievements.
	Organize field collaboration and exchange targeting regional directorates ( DRAE and DREEF)	1 exchange per year	
Activity 2.7: Integration of CSA into public policies	Participate to workshops or meeting to advocate CSA	3 workshop organized to advocate CSA	CSA integrated into public policies
	Participate to workshops or meeting on climate change to advocate CSA	3 workshop organized on climate change to advocate CSA	

#### III.3.3 Result 3 Farmer organizations are supported and linked to various stakeholders in Agriculture

Farmers Organizations (FOs) play a very important role in ensuring achievement and sustainability of project results. They also offer good opportunities for enabling their members access markets and obtain good prices for their commodities. Well-functioning FOs, will also link their farmers to financial service providers and agricultural inputs suppliers. Therefore, under this Result, FOs will be supported to create and maintain linkages with the various stakeholders along the value chain in the Agriculture sector. The following activities are specified:

#### Activities

- 1. Support FOs to participate in the development of the National Action Plan for Climate Change as well as other Climate Change Frameworks
- 2. Sharing experience at the regional level (COMESA and other regions) integrating political actors and development actors
- 3. Support FOs to maintain continuous exchange with FDA and FDAR (state promoted development mechanisms in national level) in order to make a link with government development orientation
- 4. Ensure that the FOs obtain permanent utilization of CSA or Agricultural Service Center (state promoted development mechanism in District level) to make a link between farmers and agricultural service
- 5. Support the FOs on their collaborative contracting with various partners such as APDRA, FIFAMANOR, CEFFEL, AVSF AGRISUD and PAPAM in various interventions

#### Indicators of progress

- i. Number of participants informed on Climate Change framework
- ii. Number of participants on exchange visits organized to target policy makers, development actors (technicians) and farmers in COMESA and other regions
- iii. Number FOs benefiting finance from FDAR
- iv. Number of FOs on rice/fish ecosystem trained by APDRA
- v. Number of FOs trained on dairy cattle, improved cowsheds and forages by contracting with FIFAMANOR
- vi. Number of FOs trained on market gardening and livestock by contracting with AVSF (targeting mainly women)
- vii. Number of FOs trained on FFS School approach as developed by PAPAM project by AGRISUD

ACTIVITIES	SUB- ACTIVITIES	PROCESS INDICATORS	OUTPUTS/INDICATORS OF SUCCESS		
development in the National Action Plan for Climate Change as well as		3 sessions of training organized to actors development as farmers organizations, NGO, local service provider	90 participants informed on Climate Change framework		
Activity 3.2. Sharing experience at the regional level (COMESA and other regions) integrating political actors and development actors	Organize exchange visits targeting policy makers, development actors (technicians) and farmers in COMESA and other regions	1 exchange visits organized to target policy makers, development actors	5 participants on exchange visits organized to target policy makers, development actors (technicians) and farmers in COMESA and other regions		
<b>Activity 3.3</b> . Support FOs to maintain continuous exchange with FDA and FDAR (state promoted development mechanisms)	Permanent exchange with FDA (state promoted development device in national level) in order to make a link with government development orientation	3 years for intervention to permanent exchange with FDA			
development mechanisms in national level) in order to make a link between farmers and agricultural services	Permanent exchange with FDAR (state promoted development device in regional level) in order to make a link with government development orientation	3 years for intervention to permanent exchange with FDAR	90 FOs projects financed by FDAR		
Activity 3.4: Ensure that the FOs obtain permanent utilization of the Agricultural Service Provider (state promoted development mecanisms in national level) to make a link between the farmers and the agricultural services	Permanent utilization of CSA or Agricultural Service Center (state promoted development mechanism in District level) to make a link between farmers and agricultural service	3 years for permanent utilization of CSA or Agricultural Service Center			
	Built capacity of Fos on rice/fish ecosystem by contracting with APDRA	2 years for intervention to Built capacity of Fos on rice/fish ecosystem by contracting with APDRA			
Activity 2 5, Support 500	Built capacity of FOs on dairy cattle and forages by contracting with FIFAMANOR	2 years for intervention for built capacity of FOs on dairy cattle and forages by contracting with FIFAMANOR	Capacity of 100 FOs and specially women FOs		
Activity 3.5: Support FOs on their collaborative contracting with various partners such as APDRA, FIFAMANOR, CEFFEL, AVSE_ACEPISUD and	Built capacity of FOs on market gardening and livestock by contracting with AVSF (targeting mainly women)	2 years for intervention to Built capacity of FOs on market gardening and livestock by contracting with AVSF	strengthened in : - rice/fish ecosystem by contracting with APDRA - dairy cattle and		
AVSF, AGRISUD and PAPAM in various interventions	Built capacity of FOs on FFS School approach as developed by PAPAM project by AGRISUD	2 years for intervention to Built capacity of FOs on FFS School approach as developed by PAPAM project by AGRISUD	forages by contracting with FIFAMANOR - market gardening and livestock by		
	Built capacity of FOs on Best practices, bio- pesticides and fruit trees by contracting with CEFFEL	2 years for intervention to Built capacity of FOs on Best practices, bio-pesticides and fruit trees by contracting with CEFFEL	contracting with AVSF - Best practices, bio- pesticides and fruit trees		

—			
Table 3: Activities, sub-activities,	process indicators	outputs and indicators	of success for Result 3
	process manualone,	oulpulo una maiouloro	01 0000000 101 11000010

	- FFS School
	approach as
	developed

#### III.3.4 Promote increased project awareness

Communication and CSA visibility will be promoted throughout implementation of the project. Three (3) types of communication and visibility actions are planned during this project:

- Activity 4.1. Visibility and communication events organization
- Activity 4.2. Publications and broadcasting.
- Activity 4.3. Documentaries design and edition

7	Table 4:	Activities,	sub-activities,	process	indicators,	outputs and	d indicator	rs of	success f	or C	Communication	

ACTIVITIES	SUB- ACTIVITIES	PROCESS INDICATORS	OUTPUTS/INDICATORS OF SUCCESS
Activity 4.1. Visibility and communication events	Organize regional field days targeting government authorities and development actors	1 Regional field days targeting government authorities and development actors	CSA advocated for
organization	communication per year	Communication tools as streamers, roll up and mass	national and regional authorities
	Broadcasting on national TV	2 Broadcasting on national TV	
Activity 4.2. Publications and broadcasting	Broadcasting on national Radio	30 Broadcasting on national Radio	
and broadcasting	Invite journalists to CSA	Event Frequency	
	events	Estimated number of journalists	
			CSA up scaling
Activity 4.3.	Design and edit documents and tools for technicians and farmers	1 document and tools edited	disseminated on TV, radio and news papers
Documentaries design and edition	Produce films for each project events	3 films edited	
	Produce Capitalization leaflets	1 capitalization document produced	

#### III.4 Resources Required to Achieve the Expected Results

To achieve the above expected Results, the project will require a total finding of Euro 727,272.73. Human resources will also be required to support the implementation of the project. For the Manitatra 2 Project, there are 2 types of Human resources required: specific personnel recruited for the project and the key senior staff by GSDM who will undertake project back-stopping.

#### (a) Specific Personel

The following specific Personnel will be recruited on a full-time basis:

- 01 Project Leader
- 01 Assistant to the Project Leader
- 06 technicians (based in a Commune level)
- 50 Lead farmers (based in Local level)

#### b) Key staff of GSDM

The following GSDM key staff will work part- time on the project to undertake project- backstopping:

- Director 02 months per year
- 01 Agronomist 02 months per year
- 02 Senior Agronomists Trainers 2 months per year each;
- 01 Agro economist 2 months per year

- 01 Communication Officer 2 months per year
- 01 Senior Agronomist Vakinankaratra 2 months per year

In addition to the above human resources, the following equipment and materials will be required:

- 08 motorcycles for Project leader, 01 Assistant project leader and 06 Technicians
- 50 bicycles for lead farmers
- 04 laptops
- 02 printers/scanners/photocopiers
- 02 cameras
- 02 Video-projectors
- Other operating costs

#### III.5 Partnerships and Stakeholder Engagement

As it is specified in the theory of change and intervention logic, a large scale of stakeholders will participate in this Project.

#### III.5.1 Partners of the Project

# III.5.1.1 Governments Ministries and institutions partners involved in implementing the project:

- 1. MPAE and his regional office, DRAE (Agriculture and Livestock)
- 2. MEEF and his regional office DREEF (Environment, Ecology and Forestry)
- 3. MEEF as Focal point for Land Degradation and Desertification
- 4. MEEF/DGE as focal point for Global Environment Facility
- 5. MEN and his regional offices DREN and CISCO (Education)
- 6. DGM and his regional office (Meteorology)
- 7. BNCC as Focal point for Green Climate Fund (National Office for Climate Change).
- 8. FOFIFA (national institution for Ag Research)
- 9. FIFAMANOR (national institution for research on dairy cattle, tuber crops and cereals).
- 10. LRI and University of Antananarivo

#### III.5.1.2 Non-Government organizations partners:

- 1. CEFFEL: Fruit trees and vegetables and best practices
- 2. APDRA: fish rising in paddy fields or in ponds

#### III.5.1.3 International organizations:

- 1. CIRAD
- 2. Africa Rice
- 3. IRD

#### III.5.1.4 CBO' and farmers Associations beneficiaries:

- 1. Seed growers (Vinany)
- 2. Nurserymen
- 3. FIFATA
- 4. VFTV
- 5. ROVA

#### III.5.2 Projects

The following projects in the Vakinankaratra will offer opportunity for synergising for MANITATRA 2.

#### III.5.2.1 PAPAM project\_(on-going project)

The project aims to strengthen the capacity of Malagasy farms to develop production and revenues by integrating opportunities related to **agro-ecology**. The PAPAM project is funded by AFD in 4 regions including the Vakinankaratra for €7 millions and GSDM is implementing part of this project.

The objectives of this project are as follows:

- Develop support services for farmers and their organizations (advice, training, investments). It will strengthen the system through the pursuit of support to the Vakinankaratra Regional Agricultural Development Fund (FDAR), the creation of a fund in the Alaotra-Mangoro region and support for the operationalization of the Development Fund National Agricultural Fund (FDA).
- To sustainably improve the productivity of agricultural holdings, in particular through diversification and **agro-ecological intensification** of production systems.

#### III.5.2.2 CASEF (World Bank project, on-going project)

The objective of the Agriculture Rural Growth and Land Management Project for Madagascar is 'to improve rural land tenure security and access to markets of targeted farming households in selected agricultural value chains in the project areas, and to provide immediate and effective response to an eligible crisis or emergency'.

#### III.5.2.3 PAPRIZ (JICA Project, CARD) on-going project

JICA has launched a second phase of PAPRIZ (support to irrigated rice) in many regions including the VAKINANKARATRA. "The PAPRIZ II project integrates several aspects such as the environment, the standard of living of the beneficiaries, the social, etc. The PAPRIZ II project is funded with \$ 4.5 million and will be implemented over 4 years in 9 regions.

#### III.5.2.4 EcoAfrica (AU Funded project, on-going project)

Research project funded by AU and implemented by a consortium of national and international research organisations in the Vakinankaratra region: research on cropping systems, on rice breeding, pests and diseases in the Mid-West. All up-land rice varieties diffused in the Vakinankaratra are from this consortium of research.

#### III.5.2.5 APDRA (French NGO, on-going project)

In order to contribute significantly to strengthening the food security of vulnerable populations, APDRA has been supporting the development of smallholder fish farming in Madagascar for more than 10 years. In the Highlands, its objective is to improve access to carp fry and to develop rice-fish farming in the most isolated areas. Finally, in the vicinity of Antananarivo, the capital, APDRA works on the production and marketing of quality fish.

#### III.6 Risks and Assumptions

As with any project involving multiple partners in multiple levels, and targeting different population segments, there are inherent risks involved in implementing and sustaining project activities. The main potential risks and assumptions that could affect the smooth running of the proposed project are summarized below, together with mitigation strategies.

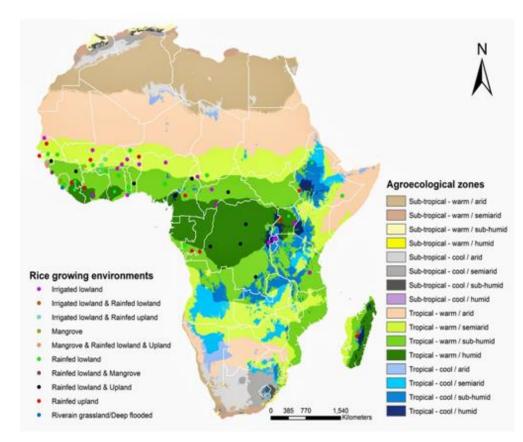
Risks	Level of Risk	Mitigation strategies and actions
1. Technical risk		
1.1. Different competence levels between new recruited teams especially on CSA (EBA) practices	Medium	Rigorous recruitment process, Transfer and reinforcement of knowhow; Training Backstopping by GSDM senior staff
1.2. Reluctance of final beneficiaries	Medium	Good management of FFS plots and Lead Farmers training, working on good tools
1.3. Geographic distances and communication difficulties	Low	Regular contact and exchange between GSDM key staff and local staff, regular mission by GSDM key staff
1.4. Tight deadline for activities	Medium	Careful planning, Monitoring
1.5. Current data (and database) disparities in the country (on CSA activities)	High	New data acquisition; data management plan (the object of Man@mora)
2. Climate change and environmental risk		
2.1. Severe droughts and other extreme weather events	High	CSA/EBA practices extension (project central orientation)
3. Political Risk		
3.1. Political team change (new teams according to the elected candidate)	High	Try big and continuous program of sensitization Involve as many stakeholders as possible

Table 5: Project risk and assumptions for the technical activities of the project

3.2. Local stakeholders' teams change (sometimes linked to the political risk)	Medium	Implement an extensive program of sensitization
4. Economical risk		
4.1. Major delay in releasing project funds	Low	Modify project action plan and anticipate the impact of campaign planning Ensure timely submission of documents that are a pre-requisite for release of funds
4.2. Worsening economic situation of farmers	Medium	Promote low-external input agriculture (one of the project objectives)
5. Assumptions		
5.1. The election towards the end of 2018 does not create an anti-constitutional problem and political crises that will impact the continuity of the project	High	Anticipate on the planning and try to unlock action funds before the election period with the aim of launching the project before.
5.2. The climatic risk is not too severe to impact highly the project implementation (Road cut, inaccessible areas, etc.)	High	Ensure that the local team is independent in the implementation of the project in the target areas

## III.7 South to South Cooperation and Triangular Cooperation (SSC/TrC)

This proposed project Manitatra 2 will concentrate its efforts on rain-fed rice and sustainable farming on 2 agro-ecological zones of Madagascar that constitute the potential cropping areas to ensure food and nutrient security and enhancement of farmer's livelihood. Experiences from this project can be shared with countries in Africa.



