

GEF-6 PROGRAM FRAMEWORK DOCUMENT (PFD)

TYPE OF TRUST FUND: GEF TRUST FUND



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PART I: PROGRAM IDENTIFICATION

Program Title:	Sustainable Management of Madagascar's Marine Resources		
Country(ies):	Madagascar	GEF Program ID: ¹	9433
Lead GEF Agency:	World Wildlife Fund, Inc.	GEF Agency Program ID:	G00012 (WWF) P153370 (WB)
Other GEF Agenc(ies):	World Bank	Submission Date:	28/03/2016
Other Executing Partner(s):	Ministry of Environment, Ecology, Oceans and Forests; Ministry of Living Marine Resources and Fisheries; WCS; Blue Ventures	Program Duration(Months)	60
GEF Focal Area (s):	Biodiversity, International Waters	Program Agency Fee (\$):	565,596 (WWF) 577,982 (WB)
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>		
Program Commitment Deadline: 30/06/2018			

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Expected Outcomes	Trust Fund	Amount (in \$)	
			GEF Program Financing	Co-financing
IW-3 Program 7	Strengthened governance and management of the priority fisheries in target areas	GEFTF	6,422,018	23,000,000
BD-1 Program 1	Improved management effectiveness of protected areas.	GEFTF	3,142,202	8,895,500
BD-1 Program 2	Increase in area of marine ecosystems of global significance in new protected areas and increase in threatened species of global significance protected in new protected areas.	GEFTF	3,142,202	8,066,750
Total Program Costs			12,706,422	39,962,250

B. INDICATIVE PROGRAM RESULTS FRAMEWORK

Program Objective: Strengthened management of Madagascar's marine biodiversity and productivity					
Program Components	Financing Type ³	Program Outcomes	Trust Fund	(in \$)	
				GEF Program Financing	Co-financing
Program Component 1. Marine Protected Area (MPA) / Locally Managed Marine Area (LMMA) expansion and	TA	Seascape level coordination of biodiversity and priority fisheries management in target areas	GEFTF	5,157,574	14,313,050

¹ Program ID number will be assigned by GEFSEC.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCE](#).

³ Financing type can be either investment or technical assistance.

MPA and priority fisheries management plans implemented in key areas					
1.a Ministry of Environment, Ecology, Oceans and Forests (MEEMF) Marine Protected Area project (MPA plans and fisheries measures not covered by fisheries law)				2,567,574	7,862,250
1.b Ministry of Marine Resources and Fisheries (MRHP) SWIOFish2 (Fisheries co-management units & fisheries Management plans)				2,590,000	6,450,800
Program Component 2. Improved biodiversity and priority fisheries governance	TA	Strengthened governance and management of Marine Protected Areas, Locally Managed Marine Areas and priority fisheries in target areas	GEFT F	6,749,591	17,349,200
2.a Ministry of Environment, Ecology, Oceans and Forests (MEEMF) MPA project				2,917,573	8,450,000
2.b Ministry of Marine Resources and Fisheries (MRHP) SWIOFish2 (fisheries regalian functions apart from management plan and co-management implementation)		Includes policy and legal frameworks, a fisheries information system, research and capacity building		3,832,018	8,899,200
Program Component 3. Increased economic and social benefits from priority fisheries and other economic developments	TA	Increased local value added from the fisheries and other sectors such as ecotourism in target areas	GEFT F	500,000	3,800,000
3.a Ministry of Environment, Ecology, Oceans and Forests MEEMF Marine Protected Area project				500,000	350,000
3.b Ministry of Marine Resources and Fisheries (MRHP) SWIOFish2 (for fisheries sustainable development and restriction of access compensation due to fisheries management plans)					3,450,000
Program Component 4. Enhanced regional integration	TA	Cohesion and coordination to improve regional fisheries management efficiency for Madagascar and neighboring countries	GETF	0	2,000,000
4.a Ministry of Environment, Ecology, Oceans and Forests MEEMF Marine Protected Area project				0	0

4.b Ministry of Marine Resources and Fisheries (MRHP) SWIOFish2				0	2,000,000
Subtotal				12,407,165	37,462,250
Program Management Cost (PMC) ⁴			GEFT F	299,257*	2,500,000
Total Program Cost				12,706,422	39,962,250