#### Figure 2: Agroecological zones in Africa

The Map (Fig.2) shows the correspondence between the AEZ of Madagascar and Africa. As it shows, experiences and best practices in terms of rain-fed rice and organic farming in:

- Mid-West AEZ (green) can be shared with countries like Mozambique
- Highland AEZ can be shared with many countries with Tropical cool /sub-humid AE zones (Sky blue and deep blue in the map)

The South to South Triangular Cooperation is demonstrated by the cooperation between countries of the South by exchange visits between countries as envisaged in the project. One experience-sharing exchange visit in the COMESA region is planned and budgeted in this project.

The interventions of many international organisations (CIRAD, AFRICA RICE, IRD) in the benchmark represented by the lvory site for research in the Mid-West could also be considered as part of South to South and triangular Cooperation. The GSDM will also organize and continuously undertake exchange visits and training in the lvory site in which representatives from other countries could benefit. For example, in October 2016, Seven (07) representatives from other countries did exchange visits and training in this site. The representatives comprised of the following: 02 people from the Comité anti Bwaki from the Democratic Republic of Congo (DRC), 01 person from GEADES DRC, 02 people from APROJUMAP Rwanda and 02 people from OAP Burundi).

In addition, the GSDM is the focal point of the NCATF (National Conservation Agriculture Task Force), and participates every year in meetings organised by CARWG (Conservation Agriculture Regional Working Group) for sharing experiences.

### III.8 Knowledge Management and Sharing

Knowledge can be either tacit or explicit. Tacit knowledge is the knowledge that is embedded in a person's mind and it is difficult to articulate because it is highly personal, is hard to formalize, or transfer to other projects. On the other hand, explicit knowledge is formal and systematic and that could be clearly articulated and shared, such as manuals, documents and online documents.

GSDM will create an environment conducive for sharing, and using knowledge for both local community and all stakeholders.

For local community, as it is said in the "Strategic intervention part" (II.3) of this document, the GSDM will develop the "farmer-to-farmer approach" through lead farmers. It will create a local expertise and locally available knowledge in each intervention area and this will remain at the end of the project. It will be transferred to the CSA/FRDA (State promoted development service) at the end of the Project to play the role of local expertise (success experience from the Manitatra 1 Project).

For the Project Management, especially for the new recruited personnel, the GSDM backstopping will play the role of team development and learning.

The GSDM is responsible for the delivery of a successful project.

For the other stakeholders, information dissemination and publication by target audience will be done as follows:

	1	
DISSEMINATION	TARGET AUDIENCE	EXAMPLES
CHANNELS		
Website GSDM and social	Authorities, donors, Researchers,	http://gsdm-mg.org/
networks	student, development actors, mass	https://www.facebook.com/GSDM-
	diffusion, national and international	838300569533063/
		http://open-library.cirad.fr/gsdm/
Radio, TV and films	Farmers, farmers unions, mass	
	diffusion, Researchers, student,	https://www.youtube.com/results?search_q
	development actors, Authorities,	uery=GSDM
	donors, national and international	
Training and diffusion tools	Technicians, lead farmers, farmers,	Training tools on tarpaulin, roll up, flyers,
and manuals	regional offices of MPAE, MEEF,	technical guides
	FDAR, Service providers, schools,	
	training centers	
Mass media and public	All targets	Press release, newsletters e.g: Journal de
relation	_	l'Agro-écologie, Journal Tantely
Workshops, side events,	All targets	FIER MADA, FIA
forums	-	

Table 6: Example of dissemination channels for knowledge management and sharing

#### III.9 Sustainability and Scaling Up

Manitatra 2 Project has an objective to upscale CSA through Ecosystem-based adaptation in the Mid-West and the Highlands of the VAKINANKARATRA Region, Madagascar. The training and production results are useful and useable by rural development stakeholders and by the public policy. It will consolidate and continue the experiences and successful of Manitatra 1 Project and other projects (e.g. BVPI SE/HP). All practices and technics developed are experienced, tested, adapted and shown their success in a farmer level.

Firstly, to overcome the shortcomings of previous actions (through all previous experiences), the project will adopt from the outset (from the analysis and diagnostic stages) a gender and social approach, taking into account (i) the distribution of labour, resources and decision-making within the family farm, among men, women, and children, and (ii) the income and living standards of these households. The aim is to identify the likely consequences – desirable and undesirable – arising from the choice of farming practices offered to the different categories of beneficiaries, while at the same time acknowledging the complex nature of gender equality and the fight against poverty. Results from the evaluations will be consolidated by means of a multi-criterial tool in order to assess the sustainability of each agro-ecological option in terms of technical, economic, social and environmental aspects. The expected impact could be presented in short, medium and long term.

The short term expected impacts are the following: (i) greater efficiency in developed system in agro-ecological concerned zones by improved knowledge and more efficient production tools. For this purpose, the planned systems to be developed within the Project are mostly systems with low levels of external inputs and value resources available locally. It is already a strategy to ensure that farmers could afford and will continue the developed system at the end of the Project; (ii) well-defined procedures for technical diffusion.

Improving conservation system (by recycling of biomass and nutrients) in agricultural production systems is one way to intensify agriculture, especially in regions where family farms have low access to inputs and input shops. Thus, the expected medium and long-term impacts could be: (i) increasing agricultural production and productivity, (ii) improving the sustainability of family farm production systems, and consequently (iii) reducing poverty and the vulnerability of rural households.

Secondly, a positive impact could be obtained by a mutual knowledge generation and enhanced collaboration between different stakeholders. Overall, Manitatra 2 will especially strengthen exchange between all stakeholders at international, national, regional and local level (as it is shown in the pathway of change). It will make the project more sustainable and more reproducible.

Thirdly, the involvement of the final beneficiaries in its implementation bestows the project with a real capacity for dissemination and extension in a sustainable way. As it is shown in the strategic intervention part" (II.3) of this document, the GSDM will develop the "farmer-to-farmer approach" through lead farmers. Sustainability of the project will be ensured locally by lead farmers and also by developing local service providers like seed growers' associations, nurserymen/women and also manufacturer for materials.

Finally, the DRAE and DREEF (the branch of Ministry and perennial institution in regional level) which are close partners of the project will be involved in the process of sustainability. In addition, the Agricultural Development Fund (FDA), a state promoted device will support sustainable agriculture development in many regions of Madagascar including the Vakinankaratra where it has been tested. Funded by the Government and many donors, the FDA is a national Public Administration Establishment (EPA) established by Decree No. 2012-968 of November 6, 2012. It is a financial institution intended to support the development of the 3 sectors of Rural Development: Agriculture, Livestock and Fisheries. It is represented at Regional level by the Regional Fund for Agricultural Development of production, the development of productivity and the improvement of the incomes of the basic actors (farmers, breeders, fishermen and fish farmers). During the implementation of the MANITRA 2 project, supported farmers will be linked to the FDAR structure to access this fund. It is not just a simple linking but a working collaboration in which the FDA/FDAR and the CSA (Agricultural Service Center) will be associated to project implementation (planning, funding, contributing to project results, etc.). It is the best way to ensure the sustainability of the project action.

# **IV- PROJECT MANAGEMENT**

The MANITATRA 2 project will be implemented by GSDM, with a steering committee which will give strategic direction. The Project Manager will be the Executive Director of GSDM who will report to the Board and the Steering committee.

The Procedures Manual and Procurement Manual of GSDM will be used for this project. The project Fund will be audited by COMESA auditors (not budgeted in the project budget) and by GSDM auditor (local chartered accountant budgeted in GSDM own fund).

The project will start with the baseline study to be achieved by a local consulting firm to be recruited in order to update the indicators to be used. The plan of actions and budget will be submitted to the Board.

Monitoring and Evaluation: Quarterly and Annual progress reports will be produced following the guidelines in Annnex A. The Annual reports and Financial Audit Reports will be submitted by the Project Manager to the Board for approval.

A Mid-term Evaluation will be undertaken during the second year of implementation and a Final Evaluation at the end of the project. All these evaluations will be undertaken by a local consulting firms to be recruited and budgeted in the project.

#### Table 7: Results framework

EXPECTED			BASE	LINE		TARGETS	6	Data
RESULTS	INDICATORS	DATA SOURCE	Value	Year	Year 1	year 2	Year 3	collection Methods
	Number of participants in exchanges visits inside communes	Project Reports attendance record	0	2018	2 400	2 800	2 800	Attendance record
	Number of participants exchanges visits between commune	Project Reports attendance record	0	2018	200	150	150	Attendance record
	Acreage of full Conservation Agriculture (ha of CA)	Project Reports	344	2016	500	1 500	2 000	Project database
	Number of farmers provided seeds of cover crops	Project Reports	576	2016	1 500	1 500	2 000	Project database
	Number group farmer provided Stylosanthes rollers	Project Reports	10	2016			5	Project database
	Number on tree nursery man supported	Project Reports	5	2016	20	15	15	Project database
	Number of trees plantlets for reforestation (Acacia, eucalyptus)	Project Reports	514 000	2016	500 000	500 000	500 000	Project database
Result 1: CSA Best Practices are up-	Number of fruit plantlets of farmers adopting	Project Reports	3 000	2017	10 000	20 000	20 000	Project database
scaled in two ecosystems of the	Number of farmers provided seeds of hedgerows (Cajanus, Tephrosia)	Project Reports	107	2016	2 000	2 000	2 500	Project database
VAKINANKARATRA region; covering the Highland and Mid- West regions in	Number of farmers provided seeds of mucuna, crotalaire, others plants used as bio- pesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)	Project Reports	100	2016	1 500	2 000	2 000	Project database
Madagascar	Quantity of worms for composting	Project Reports	4	2016	0	0	10	Project database
	Number of dairy farmers benefiting improved cowsheds for quality manure, for better of dairy cows and for composting	Project Reports	0	2018	100	100	100	Project database
	Number farmers provided seeds of forage (grasses and legumes and off season forage) and food safety plants (orange flesh sweetpotatoes) based on experiences of FIFAMANOR	Project Reports	0	2018	500	750	750	Project database
	Number of farmers provided equipment and fry for fish raising in the paddy field or in ponds (base on the experiences of APDRA and CIRAD)	Project Reports	0	2018	50	50	50	Project database
	Number of expertise contract to conduct National survey in some strategic agro-ecological areas	Project Reports	1	2017	1			Administration documents
	Number of convention contracting with CIRAD to integrate data in MANAMORA database	Project Reports	1	2017	1			Administration documents

EXPECTED			BAS	ELINE		TARGETS		Data
RESULTS	INDICATORS	DATA SOURCE	Value	Year	Year 1	year 2	Year 3	collection Methods
	Number of DRAE trained in the use of the data base MANAMORA	Project Reports attendance record	0	2018			5	Time sheet
	Number of equipment for field team ( technician and lead farmers)	Project Reports			8 motorcycles 50 bicycles			Administration documents
	Number of Nursery men/women trained (disaggregated by gender)	Project Reports	5	2016	20	15	15	Attendance record
	Number of farmers trained (disaggregated by gender)	Project Reports	4 020	2015	4 000 ( 50% men, 50% women)	6 000 ( 50% men, 50% women)	8 000 ( 50% men, 50% women)	Attendance record
	Number of diagnosis to select beneficiary schools		1	2017	1			Administration documents
	Number of Event				2			Administration documents
	Number of secondary school reached	Project Reports	6	2017	12	12	12	Administration documents
Result 2: Capacity of	Number of session organized for training for Ministry Branch ( OEMC/DREMC/BEMC)	attendance record	1	2017	1			Attendance record
various stakeholders is built in Climate Smart	Number of session organized for training for teachers	Project Reports attendance record	3	2017	3			Attendance record
Agriculture, Conservation	Number of film for communication produced		2	2017		1	1	Administration documents
	Number of cartoon strips produced for school children		0	2018		1		Administration documents
	Number of competition organized of best school		1	2017		1		Administration documents
	Number of participants from development actor trained (FOs, NGO, local service provider)		60	2018	20	20	20	Attendance record
	Number of participants to exchange visit in the training sites of GSDM		700	2018	800	800	800	Attendance record
	Number of local stakeholders sensitized on Climate change by regional Meteorology officer		0	2018	30	30	30	Attendance record
	Number of information bulletins provided		0	2018	200	300	300	Administration documents
Result 3: Farmer Organizations are	Number of participants informed on Climate Change framework	Project Reports	0	2018	30	30	30	Attendance record
supported and linked to various stakeholders in the Agriculture Sector to support	Number of participants on exchange visits organized to target policy makers, development actors (technicians) and farmers in COMESA and other regions	Project Reports	0	2018		5		Attendance record

EXPECTED			BASE	LINE		TARGET	5	Data
RESULTS	INDICATORS	DATA SOURCE	Value	Year	Year 1	year 2	Year 3	collection Methods
sustainability of project results	Number FOs benefiting finance from FDAR	Project Reports	0	2018	30	30	30	Administration documents
	Number of FOs on rice/fish ecosystem trained by APDRA	Project Reports	0	2018	10	10		Administration documents Attendance record
	Number of FOs trained on dairy cattle, improved cowsheds and forages by contracting with FIFAMANOR	Project Reports	0	2018	20	20		Administration documents Attendance record
	Number of FOs trained on market gardening and livestock by contracting with AVSF (targeting mainly women)	Project Reports	0	2018	10	10		Administration documents Attendance record
	Number of FOs trained on FFS School approach as developed by PAPAM project by AGRISUD	Project Reports	0	2018	10	10		Administration documents Attendance record
	Number of FOs trained on best practices, bio- pesticides and fruit trees by contracting with CEFFEL	Project Reports	0	2018	10	10		Administration documents Attendance record

# **V- MONITORING AND EVALUATION**

The monitoring and evaluation, integrating learning will be an integral part of the project design, implementation and completion.