* PMC only on MPA child project (see Annex A)

C. CO-FINANCING FOR THE PROGRAM BY SOURCE, BY NAME AND BY TYPE

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
GEF Agency	World Bank	Loans	20,000,000
GEF Agency	World Bank	Grants	2,000,000
Recipient Government	MRHP	In-kind	1,000,000
Recipient Government	Ministry of Environment, Ecology, Oceans and Forests	In-kind	2,424,510
Recipient Government	Madagascar National Parks	In-kind	3,000,000
CSO	WWF-Madagascar Country Office	In-kind	4,678,068
CSO	WCS	In-kind	500,000
CSO	Blue Ventures	In-kind	2,048,401
Donor Agency (select)	KfW	Grants (select)	4,311,271
Total Cofinancing			39,962,250

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, TRUST FUND, COUNTRY, FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Type of Trust Fund	Country Regional/Global	Focal Area	Programming of Funds	(in \$)		
					Program Amount (a)	Agency Fee (b)*	Total c=a+b
World Bank	GEFTF	Regional	International Waters		6,422,018	577,982	7,000,000
WWF	GEFTF	Madagascar	Biodiversity		6,284,404	565,596	6,850,000
Total Grant Resources					12,706,422	1,143,578	13,850,000

* Please indicate fees related to this Program. Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROGRAM'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected program targets as appropriate.

Corporate Results	Replenishment Targets	Indicative Program Targets
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⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

⁵ Provide those indicator values in this table to the extent applicable to your proposed program. Progress in programming against these targets for the program per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	3,500,000 hectares
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	hectares
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	number of freshwater basins
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	0.1% percent of fisheries, by volume
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	metric tons
	Reduction of 1000 tons of Mercury	metric tons
	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

PART II: PROGRAMMATIC JUSTIFICATION

1. Program Description. Briefly describe: a) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; b) the baseline scenario or any associated baseline program/projects, c) the proposed alternative scenario, GEF focal area⁶ strategies, with a brief description of expected outcomes and components of the program, d) [incremental/ additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); and e) innovation, sustainability and potential for scaling up.

A) THE GLOBAL ENVIRONMENTAL PROBLEM (root causes and barriers that need to be addressed)

This goal of this program is to support the Government of Madagascar to achieve effective conservation of the country's unique marine biodiversity while deriving sustainable economic and social benefits from sustainable exploitation of key fisheries at local and national levels. This translates into having an effective network of Marine Protected Areas (MPAs) and enhanced management of fisheries stocks for improved food security and economic development. In this context the two child projects are highly complementary: the MPAs provide healthy ecosystems and act as fisheries reserves to maintain productive fisheries, and improved fisheries management provides opportunities for achieving fisheries-specific policy objectives such export revenues and increased local incomes at the community level for commercial fisheries (e.g., octopus, sea-cucumber).

⁶ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

Biodiversity overview

The global importance of Madagascar's terrestrial biodiversity has long been recognized but recent scientific research has clearly demonstrated highly diverse marine ecosystems and species. Levels of coral diversity for example are the highest in the Western Indian Ocean and only surpassed globally by the Coral Triangle. Furthermore, Madagascar is at the heart of the Agulhas and Somali Currents Large Marine Ecosystems (ASCLME) and undoubtedly influences the richness and productivity of this great system.

The most important areas or ecoregions from a biodiversity perspective are believed to include the northern third of the island on both the eastern and western sides. The northwest is the most diverse and productive area and through complex currents and gyres it is believed to contribute to ensuring the richness and productivity of the LME. The southwest has also been identified as a biodiversity priority because of its ecosystem diversity, and the far south where a long extension Madagascar's continental plate provides fertile habitats for a wide range of species including pygmy blue whales. There is growing evidence that the entire Mozambique Channel coastal region may also be particularly high in diversity given its extensive coral reef coverage, seagrass habitats and seamounts. These priority areas are recognized by NGOs, regional organizations such as the South West Indian Ocean Fisheries Commission (SWIOFPC) and the Nairobi Convention, and UNESCO World Heritage Center. More detailed information is provided in the MPA PIF in the annex.