It is a cycle of action in all the project actions from the beginning till the end and profiting the input from learning. This figure below summarizes the monitoring, evaluation and learning cycle.

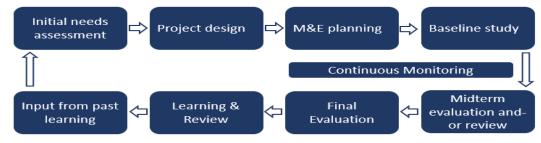


Figure 3: Monitoring, Evaluation and Learning cycle for the Manitatra 2

# V.1 Monitoring Plan

#### Table 8: Monitoring Plan

Activity	Purpose	Frequency	Expected Action	Partners	cost
Track results progress	To keep a track of implementation process, To manage the intended direction and check performance against pre-determined plans To watch the progress of the project against time, resources and performance schedule during the execution of the project	Monthly Quarterly	<ul> <li>Identifying the different units involved in planning and implementation</li> <li>Identifying Items in which feedback is required</li> <li>Developing outline for monitoring report</li> <li>Determining the periodicity of reporting</li> <li>Fixing the responsibility of reporting at different level</li> <li>Ensuring the data gathering and the smooth flow of feedback</li> </ul>	M&E Responsible of GSDM National technical assistant of the project Zone's Supervisor Technician and Lead farmers	Include in the GSDM backstopping and the PMU official recruited costs
Monitor and Manage Risk	To identify lagging areas requiring timely attention and action	Quarterly	<ul> <li>Assess and identify risk factors</li> <li>Work with each responsible at different level to identify strategies to minimize or eliminate the identified risks (The frequency of contact is determined by the number and level of risks identified)</li> <li>Monitor the plan for effectiveness and determine if the plan is working.</li> <li>Revise the plan as necessary.</li> <li>Continue to monitor and revise the plan over time for effectiveness.</li> </ul>	M&E Responsible of GSDM National technical assistant of the project Zone's Supervisor	Include in the GSDM backstopping and the PMU official recruited costs

Activity	Purpose	Frequency	Expected Action	Partners	cost
Learn	Learning is a continuous dynamic process of investigation where the key elements are experience, knowledge, access and relevance. It requires a culture of inquiry and investigation.	Annually	<ul> <li>Learning cycle is done at all stages within the project cycle through monitoring and evaluation process. This project will consider four dimensions of learning: <ul> <li>Learning from an experience (learning by doing);</li> <li>Reflecting on that experience (reflective practice);</li> <li>Conceptualising from the experience and sharing this experiences (lesson learning);</li> <li>And then testing out new ideas which lead to a new experience.</li> </ul> </li> </ul>	GSDM M&E Responsible National technical assistant of the project Zone's Supervisor	Include in the GSDM backstopping and the PMU official recruited costs
Annual Project Quality Assurance	The purpose is to prevent problems before they happen. Quality assurance is the proactive process intended to minimize the chance of an error being inserted into your data.	Quarterly and Annually	<ul> <li>Continuously-Monthly-Quarterly:</li> <li>Maintain data organization,</li> <li>Keep the organisation context of the project in mind,</li> <li>Documents error,</li> <li>Review data sheets for completeness and correctness</li> <li>Back up to the project data</li> <li>Annually:</li> <li>Calibrate data gatherers for each method of data collection</li> <li>Review data sheets for completeness and correctness</li> <li>Back up to the project data</li> </ul>	M&E Responsible from COMESA M&E Responsible of GSDM National technical assistant of the project	Include in the GSDM backstopping and the PMU official recruited costs
Review and make Course Corrections	To provide constructive suggestion (re- scheduling the project, re-budgeting the project, re-assigning the staff)	Annually	Providing feedback to corrective measures	GSDM M&E Responsible National technical assistant of the project Zone's Supervisor	Include in the GSDM backstopping cost and the PMU official recruited cost
Project Report	The purpose of the Project reports is to communicate information which has been compiled as a result and analysis of data and of issues. Reports focus on transmitting information with a clear purpose, to a specific audience. For the case of this project, it will be the Donor and COMESA, the Madagascar government and the rural development and Agricultural actors.	Annually, and at the end of the project (final report)	The report will be done each year and at the end of the project. The Project report plan is developed in the Annex 1 but it should give information about the Partnerships, the Objectives, the Project Financial Performance, the Detailed Progress on Project Implementation (activities, indicators, success stories), the Lessons and Challenges and the Recommendations.	GSDM senior staff National technical assistant of the project Finance and administrative officer Zone's Supervisor	Include in the GSDM backstopping cost and the PMU official recruited cost
Project Review (Project Board)	The purpose of the project review is to identify ways through which the implementation of the project can be strengthened to increase its effectiveness including monitoring and verification of results. It should make recommendations to improve and strengthen the	Annually	<ul> <li>There are two kind of review :</li> <li>The review from steering committee which is based on a working meeting through the report. The steering committee is composed by the government or Ministry representative, some key stakeholders, some GSDM members (GSDM board) and the senior staff of GSDM.</li> <li>The review from COMESA (if necessary) and based on desk review, interviews with GSDM Staff and stakeholders, the</li> </ul>	Donor, COMESA Project Steering Committee GSDM Senior staff Local staff if needed (for the case of field visit)	The cost of Donor and COMESA review is not in this project budget (see COMESA)

Activity	Purpose	Frequency	Expected Action	Partners	cost
	performance of the project, find out gaps that exist in current system and processes and recommend mitigation actions for those identified gaps along with risks and sustainability approaches. This will help to develop actions to be included in the Performance Improvement Plan providing future direction for the project.		Field Implementation Process and any related procedures in relation to the implementation and monitoring.		The steering committee meeting cost is 790€ (just for meeting cost) Participation of GSDM staff is included in the GSDM backstopping cost and the PMU official recruited cost

# V.2 Audit and Evaluation Plan

Table 9: Audit and evaluation plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost	Source of Funding
Annual Review	EU, COMESA Project Steering Committee	It should integrate the review of program activities, implementation policies and reporting mechanisms, the collection of program data for analysis, the analysis of gaps, priorities and program performance and the assessment report and presentation to all stakeholders.	Recommendations to improve and strengthen the performance of the project, Find out gaps in current system and processes Mitigation actions for those identified	End of project year (July of each year if the project begin on June 2018)	Government and Ministry representative Other Key stakeholders GSDM Senior staff Local staff if needed (for the case of field visit)	See COMESA The steering committee meeting: 790€ (3 years) Included in the GSDM backstopping and the PMU official recruited cost	COMESA for the Review by EU and COMESA Project for steering committee and GSDM staff participation
Annual Audit	COMESA Audit Specialist for external audit NPNM Audit for internal audit	Cost Allowability, Home Office Costs, General Controls, Sub- contracts Time & Materials, Post-Implementation Plan, Data Analytics, Internal Controls Structure, Employee Concerns, Continuous Controls Monitoring	The annual audit plan is driven by two key factors: (1) risk assessment results and (2) Internal Audit resources.	At the beginning the next year (after each completed project year)	GSDM Senior staff First responsible (Director, Finance and Administrative Officer)	See COMESA for Audit by COMESA 2.400 euros for internal Audit by GSDM	COMESA for the Audit by EU and COMESA GSDM Own account for internal Audit

		Emergency Management					
		Fraud Risk Assessment					
Mid Term Evaluation	External expertise	To ascertain the intervention if         it is still coherent with the         strategic objectives.         Relevance and useful to the         key stakeholders and is being         conducted in an efficient         manner according to the         agreed project document.         Some Criteria and Questions         for Independent Mid-Term         Evaluations:         Validity of design         Efficiency         Efficiency of resource use         Efficiency of management arrangements	Assess the continued relevance of the Project and the progress made towards achieving its planned objectives. Opportunity to make modifications to ensure the achievement of these objectives within the lifetime of the project.	Dec. 2019	Government and Ministry representative Other Key stakeholders GSDM Senior staff Local staff if needed (for the case of field visit)	6,579€	Project budget
Terminal Evaluation	External expertise	The Logframe (intervention logic) is analysed. The aim is to determine the relevance and fulfilment of objectives and project development through five evaluation criteria: - Relevance, - Effectiveness, - Efficiency, - Impact - Sustainability Cross-cutting issues, such as poverty, gender and environment, are taken into consideration	Objective assessment of completed project, its design, implementation and results.	Sept 2020	Government and Ministry representative Other Key stakeholders GSDM Senior staff Local staff if needed (for the case of field visit)	11,375€	Project budget

# VI- MULTI YEAR WORK PLAN

#### Table 10: Multi-year Work Plan

		PLANNE	D BUDGET BY YE	AR (€)	Responsible	PLANNED BUDGET (€)				
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (€)	Budget notes
RESULT 1 : CSA and best practices are up scaled in two ecosystems of the VAKINANKARATRA region, covering the Highland and Middle West regions in Madagascar		115 644,74 €	77 126,32 €	87 268,42 €			1		280 039,47 €	
	Conduct awareness raisig, exchanges visits and field days to facilitate experiences sharing and learning between beneficiaries	7 631,58€	6 052,63 €	6 052,63 €			1.1		19 736,84 €	
1.1.1	Exchanges visites inside communes	3 157,89	3 684,21	3 684,21	Assistant Project	COMESA	1.1.1	8000 participants (30% in first year, 35% in second year and 35% in third year)	10 526,32 €	
1.1.2	Exchanges visites between communes	526,32	394,74	394,74	Technician	COMESA	1.1.2	550 participants (200 in first year, 150 in second year and 150 in third year)	1 315,79€	
1.1.3	Car hiring and other expenses during field visits	3 947,37	1 973,68	1 973,68	Administration	COMESA	1.1.3	50 days/year for farmers (local and communes moves) (Minibus)	7 894,74 €	
Activity 1.2	Upscale Conservation Agriculture to support the growing of up land rice and other crops	5 921,05 €	5 921,05 €	14 473,68 €			1.2		26 315,79 €	
1.2.1	Provides seeds of cover crops (mucuna, stylosanthes, cowpea)	5 921,05	5 921,05	7 894,74	GSDM backstopping Project Leader &	COMESA	1.2.1	For only new farmers (1000 in first year, 1500 in second year, 1500 in third year)	19 736,84 €	
1.2.2	Support for Stylosanthes rollers			6 578,95	Assistant Technician Administration	COMESA	1.2.2	At the last year for new communes (targeting 4 groups of farmers)	6 578,95 €	
Activity 1.3	Upscale agroforestry and forestation (equipement and seed support to nurseryman and adopting farmers)	35 921,05 €	38 421,05 €	39 210,53 €			1.3		113 552,63 €	
1.3.1	Support tree nurserimen (potting bags, other materials)	3 158	2 368	2 368	GSDM	COMESA	1.3.1	50 nurserymen (20 in first year, 15 new in second year and 15 new in third year)	7 894,74 €	
	Support adopting farmers in tree plantlets for reforestation (Acacia, Eucalyptus)	26 315,79	26 315,79	26 315,79	backstopping Project Leader &	COMESA	1.3.2	500 000 tree plants per year for 15 000 adoptants in 3 years	78 947,37 €	
1.3.3	Support adopting farmers in fruit plantlets	3 289,47	6 578,95	6 578,95	Assistant Technician Administration	COMESA	1.3.3	50 000 fruits plants (10000 in first year, 20000 in second year and 2000 in third year) (50% of subvention)	16 447,37 €	
1.3.4	Provides seeds of hedgerow (Cajanus, Tephrosia)	3 157,89	3 157,89	3 947,37	Administration	COMESA	1.3.4	For only new farmers (1000 in first year, 1500 in second year, 1500 in third year)	10 263,16 €	
Activity 1.4	plants, technology of composting, improved organic fertilizers, forages, species for food safety as orange flesh sweet	8 631,58 €	9 394,74 €	9 394,74 €			1.4		27 421,05 €	

		PLANNED BUDGET BY YEAR (€)			Responsible	PLANNED BUDGET (€)				
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (€)	Budget notes
1.4.1	Provide seeds of mucuna, crotalaire, others plants used as bio- pesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)	1 578,95	2 105,26	2 105,26		COMESA	1.4.1	For only new farmers (1500 in first year, 2000 in second year, 1500 in third year)	5 789,47 €	
1.4.2	Provide worms for composting	1 052,63			GSDM backstopping	COMESA	1.4.2	During the first year of introduction (after, multiplication by farmers)	1 052,63 €	
1.4.3	Participate to improve cowsheds for quality manure and composting	2 631,58	2 631,58	2 631,58	Project Leader & Assistant	COMESA	1.4.3	For 300 farmers as a model (part expenses subvention)	7 894,74 €	
1.4.4	Provide seeds of forage (grasses and legumes and off season forage) and food safety plants (orange flesh potatoes) based on experiences of FIFAMANOR	2 578,95	3 868,42	3 868,42	Technician Administration	COMESA	1.4.4	For only new farmers (500 in first year, 750 in second year, 750 in third year)	10 315,79 €	
1.4.5	Provide fry and other equipment for farmers for fish raising in the paddy field or in ponds (based on the experiences of APDRA and CIRAD)	789,47	789,47	789,47		COMESA	1.4.5	For only new farmers as a model (50 in first year, 50 in second year, 50 in third year)	2 368,42 €	
Activity 1.5	Collect data on CSA in some strategic area at National level in a view to update data on upscaling of CSA and best practices in the Country	23 000,00 €	7 600,00 €	8 400,00 €			1.5		39 000,00 €	
1.5.1	Contratc with a firm to conduct National survey in some strategic agro- écological areas	20 000,00			External Consultant GSDM Backstopping Administration	COMESA	1.5.1	National Consultancy	20 000,00 €	
1.5.2	Integrate data in MANAMORA database - and include database improvement by contratcing with CIRAD	3 000,00	6 000,00	6 000,00	External Consultant	COMESA	152	Contract for an accompaniment over a period of at least 2 years (adaptation of the BDD Manamora, GSDM support, training of DRAE and other actors)	15 000,00 €	
1.5.3	Train regional directorates of MPAE (DRAE) in the use of the data base MANAMORA				GSDM Backstopping	COMESA	1.5.3	Included in the CIRAD contract	0,00€	
1.5.4	National database transfert to DRAE (Ministry regional branch)		1 600,00	2 400,00	Administration DRAE	COMESA	1.5.4	Support in connection and other needs to ensure the establishment of Manamora in the Vakinankaratra region	4 000,00 €	
Activity 1.6	Purchase principal mean for upscaling activity	34 539,47 €	9 736,84 €	9 736,84 €			1.6		54 013,16 €	
	Purchase of Equipments	25 000,00 €	0,00€	0,00€			1.6.1		25 000,00 €	
	Purchase of motorcycles	21 052,63			Administration	COMESA	1.6.1.1		21 052,63 €	
	Purchase of bicycles	3 947,37			Administration	COMESA	1.6.1.2		3 947,37 €	
	Fuel and repairs	9 539,47 €	9 736,84 €	9 736,84 €			1.6.2		29 013,16 €	
1.6.2.1	Fuel and repairs (spare parts) for motorcycle	5 328,95	7 105,26	7 105,26	Administration	COMESA	1.6.2.1	8 motorcycles (9 months at the first year )	19 539,47 €	
1.6.2.2	Car hiring for field backstopping and monitoring (all CSA: CA, Agroforestry and best practices)	4 210,53	2 631,58	2 631,58	Administration	COMESA	1.6.2.2	30 days/year (4x4 car)	9 473,68 €	

		PLANNED BUDGET BY YEAR (€)			Beeneneihle	PLANNED BUDGET (€)				
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	Responsible party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (€)	Budget notes
	RESULT 2 : Capacity of various stakeholders is built in Climate smart Agriculture Conservation Agriculture and Agroforestry		36 408,95 €	26 410,74 €			2		103 022,11 €	
Activity 2.1	Train nursymen in the technology of tree nurseries and in the choice of the appropriate tree species	921,05€	690,79€	690,79€			2.1		2 302,63 €	
2.1.1	Train Nurserymen/women	921,05	690,79	690,79	Project Leader & Assistant Technician	COMESA	2.1.1	For new Nurseymen/women	2 302,63 €	
Activity 2.2	Train lead farmers and farmers in CSA (CA, agroforestry and forestation, other good practices)	11 052,63 €	11 052,63 €	11 052,63 €			2.2		33 157,89 €	
2.2.1	Train Lead farmers (LF) by technicians and other stakeholders	-	-	-	Technician	COMESA	2.2.1	No direct cost (Integrated in technician action and contract with other stakeholders)	0,00€	
2.2.2	Support cost of farmers training by Lead farmers (Farmer to farmer approach, based on man-day spent on training of their peer farmers)	11 052,63	11 052,63	11 052,63	Project Leader & Assistant Administration	COMESA	2.2.2	7 days per month per Lead Farmers	33 157,89 €	
Activity 2.3	Train secondary school students in CSA (CA, Agroforestry and forestation, other good practices)	21 089,52 €	17 526,32 €	7 501,80 €			2.3		46 117,63 €	
2.3.1	Make Diagnosis to select beneficiary schools	185,26				COMESA	2.3.1	Exepenses linked to participants from Ministry participating to the diagnosis	185,26€	
2.3.2	Organize Events (Commitment charte event, Tools delivery)	370,53				COMESA	2.3.2	Exepenses linked to participants from Ministry participating to the events	370,53€	
2.3.3	Organize Training for Ministry Branch (OEMC/DREMC/BEMC)	131,58				COMESA	2.3.3	Exepenses linked to participants and organisation of one session of training	131,58€	
2.3.4	Organize Training for teachers (3 sessions of training in Vakinankaratra)	5 292,63				COMESA	2.3.4	Exepenses linked to participants and organisation of 3 sessions of training at the first year	5 292,63 €	
2.3.5	Training Tools (tarpaulin, booklet, teacher guideline, langage-photo) - 6 new schools	3 806,05				COMESA	2.3.5	Expenses linked to the Training Tools edition (tarpauling, booklet, teacher guideline, langage- photo)	3 806,05 €	
2.3.6	Produce and edit Communication tools (tarpaulin, Roll up)	105,26	105,26		GSDM backstopping	COMESA	2.3.6	Expenses linked to the input (demontration sites into the school) during the 03 years: different cost per year	210,53€	
2.3.7	Produce Film for communication	1 077,15	1 052,63	1 554,43	OEMC/MEN School Responsible Teacher	COMESA	2.3.7	Expenses linked to the film production (specialist)	3 684,21€	
2.3.8	Produce Cartoon strips for school children		10 000,00		Teacher	COMESA	2.3.8	Expenses linked to the Cartoon strip production (specialist)	10 000,00 €	
2.3.9	Provide some kits and inputs for demonstration plot (Materials and tools, Teaching Tools, inputs) for 6 new school	1 963,16	947,37	947,37		COMESA	2.3.9	Expenses linked to the input (demontration sites into the school) during the 03 years: different cost per year	3 857,89 €	
2.3.10	Accompany students in the implementation	-	-		]	COMESA	2.3.10	No cost (including in the GSDM backstopping)	0,00€	
2.3.11	Organise competition of best school (demonstration plot and student knowledge)		421,05			COMESA	2.3.11	Competitition expenses (lot,) only in the second year	421,05€	
2.3.12	Exchange visits between School	2 368,42	1 578,95	1 578,95		COMESA	2.3.12	Expenses during exchange visit targeting 100 participants per year (for 3 years)	5 526,32 €	
2.3.13	Organize annual workshop (capitalisation, experiences exchange)	2 631,58	1 842,11	1 842,11		COMESA	2.3.13	Expenses during workshop (one workshop per year)	6 315,79 €	
2.3.14	Car hiring for training, monitoring and other actions fo secondary school	3 157,89	1 578,95	1 578,95		COMESA	2.3.14	20 days of car hiring per year for this specific action	6 315,79€	

		PLANN	D BUDGET BY YE	AR (€)	Bassasible			PLANNED BUDGET (€)	•		
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	Responsible party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (€)	Budget notes	
Activity 2.4	Organise training sessions targeting development actors such as f	1 947,37 €	1 947,37 €	1 947,37 €			2.4		5 842,11 €	:	
2.4.1	Organize training sessions targeting development actors as farmers organizations, NGO, local service provider	1 315,79	1 315,79	1 315,79	GSDM backstopping Project Leader &	COMESA	2.4.1	All expenses for training (room rental, car for exchange visit, participant fees, training tool) - targeting 15 participants/year (45 participants)	3 947,37 €		
2.4.2	Organize exchange visit in the training sites of GSDM				Assistant	COMESA	2.4.2	No cost (integrated in backstopping cost)	0,00€	C	
2.4.3	Car hiring during training sessions (6 days per session)	631,58	631,58	631,58	Administration	COMESA	2.4.3	6 days of car hiring per session (18 days)	1 894,74 €		
Activity 2.5	Involve regional Directorate of Meteorology in Climate smart Agriculture Conservation Agriculture and Agroforestry	2 560,26 €	2 560,26 €	2 586,58 €			2.5		7 707,11 €	:	
2.5.1	Organize Information/sensitization of local stakeholders	263,16	263,16	263,16		COMESA	2.5.1	Expenses for sensitization session	789,47€		
2.5.2	Organize Training workshop for local stakeholders	1 499,21	1 499,21	1 499,21	GSDM	COMESA	2.5.2	Expenses during one session per year	4 497,63 €	]	
2.5.3	Provide regional Meteorological information bulletins (quarterly)	131,58	131,58	157,89	backstopping Meteo Officer/DGM	Meteo	COMESA	2.5.3	4 pages of monthly newsletter for 50 exemplaires (targeting local authority, technicians)x12	421,05€	2
2.5.4	Provide perdiem for meteorological officer	666,32	666,32	666,32		COMESA	2.5.4	2 interventions by 2 Meteo officer /year	1 998,95 €		
Activity 2.6	Involve the Ministry of Agriculture and livestock (MPAE) and Ministry of Environment and Forestry (MEEF) or regional directorates	2 631,58 €	2 631,58 €	2 631,58 €			2.6		7 894,74 €	:	
2.6.1	Organize field collaboration and exchange by MPAE + MEEF	789,47	789,47	789,47	MPAE, MEEF, DRAE, DREEF	COMESA	2.6.1	3 missions field collaboration and exchange MPAE (1) et MEEF (1)	2 368,42 €	2	
2.6.2	Organize field collaboration and exchange by regional directorates ( DRAE + DREEF)	1 842,11	1 842,11	1 842,11	Project leader & Assistant	COMESA	2.6.2	DRAE and DREFF Vakinankaratra (cost of intervention per year)	5 526,32 €		
Activity 2.7	Participate to CSA integration into public policies	0,00€	0,00€	0,00€			2.7		0,00€		
2.7.1	Participate to workshops or meeting to advocate CSA (no cost)	-	-	-	GSDM	COMESA	2.7.1	No budget, Workshop organised by Ministry	0,00€	3	
2.7.2	Participate to workshops or meeting on climate change to advocate CSA (no cost)	-	-	-	Backstopping	COMESA	2.7.2	No budget, Workshop organised by Ministry	0,00€		

		PLANNE	D BUDGET BY YE	AR (C)				PIANNED BUDGET (C)		
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	Responsible party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (€)	Budget notes
	ners organisations are supported and linked to various the Agriculture to support sustainability of the project results	10 809,77 €	19 971,61 €	1 730,82 €			3		32 512,20 €	:
	Support FOs to participate in the development of National Action Plan for Climate Change as well as other Climate Change Frameworks	1 230,82 €	1 230,82 €	1 230,82 €			3.1		3 692,47 €	
3.1.1	Organize awareness raising on Climate Change targeting development actors as farmers organizations, NGO, local service provider	1 020,30	1 020,30	1 020,30	GSDM Backstopping DGM	COMESA	3.1.1	All expenses for workshop (room rental, articipant fees, worhshop tool)	3 060,89 €	
Activity 3.1.2	Car hiring during training sessions (2 days per session)	210,53	210,53	210,53	Administration	COMESA	3.1.2	2 days of car hiring per workshop (6 days)	631,58€	
Activity 3.2	Sharing experience at the regional level (COMESA and other regions) integrating political actors and development actors	0,00€	9 161,84 €	0,00€			3.2		9 161,84 €	
Activity 3.2.1	Organize exchange visits targeting policy makers, development actors (technicians) and farmers in COMESA and other regions		9 161,84		GSDM Backstopping COMESA	COMESA	3.2.1	Airplane travel, procedures (\$ 1200 flate rate / person x 5 people) for the second year Perdiem/Allowance (\$ 250 / night / pers x 5 people x 4 nights)	9 161,84 €	
Activity 3.3	FDAR (state promoted development mechanisms in national	0,00€	0,00€	0,00€			3.3		0,00€	;
3.3.1	Ensure Permanent exchange with FDA (state promoted development device in national level) in order to make a link with government development orientations	-	-	-	GSDM Backstopping	COMESA	3.3.1	Meeting and permanent exchanges at national level (No direct cost)	0,00€	
Activity 3.3.2	Ensure Permanent exchange with FDAR (state promoted development device in regional level) in order to make a link with government development orientation	-	-	-	Project Leader & Assistant	COMESA	3.3.2	Meeting and permanent exchanges at national level (No direct cost)	0,00€	
Activity 3.4	Agricultural Service Provider (state promoted development mecanisms in national level) to make a link between the farmers	500,00€	500,00€	500,00€			3.4.		1 500,00 €	;
Activity 4.1	Ensure Permanent utilization of CSA or Agricultural Service Center (state promoted development mechanism in District level) to make a link between farmers and agricultural service	500,00	500,00	500,00	Project Leader & Assistant	COMESA	3.4.1	Expenses linked to sensitization of CSA at the communes level (2 days / month / district x 12 months x 6 Districts (per year)	1 500,00 €	
	Support FOs on their collaborative contracting with various partners such as APDRA, FIFAMANOR, CEFFEL, AVSF, AGRISUD and PAPAM in various interventions	9 078,95 €	9 078,95 €	0,00€			3.5		18 157,89 €	;
3.5.1	Built capacity of FOs on rice/fish ecosystem by contracting with APDRA	1 710,53	1 710,53			COMESA	3.5.1	Support of APDRA (2 years of accompaniment of technicians and lead farmers)	3 421,05 €	
3.5.2	Built capacity of FOs on dairy cattle and forages by contracting with FIFAMANOR	2 631,58	2 631,58		Project Leader &	COMESA	3.5.2	Support of FIFAMANOR(2 years of accompaniment of technicians and lead farmers)	5 263,16 €	
3.5.3	Built capacity of FOs on market gardening and livestock by contracting with AVSF (targeting mainly women)	1 578,95	1 578,95		Assistant Partners	COMESA	3.5.3	Support of AVSF (2 years of accompaniment of technicians and lead farmers)	3 157,89 €	
3.5.4	Built capacity of FOs on FFS School approach as developped by PAPAM project by AGRISUD	1 578,95	1 578,95		Administration	COMESA	3.5.4	Support of AGRISUD (2 years of accompaniment of technicians and lead farmers)	3 157,89 €	
3.5.5	Built capacity of FOs on Best practices, bio-pesticides and fruit trees by contracting with CEFFEL	1 578,95	1 578,95			COMESA	3.5.5	Support of CEFFEL (2 years of accompaniment of technicians and lead farmers)	3 157,89 €	