Fisheries overview

The fisheries sector is a key contributor to Madagascar's economy, important for both local livelihoods and national growth. The country has more than 5,600 km of coastline, extensive coral reefs, seagrasses and mangroves that maintain fisheries productivity, over 1 million km² with the exclusive economic zone, and more than 100,000 km² of continental shelf, and is thus endowed with substantial marine resources. The economic and social significance of fisheries and aquaculture are clear insofar that they represent 7% of GDP and 13% of exports, while providing an estimated 500,000 jobs⁷.

Madagascar's fisheries management has marked regional significance. The complex current systems within the Large Marine Ecosystem (LME) support rich inshore and open water food chains that sustain the region's fisheries. The LMEs support the livelihoods of fisher communities along the Eastern African seaboard and Western Madagascar. In the latter, an estimated 240,000 people are entirely dependent on subsistence artisanal and small-scale fisheries, harvesting 87,750 tons or 65% of the national annual near-shore catch. Recent studies indicate that overfishing, marked habitat damage and reduction of commercial stocks caused by destructive fishing practices seriously threaten the livelihoods of many of Madagascar's fishers, in part due to limited resources to enforce fisheries policy and laws. The general decline in productivity reveals a worrisome state of the marine resources. Very few stock assessments have been conducted, but available data indicate that most fisheries are declining. The principal causes appear to be habitat destruction, inappropriate fisheries practices, increasing fishing effort and climate change.

The Southwestern Indian Ocean (SWIO) marine fisheries are part of a large ecosystem shared by all countries of the region. They are thus a regional resource whose health and sustainability require regional coordination to limit the negative and enhance the positive externalities yielded by national activities. Migratory species, such as tuna, are archetypes of this shared regional common good, and their sustainable harvesting requires coordination to avoid a "tragedy of the commons" scenario. Given this regional nature of fisheries, several large-scale projects have been implemented or are ongoing to coordinate their management. The SWIOFish2

⁷ NationalDevelopmentPlan2015–2019, Government of Madagascar.

child project described in the annex of this PFD describes the national component of this wider regional approach.

Site-based conservation and resource management: Marine Protected Areas (MPAs) and Locally Managed Marine Areas (LMMAs)

All of Madagascar's MPAs are within the national Protected Areas (PAs) system managed by the Ministry of Environment, Ecology, Oceans and Forests (MEEMF). A parallel but often overlapping site-based conservation/ resource management mechanism has emerged over the past decade comprising community-managed LMMAs. For much of the past decade the Ministry of Marine Resources and Fisheries (MRHP) supported LMMA establishment but the MEEMF recently assumed some of the responsibility for LMMA development given their mandate conferred by higher levels of government and their strong interest in conserving marine biodiversity and habitats.

It may be noted that the respective definitions and objectives of many MPAs and LMMAs are blurred: there is a clear need to clarify this situation.

MPA coverage. Worldwide, MPA coverage of marine and coastal environments is 3.41%. It is strongly skewed towards better coverage (10%) of national territorial waters (0-22 km from the coast), falling to less than 1% of high seas beyond national jurisdiction. At present, it falls far short of the Aichi Target 11 that aims by 2020 to attain 10% coverage.

Madagascar's MPA coverage is significantly below global levels, even though the MPA network has tripled in size in the last decade. At present, it covers 3-4% on territorial waters and less than 1% of the Exclusive Economic Zone (EEZ). Existing MPAs tend to be relatively small and isolated focusing on specific habitats such as coral reefs and mangroves, with a commensurate absence of ecosystem or seascape design. In addition, several important marine ecosystems are not yet included in the network.

The Government's new National Development Plan (NDP) recognizes the importance of MPAs in marine resource management for sustainable development as well as its international commitments such as meeting Aichi Target 11. The MEEMF created a new General Oceans Directorate to lead MPA development in the context of improved marine spatial planning (MSP) eventually leading to a new system of national ocean governance. The government has committed to tripling the existing MPA coverage to around 2.6 million ha by 2020 as its Aichi objective. A major driver for expanding MPA coverage and ecosystem representation is to maintain critically important sites for fisheries and other economic development opportunities such as coastal ecotourism.