	PLANNED BUDGET BY YEAR (C) PLANNED BUDGET (C)									
Budget acc.	Planed Activities	Year 1	Year 2	Year 3	Responsible party	Funding Source	Budget acc. code	Budget description	TOTAL BUDGET (C)	Budget notes
4.COMMUNIC	ATION AND VISIBILITY	8 857,46 €	21 672,75 €	19 705,64 €			4		50 235,86 €	;
Activity 4.1	1 Visibility and communication events organization	3 382,78 €	14 297,25 €	1 803,83€			4.1		19 483,86 €	;
4.1.1	Organization of regional field days targeting government authorities and development actors		12 493,42		GSDM backstopping	COMESA	4.1.1	All expenses for training (room rental, car for exchange visit, participant fees, training tool) - (150 participants)	12 493,42 €	
4.1.2	2 Conception of other Communication tools as streamers, roll up and mass	56,22	56,22	56,22	Specialist	COMESA	4.1.2	2 banners per year	168,66€	
	communication	168,66	168,66	168,66		COMESA	4.1.2	2 roll up per year	505,98€	5
4.1.3	3 Car hiring for all communication and visibility action	3 157,89	1 578,95	1 578,95	Administration	COMESA	4.1.3	20 days of car hiring per year for all visibility and communication	6 315,79€	2
Activity 4.2	2 Publications and broadcasting	599,68€	2 382,08 €	2 382,08 €			4.2		5 363,84 €	:
4.2.1	1 Broadcasting on national TV		1 582,50	1 582,50		COMESA	4.2.1	Cost of TV broadcasting in the second and third year	3 165,00 €	
4.2.2	2 Broadcasting on national Radio	199,89	399,79	399,79	GSDM	COMESA	4.2.2	Cost of radio broadcasting in the second and third year	999,47€	1
	Expenses related to attendance of journalists or reproters in events for	399,79	399,79	399,79	backstopping Reporters	COMESA		Homeday of reporters (20 Hd of reporters x 5 events / an)	1 199,37 €	
4.2.3	publication on TV or newspapers	-	-	-		COMESA		No direct cost	0,00€	
	publication on two newspapers	-	-	-		COMESA	_	No direct cost	0,00€	
		-	-	-		COMESA		No direct cost	0,00€	
Activity 4.3	3 Documentaries conception and edition	4 875,00 €	4 993,42 €	15 519,74 €			4.3		25 388,16 €	
4.3.1		710,53	828,95	828,95	GSDM backstopping	COMESA	4.3.1	30% during the first year, 35% during the second et 35% during the third year	2 368,42 €	
4.3.2	2 Editing of films for each project events	4 164,47	4 164,47	4 164,47	Project Leader &	COMESA	4.3.2	Cost of film edition	12 493,42 €	
4.3.3	Capitalization leaflets 3			10 526,32	Assistant Specialist	COMESA	5.4.2	Capitalization leaflets expenses (flate rate) - the format and number will be specified later (during the project)	10 526,32 €	
5, PROJECT AD	DMINISTRATION (HUMAN AND EQUIPEMENTS)	63 319,89 €	52 386,99 €	52 386,99 €			5		168 093,87 €	:
Activity 5.1	1 PMU officials recruited	29 815,79 €	29 815,79 €	29 815,79 €			5.1		89 447,37 €	:
	1 National Technical Assistant (Project Leader)	7 236,84	7 236,84	7 236,84		COMESA	5.1.1		21 710,53 €	1
	2 Assitant of project leader	5 210,53	5 210,53	5 210,53	Administration	COMESA	5.1.2		15 631,58 €	1
5.1.3	3 Technician Agroecology (Highland+Middle West) (6 technicians)	17 368,42	17 368,42	17 368,42		COMESA	5.1.3		52 105,26€	
	2 GSDM Backstopping fully implemented by his key staff	14 413,35 €	14 413,35 €	14 413,35 €			5.2		43 240,04 €	
	1 Director (2 months per year)	3 708,84	3 708,84	3 708,84		COMESA	5.2.1	2 months intervention per year	11 126,53 €	1
5.2.3	3 Agronomist (2 months per year)	1 784,08	1 784,08	1 784,08		COMESA	5.2.2	2 months intervention per year	5 352,25€	
5.2.4	Hasina)	3 568,17	3 568,17	3 568,17	GSDM Backstopping	COMESA	5.2.3	2 months intervention per year per trainer (for 2 trainers)	10 704,51€	
5.2.5	0	1 784,08	1 784,08	1 784,08		COMESA	5.2.4	2 months intervention per year	5 352,25 €	
5.2.6		1 784,08	1 784,08	1 784,08		COMESA	5.2.5	2 months intervention per year	5 352,25 €	
5.2.7	7 Agronomist Vakinankaratra (2 months per year)	1 784,08	1 784,08	1 784,08		COMESA	5.2.6	2 months intervention per year	5 352,25€	
	3 Local missions	6 907,89 €	4 440,79 €	4 440,79 €			5.3		15 789,47 €	
	1 Per diem for GSDM national staff	4 934,21	3 453,95	3 453,95	Administration	COMESA	5.3.1		11 842,11€	2
E 2 2	2 Per diem for local staff	1 973,68	986,84	986.84		COMESA	5.3.2		3 947,37 €	

		PLANN	DBUDGETBY	AR (C)	Responsible			PIANNED BUDGET (C)		
Budget acc.	Planned Activities	Year 1	Year 2	Year 3	party	Funding	Budget	Budget description		Budget notes
					1	Source	acc. code		(C)	I
Activity 5.4	Mean and equipments implementation	12 182,85 €	3 717,06 €	3 717,06 €			5.4		19 616,98 €	
	Offices renting and communication	1 105,26 €	1 105,26 €	1 105,26 €			5.4.3		3 315,79 €	
	Regional office renting	1 105,26	1 105,26	1 105,26	Administration	COMESA	5.4.3.1		3 315,79€	
	Offices renting and communication	10 719,70 €	2 253,91 €	2 253,91 €			5.4.4		15 227,51 €	
	PC/laptop	4 210,53				COMESA	5.4.4.1		4 210,53 €	
	printers/scanner/photocopiers	552,63				COMESA	5.4.4.2		552,63€	
	Digital camera	947,37				COMESA	5.4.4.3		947,37€	
	videoprojectors + screens	2 105,26			Administration	COMESA	5.4.4.4		2 105,26 €	1
	hard disks Other equipments (flat rate per technician)	97,37 552.63				COMESA	5.4.4.5		97,37€ 552,63€	
		,	2 252 04 0	2 252 01 6		COMESA	5.4.4.6		,	
	Communication/courier and other cordination expenses Spare parts for hard ware and other office machineries	2 253,91 € <b>357,89 €</b>	2 253,91€	2 253,91 € 357,89 €		COMESA	5.4.4.7 5.4.5		6 761,72 € 1 073,68 €	
	Spare parts for nard ware and other office machineries Spares (hard ware, photocopiers etc.)	357,89 € 357,89	<b>357,89 €</b> 357,89	357,89€ 357,89	Administration	COMESA	5.4.5.1		1 073,68 € 1 073,68 €	
				,	Auministration	COIVIESA				
6.PROJECT OVE	RSIGHT	16 051,03 €	8 158,59 €	12 105,96 €			6		45 789,27 €	
Activity 6.1	Steering committee	261,56€	263,86€	263,86€			6.1		789,27€	
6.1.1	Steering committee establishment				Steering	COMESA	6.1.1	No cost	0,00€	
6.1.2	Steering committee meetings to give strategic orientation and advice during all phases of the project	261,56	263,86	263,86	committee	COMESA	6.1.2	Cost of reunion (renting room, coffee break)	789,27€	
Activity 6.2	Monitoring and Evaluation of the project	15 789,47 €	7 894,74 €	11 842,11 €			6.2		45 000,00 €	
6.2.1	Base line study through external expertise	15 789,47			GSDM backstopping Project leader External Consultancy	COMESA	6.2.1	Cost of baseline (external consultancy)	15 789,47 €	
6.2.2	Financial auditing				COMESA	COMESA	6.2.2	Taken by COMESA	0,00€	
	Bi-annual reportings				GSDM	COMESA	6.2.3	No cost (integrated in backstopping cost)	0,00€	
	Annual reportings				backstopping Project leader	COMESA	6.2.4	No cost (integrated in backstopping cost)	0,00€	
6.2.5	Mid-term evaluation through external expertise		7 894,74		GSDM backstopping Project leader	COMESA	6.2.5	Cost of Mid-term evaluation (external consultancy)	7 894,74 €	
6.2.6	Final evaluation through external expertise			11 842,11	External Consultancy	COMESA	6.2.6	Cost of final evaluation (external consultancy)	11 842,11€	
6.2.7	Car hiring for monitoring and evaluation	3 182,41	3 145,63	3 145,63	Administration	COMESA	6.2.7	30 days of car hiring per year for monitoring and evaluation	9 473,68 €	
Activity 6.3	Project achievements capitalization	0,00€	0,00 €	0,00€			6.3		0,00€	
6.3.1	Project capitalization report				GSDM backstopping Project leader		6.3.1	No cost (integrated in backstopping cost)	0,00€	
	T 1 + RESULT 2 + RESULT 3 + COMMUNICATION + DN + PROJECT OVERSIGHT	254 885,30 €	215 725,21 €	199 608,59 €					679 692,78 €	
7.1.1	Adminstrative charges	17 841,97€	15 100,76€	13 972,60 €	Administration	COMESA	7.2.1		47 578,49€	
TOTAL BUDGET	(EUROS)	272 727,27 €	230 825,98 €	213 581,19 €				1 euro = 3800 Ar	727 271,27 €	

# VII.1 Project Organisation Structure

Below is the Project Organisation structure. The Implementing Partner will be GSDM. The overall guidance of the project will fall under the Project Board.

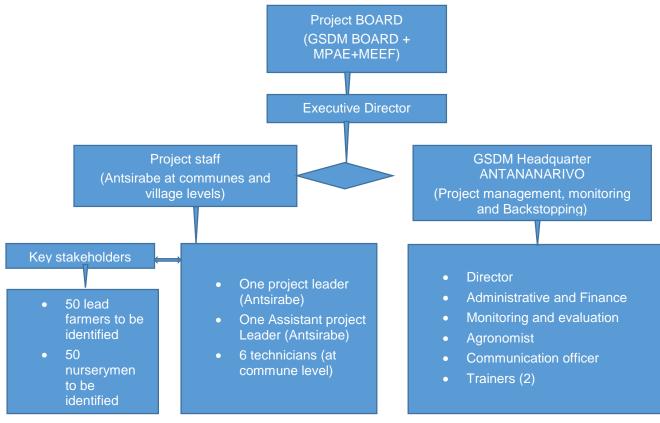


Figure 4: Project Organisation Structure

# VII.2 Roles and Responsibilities

### VII.2.1 The Project Board (Steering committee)

A Steering Committee helps to steer a project through from start to completion. It is made up of representatives of key organisations who are partners in the project, and/or who have particular expertise to lend to the project. Their views can be helpful in ensuring that the project is correctly targeted and they provide support, guidance and oversight of progress.

The Steering Committee will comprise of stakeholders from Government and non-government bodies and will be composed of members of GSDM Board and representatives of MPAE and MEEF and their Regional representatives (DRAE and DREEF). The project Board is chaired by the Chair Lady of GSDM Board.

The steering committee will meet once a year. Their responsibilities will include the following:

- Their main task is to give strategic orientation and advice during all phases of the project.
- They will give overall guidance to the project and will also help to achieve the project outcomes by identifying the priorities in the project, where the most energy should be directed, as well as identifying potential risks.
- They will provide input to the development of the project, including the evaluation strategy. They will act as a means for internal evaluation.
- They will provide advice on the budget;
- They will provide advice, and sometimes make decisions about changes to the project as it develops.