This new national commitment to MPA development will draw upon lessons from the past 10 years. Early MPAs focused largely on coral reefs and were relatively small and isolated. They were classified as International Union for the Conservation of Nature (IUCN) Category II PAs that present challenges for integration of local aspirations and subsequently to ensure sustainability. There was thus a switch favoring the more flexible Categories V and VI sites that were usually larger. Site selection took into consideration national priority setting analyses that while a useful guide suffered significant thematic gaps and were limited to near-shore waters. Data availability is now greatly improved, in part through Marine Ecosystem Diagnostic Analysis (MEDA) funded by the GEF as well as other research efforts.

LMMAs. LMMAs are defined in part by their local community ownership and management, at present usually supported by NGOs. As a rule, it has been the communities themselves that chose to establish LMMAs as they observed clear positive benefits arising among the earliest sites established in the southwest. The great majority of LMMAs were established to improve local fisheries management and/or critical fisheries habitats, explaining why MRHP was involved this process. A new national coordination body, MIHARI, was created by NGOs supported by MRHP to coordinate and support LMMA development. It

includes government agencies, research institutions, all involved communities and their supporting partners that are mostly NGOs.

Many communities are currently including ecosystem and threatened species goals in LMMA management objectives and are therefore moving LMMAs closer to MPAs. The Oceans Directorate with inputs from MRHP and MIHARI intends to test possibilities to establish a new type of MPA that conforms to the national PA Code but is considerably more flexible and supportive of local appropriation. These proposed new MPAs will be known as Community-Managed MPAs (CMMPAs). They would contribute to NDP MPA expansion goals and Aichi Target 11 commitments.

Root causes, pressures and threats to Madagascar's marine biodiversity and fisheries stocks

Marine biodiversity in general and fisheries stocks in particular are subjected to the same suite of threats and pressures. They generally arise from the same or at least similar root causes.

Threats and pressures. Direct pressures and threats include overfishing and a variety of destructive fishing practices. Habitat destruction or degradation is also a significant threat. Negative fisheries impact a wide range of species and habitats, but the most important affect the country's priority fisheries such as shrimp, crab, sea cucumber, octopus, lobster and demersal fish. The declines observed in these fisheries are reversible through improved management of stocks and improved protection for critical ecosystems but would require adequate financial and technical investments.

Root causes. One of the important root causes for overfishing and other direct threats is the persistence of an open-access regime that allows free access to fish stocks and other valuable marine resources together with their habitats. Open-access particularly impacts small-scale fisheries as it leaves them no formal recourse to manage their customary fishing grounds that are open to all. Thus given that local fishers cannot control access or fisheries practices, it is difficult for them to maintain ecosystem quality or to respond to declining local marine resources. A potential solution is to empower local stakeholder management of fisheries through CMMPAs and LMMAs.

A second important root cause that impacts traditional fisheries in particular has been the broad perception that the sector is of secondary priority compared to other sectors that legitimately use maritime space and resources, including petroleum and perhaps to a lesser extent tourism and other coastal developments including infrastructures.

A major root cause is market pressure, in particular illegal markets that are estimated to account for 50,000 tons per year that is half of the entire sector's legal production. Increasing market pressure on resources such as crab and lobster encourage overharvesting and other negative pressures on stocks.

Climate change impacts have been shown to measurably exacerbate anthropogenic threats and pressures in Madagascar, including coral bleaching and increased vulnerability of critical habitats such as mangroves. Climate change has been shown to increase vulnerability in coastal communities and some measures aimed at increasing resilience are currently being tested.

Barriers. There are four major barriers to sustainable marine biodiversity conservation and fisheries management: weak institutional and legal framework; limited information required for management; weak coastal community empowerment to manage their local resources through MPAs and LMMAs; and a weak enabling environment for LMMAs and MPAs to effectively support the fisheries sector through stocks maintenance and protection of key ecosystems.

Institutional and legal barriers. The MEEMF has traditionally focused its conservation agenda on terrestrial ecosystems and species given their high profile at a global level. A consequence is that skills required to

ensure effective marine conservation though a well-designed and well-managed MPA network are limited within the institution. The creation of the Oceans Directorate with well-qualified personnel remedies this to some extent but it still falls far short of providing the capacity that is required. Both MEEMF and MRHP lack basic resources to operationalize their policies and strategies at the field level, and the number of decentralized staff in critically important coastal regions is a significant barrier. The MRHP lacks basic resources to ensure offshore coastal and terrestrial surveillance and monitoring; in consequence the extent of illegal fishing remains rampant.

The degree of collaboration between the two ministries, as well as other institutions involved in developing marine resources requires significant strengthening, and the present program offers an excellent opportunity to bring about positive change. The NDP clearly insists on inter-ministry or inter-agency cooperation but the proposed program is essentially a pioneer initiative owing to its unprecedented level of coordination. Having both within a single program framework will facilitate information exchange and co-planning in order to ensure complementarity.

Recognizing the above constraints to effectiveness, both ministries have encouraged collaboration with environmental NGOs promoting MPAs and LMMAs, as well as additional institutions such as universities. Both are also encouraging more active engagement with the private sector to develop sustainable fisheries value chains that increase fishers' incomes or support MPA development in other activities such as small-scale sea-farming and ecotourism that benefits coastal communities and can support alternative to fishing when effort is excessive.

The national PA Code has been updated recently but its regulatory framework must be carefully developed to encourage community-based leadership in MPA development. A revised Fisheries Code has been recently adopted and includes strengthened environmental management directives.

Limited data available for effective management. Very few stock assessments have been carried out but available data indicates that most fisheries are in decline. The lack of assessment and reliable fisheries statistics undoubtedly limits fisheries policy and planning and may contribute to overexploitation in the future. The databases for MPA priority setting have greatly improved in recent years but await analysis. The Critical Ecosystems Partnership Fund is currently supporting a priority setting exercise led by Wildlife Conservation Society (WCS) and REBIOMA – (REBIOMA is the Madagascar Biodiversity Network, an institution dedicated to environmental data management. Results are expected in late 2016.

Local stakeholder empowerment. Until recently fisheries management policies called for a top-down approach from central authorities, even with respect to small-scale fisheries. Similarly PA management had limited local appropriation or participation by local stakeholders, principally local communities. These situations have evolved rapidly in recent years with local leadership being actively encouraged and supported. The changes have been integrated in the respective PA and Fisheries Codes. Notwithstanding the positive changes, much remains to be done before locally managed fisheries and MPAs are fully effective.

MPA and LMMA enabling environment. Protection and user rights management through MPAs and the emerging LMMAs have been traditionally perceived as less important than economic development through sectors operating in the marine realm such as petroleum, large-scale fisheries and tourism. With an increased emphasis on natural capital as a pillar for sustainable development in the current National Development Plan, there are new opportunities to promote the critical role of MPAs and LMMAs in national development but the challenges remain significant. Both types of areas should play a significant role in maintaining productive fisheries stocks and healthy marine environments, and will be critical opportunities for improved economic development among fishers in particular small-scale ones, based on new value added markets.

B) THE BASELINE SCENARIO OR ANY RELATED BASELINE PROGRAMS/PROJECTS

This program builds on several decades of work by government, bilateral and multilateral donors, private donors, CSOs and NGOs. This includes more than three decades of PA expansion and consolidation and more than a decade of systematic investment in fisheries improvements at both national and regional scales.

Notwithstanding substantial advances there are possibilities that the development agenda within the NDP could turn from a net loss to a net gain framework for biodiversity and fisheries management without further investment. It is important that the principles of sustainable development based on natural capital preservation is maintained in order to avoid changes in policy as government changes or as pressure from other development sectors increases.

The following sections present the specific baselines for MPAs and fisheries, respectively, but with an emphasis given to themes shared by both sectors. In effect, they describe a ‘*without project alternative scenario*.’