### VII.2.2 The programme Manager will report to the Board

The programme manager will have the following roles:

- Prepare the plans of action and budgets and present to the Board
- Ensure capacity building of the project staff with the support of GSDM senior staff (backstopping)
- Monitor the implementation of the activities by the project leader
- Prepare the Annual Progress Reports and present to the Board
- Oversee the audit process and present the Audit Report to the Board,
- Present Evaluation Reports to the Board,
- Ensure quality Assurance with the help of M and E Team
- Work with the Communication Officer to maintain good public relations

#### VII.2.3 The Project leader will report to the Programme manager

He/She will undertake the following responsibilities:

- Implement the activities with the supervisors and technicians
- Report to the Programme Manager
- Ensure local public relations

#### VII.2.4 Visibility and Communication

GSDM has one Communication Officer who will work with all responsible to achieve the targets indicated in the following table.

ACTIVITIES	SUB- ACTIVITIES	PROCESS INDICATORS	TARGETED AUDIENCES	WHEN
Activity 4.1: organize Visibility and communication events	Organize regional field days targeting government authorities and development actors	1 field days organized	100 of participants (Authorities, donors, local stakeholders, lead farmers, researchers, development actors, unions farmer and journalist)	2 <sup>nd</sup> year (2019- 2020)
	Edit documents and tools for technicians and farmers	1 document and tool edited	50 technicians, 50 lead farmers, 50 tree nurserymen, 10 local stakeholders	1 <sup>st</sup> year (2018)
Activity 4.2: CSA Publications and broadcasting	Broadcasting on national TV	2 broadcasting on national TV per year	Authorities, donors, lead farmers, researchers, development actors, unions farmer, students, journalist and wide audiences	Continuous action during 3years (2018- 2020)
	Broadcasting on national Radio	10 broadcasting on national Radio per year	Authorities, donors, lead farmers, researchers, development actors, union farmer, students, journalist and wide audiences	Continuous action during 3years (2018- 2020)
	Publications on TV and in newspapers	3 events needed journalists involved.	Authorities, donors, stakeholders and wide audience	Continuous action during 3years (2018- 2020)
Activity 4.3: Documentaries conception and edition	Edit films for each project events	3 films edited and disseminated for each project events	Authorities, donors, lead farmers, researchers, development actors, union farmer, students, journalist and wide audiences	Continuous action during 3years (2018- 2020)
	Design other Communication tools such as streamers, roll ups and mass communication	3 communication tools designed	Authorities, donors, stakeholders and wide audience	Continuous action during 3years (2018- 2020)

## VIII.1 Legal Context

The executive agency is MAEP which will act through his representatives in the Steering Committee

The implementing partner is GSDM: legal document is GSDM constitution registered at the Ministry of Interior and the legal act (registration act) of the Ministry of Interior: arrêté N° 5571/2001 authorizing GSDM to operate. The Procedures Manual of GSDM will be used: this manual included procurement and financial manual. The official Labor Code will be used for human resources.

## VIII.2 Risk Management

Risks management are summarized as follows.

#### Project risk and assumptions for the project management

Risks	Level of Risk	Corrective measures to manage the risk
1. Technical risk		
1.1. Tight deadline for recruitment	Medium	Careful planning, anticipation by GSDM
1.2. Tight deadline for material purchase	Medium	Careful planning, anticipation
1.3. Different competence levels between new recruited teams especially on CSA (EBA) practices	High	Rigorous recruitment process, Transfer and reinforcement of knowhow; Training
1.4. Geographic distances and communication difficulties	Low	Ensure reliable internet connections for all project sites, regular contact and exchange between GSDM key staff and local staff
1.5. Tight deadline for activities	Medium	Careful planning, Monitoring
2. Environmental risk		
2.1. Severe droughts and other extreme weather events	High	Provide good means of travel for all activities
3. Political Risk		
3.1. Political instability during the election period	High	Anticipate on the planning and try to unlock action funds before October
4. Economical risk		
4.1. Sharp fluctuations of the euro against local currencies	High	Maintain a reference exchange rate for project documents
4.2. Major delay in releasing project funds	Medium	Modify project action plan
5. Assumptions		
5.3. The election towards the end of 2018 does not create an anti-constitutional problem and political crises too important to impact the continuity of the project	High	Anticipate on the planning and try to unlock action funds before the election period with the aim of launching the project before.

#### ANNEXES

#### A. Annex 1: Project Report Templates

#### **Annual Report Format**

The Annual Report shall consist of the following:

Table of Contents Acronyms and Abbreviations List of Figures, Tables and Charts

- 1. Executive Summary
- 2. Partnerships
- 3. Objectives
- 4. Project Financial Performance
- 5. Detailed Progress on Project Implementation (activities, indicators, success stories)
- 6. Lessons and Challenges
- 7. Recommendations
- 8. Conclusion

#### **Quarterly Progress Report structure**

The structure of the quarterly report is given below

#### Quarterly Report for the period XXX -XXXX 2018

Executive summary:

Expected Result	Planned Activities	Actual Achievements		Remarks/ Challenges encountered and suggestions on how to address them	Plans for Next quarter
Result 1:	Activity Action:	Progress Output:	against		
	Activity Results:	Progress indicator:	against		
	1.2. Activity Action Activity Results:	Progress Output:	against		
		Progress indicator:	against		
Result 2:	2.1:				
	2.2:				
Prepared by:	I	Date:		Signature	
Approved by:		Date:		Signature	

### B. Annex 2: Detailed budget

Budget acc.	MAIN OUTPUTS/ACTIVITIES/HUMAN RESSOURCES	Unit	Quantity	Unit price (€)	Budget € Total	% Total budget
	CSA and best practices are up scaled in two ecosystems of the VAKINANKARATRA region, covering the Middle West regions in Madagascar				280 039,47 €	38,51%
Activity 1.1	Conduct awareness raising, exchanges visits and field days to facilitate experiences sharing and learning between beneficiaries				19 736,84 €	2,71%
1.1.1	Exchanges visits inside communes	Participants	8 000	1,32€	10 526,32 €	
1.1.2	Exchanges visits between communes	Participants	500	2,63€	1 315,79 €	
1.1.3	Car hiring and other expenses during field visits	Days	100	78,95€	7 894,74 €	
Activity 1.2	Upscale Conservation Agriculture to support the growing of upland rice and other crops				26 315,79 €	3,62%
1.2.1	Provide seeds of cover crops (mucuna, stylosanthes, cowpea)	flat rate per farmer	5 000	3,95€	19 736,84 €	
1.2.2	Support group of farmers for Stylosanthes rollers	group of farmers	5	1 315,79€	6 578,95 €	
Activity 1.3	Upscale agroforestry and forestation (equipment and seed support to nurseryman and adopting farmers)				113 552,63 €	15,61%
1.3.1	Support tree nurserymen (potting bags, other materials)	unit	50	157,89€	7 894,74 €	
1.3.2	Support adopting farmers in tree plantlets for reforestation (Acacia, Eucalyptus)	Tree	1500000	0,05€	78 947,37 €	
1.3.3	Support adopting farmers in fruit tree plantlets	Tree	50000	0,33€	16 447,37 €	
1.3.4	Provide seeds of hedgerows (Cajanus, Tephrosia)	flat rate per farmer	6 500	1,58€	10 263,16 €	
	Promote other best practices (bio-pesticides and repellent plants, technology of composting, improved organic fertilizers, forages, and species for food safety as orange flesh sweet sweetpotatoes, regenerative income activity as vegetables)				27 421,05 €	3,77%
1.4.1	Provide seeds of mucuna, crotalaire, others plants used as bio-pesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)	flat rate per farmer	5 500	1,05€	5 789,47 €	
1.4.2	Provide worms for composting	Kg of worm	10	105,26€	1 052,63 €	
1.4.3	Participate to improve cowsheds for quality manure, for better health of dairy cows and for composting	flat rate per farmer	300	26,32€	7 894,74 €	
1.4.4	Provide seeds of forage (grasses and legumes and off season forage) and food safety plants (orange flesh sweet potatoes) based on experiences of FIFAMANOR	flat rate per farmer	2 000	5,16€	10 315,79 €	
1.4.5	Provide fry and other equipment for farmers for fish raising in the paddy field or in ponds (base on the experiences of APDRA and CIRAD)	flat rate per farmer	150	15,79€	2 368,42 €	
Activity 1.5	Collect data on CSA in some strategic area at National level in a view to update data on upscaling of CSA and best practices in the Country				39 000,00 €	5,36%
1.5.1	Contract with a firm to conduct National survey in some strategic agro-ecological areas	Expertise	1	20 000,00 €	20 000,00	
1.5.2	Integrate data in MANAMORA database - and include database improvement by contracting with CIRAD	CIRAD Expertise (Convention)	1	15 000,00€	15 000,00	
1.5.3	Train regional directorates of MPAE (DRAE) in the use of the data base MANAMORA			0,00€	-	
1.5.4	Transfer National database to DRAE (Ministry regional branch)	flat rate 3 years	1	4 000,00 €	4 000,00	
Activity 1.6	Purchase principal means for upscaling activity				54 013,16 €	7,43%
	Purchase Equipments for field team (technician and lead farmers)				25 000,00 MGA	3,44%
	Purchase of motorcycles	Unit	8	2 631,58 €	21 052,63	

Budget acc.	MAIN OUTPUTS/ACTIVITIES/HUMAN RESSOURCES	Unit	Quantity	Unit price (€)	Budget € Total	% Total budget
1.6.1.2	Purchase of bicycles	Unit	50	78,95€	3 947,37	
1.6.2	Car hiring, fuel and repairs for field backstopping				29 013,16 €	3,99%
1.6.2.1	Fuel and repairs (spare parts) for motorcycle	month	297	65,79€	19 539,47	
1.6.2.2	Car hiring for field backstopping and monitoring (all CSA: CA, Agroforestry and best practices)	Days	90	105,26€	9 473,68 €	
2. RESULT 2	: Capacity of various stakeholders is built in Climate smart Agriculture Conservation Agriculture and				103 022,11 €	14,17%
Agroforestry						
	Train nurserymen in the technology of tree nurseries and in the choice of the appropriate tree species				2 302,63 €	0,32%
2.1.1	Train nurserymen/women	per Nurseryman	50	46,05€	2 302,63 €	
Activity 2.2	Train lead farmers and farmers in CSA (CA, agroforestry and forestation, other good practices)				33 157,89 €	4,56%
2.2.1	Train Lead farmers (by project Technicians and other stakeholders)	(No direct cost)	50	0,00€	0,00€	
2.2.2	Support cost of farmers training by Lead farmers (Farmer to farmer approach, based on man-day spent on training of their peer farmers)	Lead Farmers Man- Day	12600	2,63€	33 157,89€	
Activity 2.3	Train secondary school students in CSA (CA, Agroforestry and forestation, other good practices)				46 117,63 €	6,34%
2.3.1	Make Diagnosis to select 6 beneficiary schools	number of diagnosis	1	185,26€	185,26€	
2.3.2	Organize Events (Commitment charter event, Tools delivery)	number of Event	2	185,26€	370,53€	
2.3.3	Organize Training for Ministry Branch (OEMC/DREMC/BEMC)	Session	1	131,58€	131,58€	
2.3.4	Organize Training for teachers (3 sessions of training in Vakinankaratra)	Session	3	1 764,21€	5 292,63 €	
2.3.5	Training Tools (tarpauling, booklet, teacher guideline, language-photo) - 6 new schools	Flat rate (see details)	1	3 806,05 €	3 806,05 €	
2.3.6	Produce and edit Communication tools (tarpaulin, Roll up)	Flat rate (see details)	2	105,26€	210,53€	
2.3.7	Produce Film for communication	Flat rate (3 years)	1	3 684,21€	3 684,21€	
2.3.8	Produce Cartoon strips for school children	Number of cartoon strips	1	10 000,00 €	10 000,00 €	
2.3.9	Provide some kits and inputs for demonstration plot (Materials and tools, Teaching Tools, inputs) for 6 new school	Flat rate (see details)	1	3 857,89€	3 857,89€	
2.3.10	Accompany students in the implementation	No cost (including in the GSDM backstopping)	3	0,00€	0,00€	
2.3.11	Organize competition of best school (demonstration plot and student knowledge)	Flat rate	1	421,05€	421,05€	
2.3.12	Exchange visits between School	Flat rate per year	3	1 842,11€	5 526,32 €	
2.3.13	Organize annual workshop (capitalization, experiences exchange)	Flat rate per year	3	2 105,26€	6 315,79€	
2.3.14	Car hiring for training, monitoring and other actions to secondary school	Days	60	105,26€	6 315,79 €	
Activity 2.4	Organize training sessions targeting development actors such as farmers organizations, NGO and services providers				5 842,11 €	0,80%
2.4.1	Organize training sessions targeting development actors as farmers organizations, NGO, local service provider	Session	3	1 315,79€	3 947,37 €	
2.4.2	Organize exchange visit in the training sites of GSDM	Number of beneficiaries		0,00€	-	
2.4.3	Car hiring during training sessions (6 days per session)	Days	18	105,26€	1 894,74 €	