Marine spatial planning. The ASCLME family of projects has established a clear platform for marine spatial planning in Madagascar. It has produced Marine Ecosystem Diagnostic Analyses (MEDAs) and has identified Vulnerable Marine Ecosystems (VMEs) and Ecologically or Biologically Sensitive Areas (EBSAs). In turn, these initiatives provide a foundation for the current multi-sectoral marine spatial planning baseline project led by WCS and REBIOMA, funded by the Critical Ecosystems Partnerships Fund and called for in the NDP. This current marine spatial planning (MSP) project will clearly indicate priority areas for biodiversity conservation and improved fisheries management throughout Madagascar’s seas. It should be noted that this marine spatial planning process uses Key Biodiversity Areas as a prioritizing criterion for MPAs.

The MSP results will provide useful guidance for marine policy in general and more specifically for the design of the MPA and LMMA networks together with management of valuable fisheries stocks. However, it is not guaranteed that the results are translated into realistic, well-designed MPA, LMMA and fisheries management strategies. Without these investments important biodiversity conservation and fisheries management areas may not be targeted because of a lack of resources. Secondly, there is a similar lack of guarantee that seascape-level management strategies linking biodiversity and fisheries will follow without additional investment. These seascape plans are required to ensure long-term maintenance or restoration of ecosystem goods and services at a scale required for effective biodiversity conservation and fisheries stock maintenance. MPA and LMMA establishment is likely to patchy, limited to small habitat zones and have only limited links to maintaining viable stocks.

Policy and legislation. Through the inputs of the ASCLME projects family and private foundation initiatives, MRHP has developed new policy and legislation that more strongly integrates environmental concerns and calls for a shift in management responsibility for small-scale fisheries management from central government to local stakeholders, primarily coastal communities, thereby responding to the burgeoning growth of the LMMA network. In parallel, MEEMF has also revised the PA Code to allow for a shift from central government management responsibility towards increased local stakeholder responsibility. The PA Code also acknowledges that MPAs have their own specific management issues that are different to those of the more prevalent terrestrial PAs, and that MPAs may be a critical means to manage valuable marine resources sustainably.

The above changes will incur positive changes in marine biodiversity conservation and small-scale fisheries management but require additional investment to ensure that their impacts are maximized. The regulatory frameworks for each Code must now be developed through appropriate expertise. The latter is limited in

Madagascar and poorly framed regulatory frameworks may lead to two main risks. Firstly, the legal protection of MPAs and LMMAs may be unclear. There is a risk that locally managed MPAs may not be accorded the same legal protection status as sites in the more traditional IUCN categories such as I or II. This may leave them vulnerable to conflicts with more powerful sectoral eventual degazetting in the face of other sectoral interests. In addition, the regulatory frameworks may not adequately define the rights and responsibilities of local stakeholders and empower them to protect their interests.

MPA and LMMAs network expansion and consolidation. MPA supporters will continue to attract resources for MPA network expansion and consolidation. Capacity to manage MPAs at all levels, whether at the national Madagascar Protected Areas System (SAPM) coordination level or at site levels will continue to increase as in-country experience accrues. MPA management efficiency will be increased. United States Agency for International Development USAID and Germany's Kreditanstalt für Wiederaufbau (KfW) are planning to support MPA development but where they will work has still to be defined. Their respective intervention zones are likely to be complementary to those of the GEF Program. The KfW support is linked to German government fisheries support (see below).

However, under the business as usual scenario, some MPA supporters will be able to develop MPAs within a seascape context, but this will be beyond the scope of the majority. New MPAs are therefore more likely to continue to target distinct but relatively small habitat areas and managed in isolation of each other and with little regard for neighboring ecosystems with which they interact. The overall increase in MPA coverage will be largely limited to the most accessible inshore waters, key ecosystems may remain unrepresented in the network, and coverage will fall far short of Aichi Target 11 commitments. Total MPA coverage is extremely unlikely to double from present levels.

MPA consolidation may occur but will be limited largely to local sites where their supporters have the means and experience to achieve this. MPA governance by local stakeholders will remain a strong objective but coastal communities and other local stakeholders will remain strongly dependent on external partnerships such as with NGOs. Finally, SAPM will have limited capacity to develop appropriate management standards recommended by IUCN including relevant toolkits that are well adapted to local conditions. This will mean that some critical MPA management priorities such as climate change adaptation or systematic evaluation of overall management effectiveness will be limited.

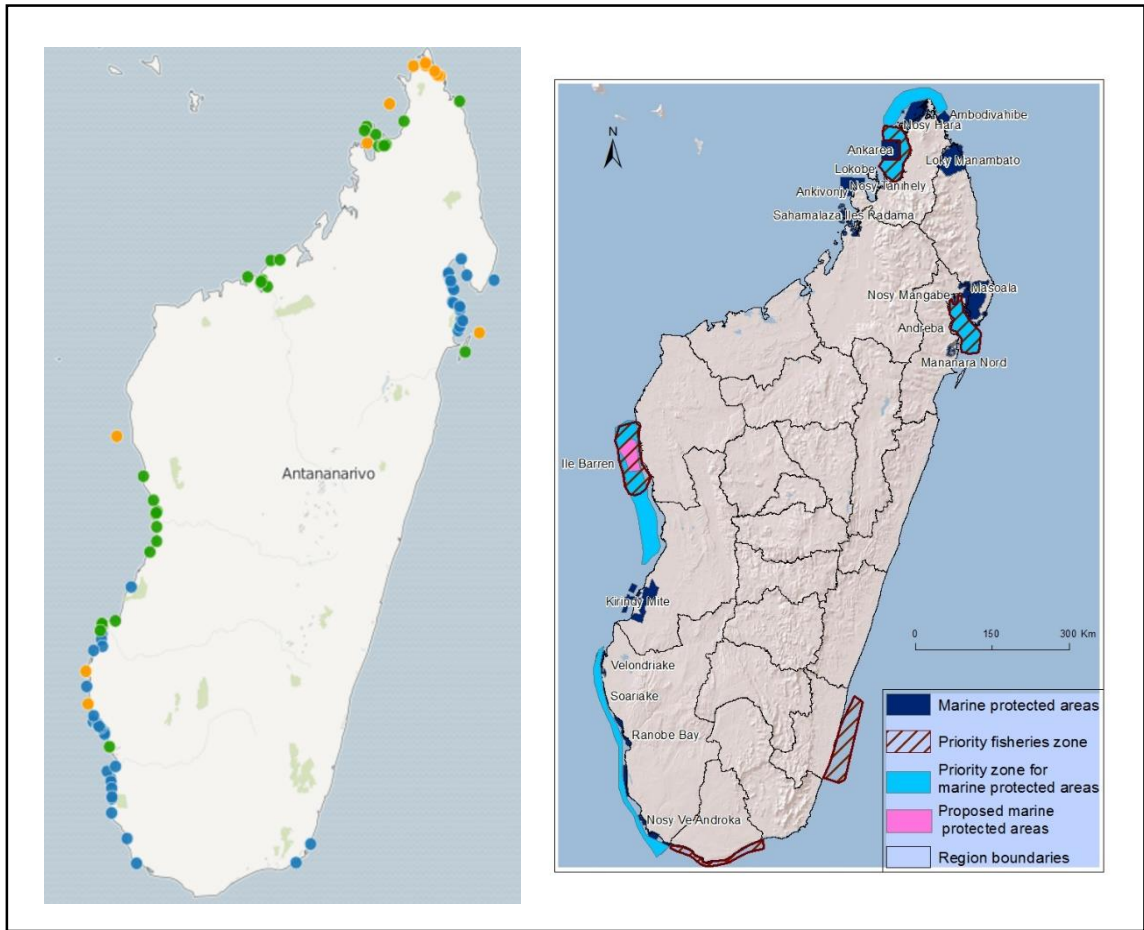
LMMAs expansion and consolidation will face similar challenges. The MIHARI Network will be a valuable tool for LMMAs but its development will be constrained by limited resources including the capacity of their supporting partners to meet their development needs. Their relationships with neighboring MPAs, where these exist, and their role in maintaining biodiversity as a basis for long-term fisheries productivity is likely to remain unclear. Managed in isolation, smaller LMMAs may improve fisheries at a very localized scale but are unlikely to contribute significantly to overall stock productivity.