Budget acc.	MAIN OUTPUTS/ACTIVITIES/HUMAN RESSOURCES	Unit	Quantity	Unit price (€)	Budget € Total	% Total budget
Activity 2.5	Involve regional Directorate of Meteorology in Climate smart Agriculture Conservation Agriculture and Agroforestry	Number	800		7 707,11€	1,06%
2.5.1	organize Information/sensitization of local stakeholders	Session	3	263,16€	789,47€	
2.5.2	Organize Training workshops for local stakeholders	Workshop	3	1 499,21€	4 497,63 €	
2.5.3	Provide Regional Meteorological information bulletins (quarterly)	Number	800	0,53€	421,05€	
2.5.4	Provide per diem for meteorological officers	Year	3	666,32€	1 998,95 €	
Activity 2.6	Involve the Ministry of Agriculture and livestock (MPAE) and Ministry of Environment and Forestry (MEEF) or regional directorates				7 894,74 €	1,09%
2.6.1	Organize field collaboration and exchange by MPAE + MEEF	Year intervention	3	789,47€	2 368,42 €	
2.6.2	Organize field collaboration and exchange by regional directorates (DRAE + DREEF)	Year intervention	3	1 842,11€	5 526,32 €	
Activity 2.7	Participate to CSA integration into public policies				0,00€	0,00%
2.7.1	Participate to workshops or meeting to advocate CSA (no cost)	Workshop	3	0,00€	-	
2.7.2	Participate to workshops or meeting on climate change to advocate CSA (no cost)	Workshop	3	0,00€	-	
	: Farmers organizations are supported and linked to various stakeholders in the Agriculture to support v of the project results				32 512,20 €	4,47%
Activity 3.1	Support FOs to participate in the development of National Action Plan for Climate Change as well as other Climate Change Frameworks		3	1 020,30 €	3 692,47 €	0,51%
3.1.1	Organize awareness raising on Climate Change targeting development actors as farmers organizations, NGO, local service provider	Session	3	1 020,30 €	3 060,89 €	
3.1.2	Car hiring during training sessions (2 days per session)	Days	6	105,26€	631,58€	
Activity 3.2	Sharing experience at the regional level (COMESA and other regions) integrating political actors and development actors				9 161,84 €	1,26%
3.2.1	Organize exchange visits targeting policy makers, development actors (technicians) and farmers in COMESA and other regions	Exchange visit	1	9 161,84 €	9 161,84	
Activity 3.3	Support FOs to maintain continuous exchange with FDA and FDAR (state promoted development mechanisms in national level) in order to make a link between farmers and agricultural services		3		0,00€	0,00%
3.3.1	Ensure Permanent exchange with FDA (state promoted development device in national level) in order to make a link with government development orientations	Year intervention	3	0,00€	0,00€	
3.3.2	Ensure Permanent exchange with FDAR (state promoted development device in regional level) in order to make a link with government development orientation	Year intervention	3	0,00€	0,00€	
Activity 3.4	Ensure that the FOs obtain permanent utilization of the Agricultural Service Provider (state promoted development mechanisms in national level) to make a link between the farmers and the agricultural services			500,00€	1 500,00 €	0,21%
3.4.1	Ensure Permanent utilization of CSA or Agricultural Service Center (state promoted development mechanism in District level) to make a link between farmers and agricultural service	Year intervention	3	500,00€	1 500,00 €	
Activity 3.5	Support FOs on their collaborative contracting with various partners such as APDRA, FIFAMANOR, CEFFEL, AVSF, AGRISUD and PAPAM in various interventions				18 157,89 €	2,50%
3.5.1	Built capacity of FOs on rice/fish ecosystem by contracting with APDRA	Year intervention	2	1 710,53 €	3 421,05 €	
3.5.2	Built capacity of FOs on dairy cattle and forages by contracting with FIFAMANOR	Year intervention	2	2 631,58€	5 263,16€	

Budget acc.	MAIN OUTPUTS/ACTIVITIES/HUMAN RESSOURCES	Unit	Quantity	Unit price (€)	Budget € Total	% Total budget
	Built capacity of FOs on market gardening and livestock by contracting with AVSF (targeting mainly women)	Year intervention	2	1 578,95€	3 157,89€	
	Built capacity of FOs on FFS School approach as developed by PAPAM project by AGRISUD	Year intervention	2	1 578,95 €	3 157,89€	
3.5.5	Built capacity of FOs on Best practices, bio-pesticides and fruit trees by contracting with CEFFEL	Year intervention	2	1 578,95 €	3 157,89€	
4. COMMUN	ICATION AND VISIBILITY				50 235,86 €	6,91%
Activity 4.1	Visibility and communication events organization				19 483,86 €	2,68%
4.1.1	Organize regional field days targeting government authorities and development actors	year	1	12 493,42 €	12 493,42 €	
4.1.2	Design Communication tools as streamers, roll up and mass communication	Year	3	224,88€	674,64€	
4.1.3	Car hiring for all communication and visibility actions	Days	60	105,26€	6 315,79€	
Activity 4.2	Publications and broadcasting				5 363,84€	0,74%
4.2.1	Broadcast messages on national TV	Broadcasting	2	1 582,50€	3 165,00€	
4.2.2	Broadcast message on national Radio	Broadcasting	30	33,32€	999,47€	
4.2.3	Expenses related to attendance of journalists or reporters in events for publication on TV or newspapers	year	3	399,79€	1 199,37 €	
Activity 4.3	Documentaries conception and edition				25 388,16€	3,49%
4.3.1	Design and edit documents and tools for technicians and farmers	Flat rate	1	2 368,42€	2 368,42	
4.3.2	Produce films for each project events	Flat rate	3	4 164,47€	12 493,42	
	Produce Capitalization leaflets	Flat rate	1	10 526,32 €	10 526,32	
5. PROJECT A	DMINISTRATION (HUMAN AND EQUIPEMENTS)				168 093,87 €	23,11%
	Recruit PMU officials (full time)				89 447,37 €	12,30%
5.1.1	Project leader	month	33	657,89€	21 710,53	
5.1.2	Assistant of project leader	month	33	473,68€	15 631,58	
5.1.3	Technician on CSA (Highland + Middle West) (6 technicians in total for the 2 sub regions)	month	198	263,16€	52 105,26	
Activity 5.2	Implement technical backstopping by GSDM key staff				43 240,04 €	5,95%
5.2.1	Director (2 months per year)	month	6,00	1 854,42€	11 126,53	
5.2.3	Agronomist (2 months per year)	month	6,00	892,04€	5 352,25	
5.2.4	Trainers agronomists (2 months per year per trainer): 2 trainers (Martin and Hasina)	month	12,00	892,04€	10 704,51	
5.2.5	Agro economist (2 months per year)	month	6,00	892,04€	5 352,25	
5.2.6	Communication Officer (2 months per year)	month	6,00	892,04€	5 352,25	
5.2.7	Agronomist Vakinankaratra (2 months per year)	month	6,00	892,04€	5 352,25	
Activity 5.3	Local missions				15 789,47 €	2,17%
5.3.1	Per diem for GSDM national staff	days	600	19,74€	11 842,11	
5.3.2	Per diem for local staff	days	300	13,16€	3 947,37	
Activity 5.4	Means and equipments implementation				19 616,98 €	2,70%
5.4.3	Offices renting and communication				3 315,79 €	
5.4.3.1	Regional office renting	month	36	92,11€	3 315,79	
5.4.4	Office furniture, hard ware				15 227,51 €	2,09%
	PC/laptop	Unit	4	1 052,63€	4 210,53	
5.4.4.2	Printers/scanner/photocopiers	Unit	2	276,32€	552,63	
5.4.4.3	Digital camera	Unit	2	473,68€	947,37	

Budget acc.	MAIN OUTPUTS/ACTIVITIES/HUMAN RESSOURCES	Unit	Quantity	Unit price (€)	Budget € Total	% Total budget
	Video projectors + screens	Unit	2	1 052,63 €	2 105,26	
	Hard disks	Unit	1	97,37€	97,37	
5.4.4.6	Other equipment (Rain boot, Raincoat, Calculator, backpack, tape measure)	per technician	6	92,11€	552,63	
5.4.4.7	Communication/courier and other coordination expenses	Unit	3	2 253,91€	6 761,72	
5.4.5	Spare parts for hard ware and other office machineries				1 073,68 €	0,15%
5.4.5.1	Spares (hard ware, photocopiers etc.)	Année	3	357,89€	1 073,68	
6. PROJECT O	VERSIGHT				45 789,47 €	6,30%
Activity 6.1	Steering comittee				789,47 €	0,11%
6.1.1	Steering committee establishment			0,00€	-	
6.1.2	Organize Steering committee meetings to give strategic orientation and advice during all phases of the project	Meetings	3	263,16€	789,47	
Activity 6.2	Monitoring and Evaluation of the project				45 000,00 €	6,19%
6.2.1	Base line study through external expertise	Baseline study	1	15 789,47€	15 789,47	
6.2.2	Financial auditing (by COMESA)			0,00€	-	
6.2.3	Quarterly report			0,00€	-	
6.2.4	Annual report			0,00€	-	
6.2.5	Midterm evaluation through external expertise	Midterm evaluation	1	7 894,74 €	7 894,74	
	Final evaluation through external expertise	Final evaluation	1	11 842,11€	11 842,11	
6.2.7	Car hiring for monitoring and evaluation	Days	90	105,26€	9 473,68 €	
Activity 6.4	Project achievements capitalization				0,00€	0,00%
6.4.1	Capitalization report (no cost)			0,00€	-	
TOTAL RESUL	T 1 + RESULT 2 + RESULT 3 + COMMUNICATION + ADMINISTRATION + PROJECT OVERSIGHT				679 692,98 €	93,46%
7	Administrative charge				47 578,51 €	6,54%
7,1	Administrative charges				47 578,51 €	
7.1.1	Project Management Fee charged by the Implementing Entity = 7%	7,0%		0,00€	47 578,51€	
BUDGET TOT	AL				727 271,49 €	

## C. Annex 4: FY 2018 Work plan and Budget

Budget acc.	Planned Activities	Indicator	Target						ar 1						BUDGET (€)
buuget uce.	RESULT 1 : CSA and best practices are up scaled i		(Year 1)	M1 M2	2 M3	M4	M5	M6	<u>M7</u>	M8	M9	M10	M11	M12	Year 1
1.		n two ecosystems of	the VAKINAN	KARAIR	A regio	on, co	verin	g the	Highi	and a	and M	liddie	e wes	t	115 644,74 €
	regions in Madagascar														
Activity 1.1	Conduct awareness raisig, exchanges visits and fi	eld days to facilitate	experiences	sharing	and le	arning	g betv	ween	benef	iciari	ies				7 631,58 €
1.1.1	Exchanges visites inside communes	Number of exchange visit	2 400												3 157,89
1.1.2	Exchanges visites between communes	Number of exchange visit	200												526,32
1.1.3	Car hiring and other expenses during field visits	Days	40												3 947,37
Activity 1.2	Upscale Conservation Agriculture to support the	growing of up land ri	ice and other	crops											5 921,05 €
1.2.1	Provides seeds of cover crops (mucuna, stylosanthes, cowpea)	Flate rate per new farmer	1 500												5 921,05
1.2.2	Support for Stylosanthes rollers	Group of farmers	-												
Activity 1.3	Upscale agroforestry and forestation (equipemen	t and seed support to	o nurserymar	and ad	opting	farme	ers)							-	35 921,05 €
1.3.1	Support tree nurserimen (potting bags, other materials)	Flate rate per Nursery	20												3 158
1.3.2	Support adopting farmers in tree plantlets for reforestation (Acacia, Eucalyptus)	Tree	500 000												26 315,79
1.3.3	Support adopting farmers in fruit plantlets	Tree (fruit plantlet)	10 000												3 289,47
1.3.4	Provides seeds of hedgerow (Cajanus, Tephrosia)	Flate rate per new farmer	2 000												3 157,89
Activity 1.4	Promote other best practices (bio-pesticides and food safety as orange flesh sweet potatoes, reg				ng, im	prove	d org	anic 1	fertili	zers,	forag	ges, sp	ecies	for	8 631,58 €
1.4.1	Provide seeds of mucuna, crotalaire, others plants used as bio-pesticides/repellent plants (based on the experiences of BVPI, GSDM, CEFFEL)	Flate rate per new farmer	1 500												1 578,95
1.4.2	Provide worms for composting	kg of worm	10												1 052,63
1.4.3	Participate to improve cowsheds for quality manure and composting	Flate rate per new farmer	100												2 631,58
1.4.4	Provide seeds of forage (grasses and legumes and off season forage) and food safety plants (orange flesh potatoes) based on experiences of FIFAMANOR	Flate rate per new farmer	500												2 578,95
1.4.5	Provide fry and other equipment for farmers for fish raising in the paddy field or in ponds (based on the experiences of APDRA and CIRAD)	Flate rate per new farmer	50												789,47

Budget acc.	Planned Activities	Indicator	Target						Y	ear 1						BUDGET (€)
Budget acc.		Indicator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Year 1
Activity 1.5	Collect data on CSA in some strategic area at Nat	ional level in a view t	o update da	ta on	upso	aling	of C	SA an	d be	st pra	ictice	es in t	the Co	untry		23 000,00 €
	Contratc with a firm to conduct National survey in some strategic agro-écological areas	Number of national survey (with national data in CSA)	1													20 000,00
1.5.2	Integrate data in MANAMORA database - and include database improvement by contratcing with CIRAD	One contract with CIRAD expertise (adaptation de la BDD Manamora, accompagnement GSDM, formation DRAE et autres acteurs)														3 000,00
1.5.3	Train regional directorates of MPAE (DRAE) in the use of the data base MANAMORA	DRAE staff trained														
1.5.4	National database transfert to DRAE (Ministry regional branch)	One database transfered														
Activity 1.6	Purchase principal mean for upscaling activity															34 539,47 €
1.6.1	Purchase of Equipments															25 000,00 €
1.6.1.1	Purchase of motorcycles	Unit	8													21 052,63
1.6.1.2	Purchase of bicycles	Unit	35													3 947,37
1.6.2	Fuel and repairs															9 539,47 €
1.6.2.1	Fuel and repairs (spare parts) for motorcycle	month	81													5 328,95
	Car hiring for field backstopping and monitoring (all CSA: CA, Agroforestry and best practices)	Days	30													4 210,53
2.	RESULT 2 : Capacity of various stakeholders is bu	ilt in Climate smart A	griculture Co	onser	vatio	n Agr	icult	ure ar	nd Ag	rofor	estry	,				40 202,41 €
Activity 2.1	Train nursymen in the technology of tree nurseri	es and in the choice o	of the appro	priate	e tree	spec	ies									921,05€
2.1.1	Train Nurserymen/women	Number of nurserymen	20													921,05
Activity 2.2	Train lead farmers and farmers in CSA (CA, agrofo	restry and forestation	n, other goo	d pra	ctice	s)										11 052,63 €
2.2.1	Train Lead farmers (LF) by technicians and other stakeholders	Number of Lead farmers	50													-
2.2.2	Support cost of farmers training by Lead farmers (Farmer to farmer approach, based on man-day spent on training of their peer farmers)	Lead farmers manday	4 200													11 052,63

Budget acc.	Planned Activities	Indicator	Target		_				Ye	ear 1				_		BUDGET (€)
buuget acc.		indicator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Year 1
Activity 2.3	Train secondary school students in CSA (CA, Agro	forestry and forestati	on, other go	ood p	racti	ces)										21 089,52 €
2.3.1	Make Diagnosis to select beneficiary schools	number of diagnosis	1													185,26
2.3.2	Organize Events (Commitment charte event, Tools delivery)	number of Event	2													370,53
2.3.3	Organize Training for Ministry Branch (OEMC/DREMC/BEMC)	Session	1													131,58
2.3.4	Organize Training for teachers (3 sessions of training in Vakinankaratra)	Session	3													5 292,63
2.3.5	Training Tools (tarpaulin, booklet, teacher guideline, langage-photo) - 6 new schools	Flate rate (see details)	1													3 806,05
2.3.6	Produce and edit Communication tools (tarpaulin, Roll up)	Flate rate (see details)	1													105,26
2.3.7	Produce Film for communication	Flate rate (3 years)	1													1 077,15
2.3.8	Produce Cartoon strips for school children	Number of cartoon strips											-			
	Provide some kits and inputs for demonstration plot (Materials and tools, Teaching Tools, inputs) for 6 new school	Flate rate (see details)	1													1 963,16
2.3.10	Accompany students in the implementation	Flate rate (see details)	1													-
2.3.11	Organise competition of best school (demonstration plot and student knowledge)	Flate rate	-													
2.3.12	Exchange visits between School	Flate rate per year	1													2 368,42
2.3.13	Organize annual workshop (capitalisation, experiences exchange)	Flate rate per year	1													2 631,58
2.3.14	Car hiring for training, monitoring and other actions fo secondary school	Days	20													3 157,89
Activity 2.4.	Organise training sessions targeting development	actors such as farme	rs organisat	ions,	NGO	ands	servi	ces pi	rovid	ers						1 947,37 €
2.4.1	Organize training sessions targeting development actors as farmers organizations, NGO, local service provider	Number of training sessions	1													1 315,79
	Organize exchange visit in the training sites of GSDM	Number of participants of exchange visit in the training sites of GSDM	800													
2.4.3	Car hiring during training sessions (6 days per session)	Days	6													631,58

Budget acc.	Planned Activities	Indicator	Target						-	ear 1						BUDGET (€)
Buuget acc.		Indicator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Year 1
Activity 2.5	Involve regional Directorate of Meteorology in C	imate smart Agricultu	ıre Conserva	tion A	gricu	ulture	and	Agro	fores	stry						2 560,26 €
2.5.1	Organize Information/sensitization of local stakeholders	Number of sessions	1													263,16
	Organize Training workshop for local stakeholders	Number of sessions	1													1 499,21
2.5.3	Provide regional Meteorological information bulletins (quarterly)	Number of bulletin	200													131,58
2.5.4	Provide perdiem for meteorological officer	Number of METEO officer intervention	2													666,32
Activity 2.6	Involve the Ministry of Agriculture and livestock	(MPAE) and Ministry	of Environm	nent ar	nd Fo	orestr	у (М	EEF)	or re	giona	l dire	ctora	ates			2 631,58 €
2.6.1	Organize field collaboration and exchange by MPAE + MEEF	Number of mission	1													789,47
	Organize field collaboration and exchange by regional directorates ( DRAE + DREEF)	Number of concerned DRAE	1													1 842,11
Activity 2.7	Participate to CSA integration into public policie	s														0,00 €
2.7.1	Participate to workshops or meeting to advocate CSA (no cost)	Worskshop														-
2.7.2	Participate to workshops or meeting on climate change to advocate CSA (no cost)	Worskshop														-
3.	RESULT 3 : Farmers organisations are supported a results	ind linked to various	stakeholers	in the	Agri	cultu	re to	supp	ort s	ustai	nabil	ity of	the p	roject		10 809,77 €
Activity 3.1.	Support FOs to participate in the development o	f National Action Plan	n for Climate	Chan	ge as	s well	as o	ther	Clima	ate Ch	ange	Fram	neworl	<s< td=""><td></td><td>1 230,82 €</td></s<>		1 230,82 €
3.1.1	Organize awareness raising on Climate Change targeting development actors as farmers organizations, NGO, local service provider	Session	1													1 020,30
3.1.2	Car hiring during training sessions (2 days per session)	Days	2													210,53
Activity 3.2	Sharing experience at the regional level (COMESA	and other regions) i	ntegrating p	olitica	l act	ors a	nd de	evelo	pmer	nt act	ors					0,00 €
3.2.1	Organize exchange visits targeting policy makers, development actors (technicians) and farmers in COMESA and other regions	Number of exchange visits in COMESA and other regions Number of exchange														
$\Delta C T V T V + + + +$	Support FOs to maintain continuous exchange w	visits participants ith FDA and FDAR (sta	ate promoteo	d deve	lopn	nent r	nech	anisr	ns in	natio	nal l	evel)	in ord	er to	make	0,00 €
	a link between farmers and agricultural services	1	1	_	_											
3.3.1	Ensure Permanent exchange with FDA (state promoted development device in national level) in order to make a link with government development orientations	Number of concerned FDA	1	-												-
3.3.2	Ensure Permanent exchange with FDAR (state promoted development device in regional level) in order to make a link with government development orientation	Number of concerned FDAR	1													_

Budget acc.	Planned Activities	Indicator	Target						Yea	ar 1					BUDGET (€)
Buuget acc.		Indicator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9 M	10 M1	1 M12	Year 1
Acivity 3.4.	Ensure that the FOs obtain permanent utilization level) to make a link between the farmers and the			der (s	tate p	romot	ted o	develo	opme	nt me	canis	ms in r	ationa	I	500,00€
3.4.1	Ensure Permanent utilization of CSA or Agricultural Service Center (state promoted development mechanism in District level) to make a link between farmers and agricultural service	Number of concerned CSA (Agricultural Service Center)	6												500,00
Acivity 3.5.	Support FOs on their collaborative contracting w various interventions	ith various partners s	such as APDF	RA, FI	FAMA	NOR,	CEFF	EL, A	VSF, /	AGRIS	UD ar	nd PAP.	AM in		9 078,95 €
3.5.1	Built capacity of FOs on rice/fish ecosystem by contracting with APDRA	Year intervention (but ponctual action by training)	1												1 710,53
3.5.2	Built capacity of FOs on dairy cattle and forages by contracting with FIFAMANOR	Year intervention (but ponctual action by training)	1												2 631,58
3.5.3	Built capacity of FOs on market gardening and livestock by contracting with AVSF (targeting mainly women)	Year intervention (but ponctual action by training)	1												1 578,95
3.5.4	Built capacity of FOs on FFS School approach as developped by PAPAM project by AGRISUD	Year intervention (but ponctual action by training)	1												1 578,95
3.5.5	Built capacity of FOs on Best practices, bio-pesticides and fruit trees by contracting with CEFFEL	Year intervention (but ponctual action by training)	1												1 578,95
4.	COMMUNICATION AND VISIBILITY														8 857,46 €
Acivity 4.1.	Visibility and communication events organization	1													3 382,78 €
111	Organization of regional field days targeting government authorities and development actors	Number of regional field days	-												
4.1.2	Conception of other Communication tools as streamers, roll up and mass communication	Number of streamer Number of roll up	2												56,22 168,66
4.1.3	Car hiring for all communication and visibility action	Days	20												3 157,89

Budget acc.	Planned Activities	Indicator	Target						Ye	ear 1						BUDGET (€)
Buuger acc.		mulcator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Year 1
Acivity 4.2.	Publications and broadcasting															599,68€
1 2 1	Broadcasting on national TV	Number of TV														
4.2.1		broadcasting	-													
122	Broadcasting on national Radio	Number of Radio	6													199,89
7.2.2		broadcasting	0													155,65
		Hommeday of reporters														
		(20 reporters x 5events)	40													399,79
		New Loss C														
4 2 2	Expenses related to attendance of journalists or reproters	Number of	8													-
4.2.3	in events for publication on TV or newspapers	newspapers'publication														
		Number of TV events	2													_
		broadcasting	2													_
		Number of Radio	2													-
		events broadcasting	-													
	Documentaries conception and edition															4 875,00 €
	Edition documents and tools for techicians and farmers	Flate rate (Year)	1													710,53
4.3.2	Editing of films for each project events	Number of films	5													4 164,47
5.4.2	Capitalization leaflets	Number of capitalization leaflets														
5.	PROJECT ADMINISTRATION (HUMAN AND EQUIPER				<u> </u>			<u> </u>	I							63 319,89 €
Activity 5.1.	PMU officials recruited															29 815,79 €
5.1.1	National Technical Assistant (Project Leader)	Months	11													7 236,84
5.1.2	Assitant of project leader	months	11													5 210,53
5.1.3	Technician Agroecology (Highland+Middle West) (6 technicians)	months	66													17 368,42
Activity 5.2.	GSDM Backstopping fully implemented by his ke	y staff														14 413,35 €
5.2.1	Director (2 months per year)	Months	2													3 708,84
	Agronomist (2 months per year)	Months	2													1 784,08
	Trainers agronomists (2 months per year per trainer): 2	Months	4													
5.2.3	trainers (Martin and Hasina)	Months	4													3 568,17
5.2.4	Agro economist (2 months per year)	Months	2													1 784,08
5.2.5	Communication Officer (2 months per year)	Months	2													1 784,08
5.2.6	Agronomist Vakinankaratra (2 months per year)	Months	2													1 784,08
Activity 5.3.	Local missions															6 907,89 €
5.3.1	Per diem for GSDM national staff	Days	200													4 934,21
5.3.2	Per diem for local staff	Days	100											_		1 973,68

Budget acc.	Planned Activities	Indicator	Target						Ye	ar 1						BUDGET (€)
Budget acc.		mulcator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Year 1
Activity 5.4.	Mean and equipments implementation															12 182,85 €
5.4.3	Offices renting and communication															1 105,26 €
5.4.3.1	Regional office renting	month	12													1 105,26
5.4.4	Offices renting and communication															10 719,70 €
5.4.4.1	PC/laptop	Unit	4													4 210,53
5.4.4.2	printers/scanner/photocopiers	Unit	2													552,63
5.4.4.3	Digital camera	Unit	2													947,37
	videoprojectors + screens	Unit	2													2 105,26
5.4.4.5	hard disks	Unit	1													97 <i>,</i> 37
5.4.4.6	Other equipments (flat rate per technician)	Per technician	6													552 <i>,</i> 63
5.4.4.7	Communication/courier and other coordination expenses	Unit	1													2 253,91
5.4.5	Spare parts for hard ware and other office machineries															357,89€
5.4.5.1	Spares (hard ware, photocopiers etc.)	year	1													357,89
6.	PROJECT OVERSIGHT															16 051,03€
Activity 6.1.	Steering committee															261,56€
6.1.1	Steering committee establishment	Steering comittee established	1													
	Steering committee meetings to give strategic orientation and advice during all phases of the project	Number of steering comittee meetings	1													261,56

Budget eee	Planned Activities	Indicator	Target						Υe	ear 1						BUDGET (€)
Budget acc.		Indicator	(Year 1)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11 N	112	Year 1
Activity 6.2.	Monitoring and Evaluation of the project															15 789,47 €
6.2.1	Base line study through external expertise	One base line study	1													15 789,47
6.2.2	Financial auditing	3 Financial auditing (one per year by COMESA)	1													
6.2.3	Bi-annual reportings	3 Semestrial report (1st : 1 per year)														
6.2.4	Annual reportings	3 Annual report (including semestrial 2 report)														
6.2.5	Mid-term evaluation through external expertise	One Mid-term evaluation														
6.2.6	Final evaluation through external expertise	One Final evaluation														
6.2.7	Car hiring for monitoring and evaluation	Days	30													3 182,41
Activity 6.3.	Project achievements capitalization															0,00€
6.3.1	Project capitalization report	Number of capitalization report														
FY																254 885,30 €
7.2.1	Adminstrative charges	7,0%														17 841,97 €
	YEAR 1 TOTAL BUDGET (EUROS)															272 727,27 €