Small-scale fisheries. The development of healthy small-scale fisheries will continue as improved policy, planning and legislation facilitates management at the level of local stakeholders. MPAs and LMMAs are likely to be the principal vehicles for improved fisheries management as they provide site-based opportunities to work with coastal communities and other stakeholders in the fisheries sector. However, if business as usual prevails, positive impacts will remain localized. Proposed new small-scale fisheries management projects that are proposed will provide a partial solution but scaling up will remain a serious challenge. Small-scale fisheries are attracting additional support from the German agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) but the nature of their support and their choice of priority zones is still awaited. USAID is also considering fisheries support related to MPAs but this is still to be defined.

Overall trends. In the baseline scenario marine biodiversity will continue its current decline. This will occur over larger areas that at present as resources are depleted in the most accessible areas and other less impacted

and remote areas are targeted. All major ecosystems are likely to decline but the most heavily impacted will be coral reefs and mangroves. Even where MPAs and LMMAs are established successfully, conditions are likely to decline because of limited management capacity and a near absence of essential measures such as climate change adaptation. At larger-scales ecosystem goods and services will be progressively impacted.

In close parallel, the degradation of biodiversity will negatively impact small-scale fisheries which are already significantly stressed by excessive or inappropriate fishing practices. MPAs and LMMAs will provide isolated sites where fisheries improved and their associated benefits increased. However, these will be exceptions as stock declines occur over larger areas and ecosystem productivity is reduced.



Maps of LMMA distribution existing and proposed MPAs (left) and proposed MPA and SWIOFish2 priority zones (right). For the LMMA map: Orange = co-managed MPAs; blue = traditional local agreement LMMAs; green = agreements for management transfer to communities.

C) THE PROPOSED ALTERNATIVE SCENARIO, GEF FOCAL AREA STRATEGIES, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

Proposed alternative scenario: In light of the threats to Madagascar's marine resources presented above, a coordinated programmatic approach is proposed. The Program will be the main vehicle to catalyze investments aimed at marine conservation and small-scale fisheries objectives broadly defined in Madagascar's NDP and the NBSAP. The program will provide the first endeavor to integrate the two interests within a broader multi-sectoral marine spatial planning framework. The Program will contribute to multiple baseline initiatives, including those of the ASCLME, WIOSAP, and SWIOFish initiatives. The five key principles of the WIOSAP underlie the design of the current Program and the Environmental Quality Objective concerning critical coastal habitats will be a major target for the Program. The MPA child project will directly address WIOSAP's Strategic Component 1, protecting, restoring and managing critical coastal habitats with contributions to all seven specific objectives and the development of detailed action plans for priority areas. Both child projects will address WIOSAP Strategic Component D, strengthening governance and awareness, is a cornerstone of the Program as it underlies MPA and small-scale fisheries sustainability. Attaining WIOSAP Strategic Component D will help to ensure that MPAs and improved fisheries are accorded the importance they deserve in national and sub-national policy and strategic planning, particularly with respect to marine spatial planning.

The Program aims to reverse the current trend of continued degradation of marine and coastal biodiversity together with the closely related decline in fisheries and other valuable maritime resources. To attain this objective it must provide additional investments over and above those described in the baseline scenario. Specifically, the program aims to: (i) Develop and implement detailed MPA, LMMA and fisheries planning in critical seascapes; (ii) Strengthen biodiversity and fisheries policy and legislation within the framework of a multi-sectoral blue economy; (iii) Expand and consolidate the MPA and LMMA networks in key seascapes; and (iv) Improve priority small-scale fisheries and increase the economic and social benefits that they provide.

Strengthened biodiversity and fisheries management in critical seascapes. The marine spatial planning baseline results will provide the foundation for critical seascape planning within three priority zones where biodiversity and fisheries interests are particularly high. The priority zones likely will include Antongil Bay in the northeast, Ambaro Bay and surrounds in the northwest, and the Barren Islands and neighboring coastal areas in the center-west.

The program will provide the first fully integrated biodiversity and fisheries strategies in Madagascar, identifying the effective mechanisms to integrate the two approaches in a given seascape, with MPAs and LMMAs providing locally managed site-based improved biodiversity health that supports well-managed local fisheries. A critical challenge that must be addressed is to ensure that local interventions add up to larger scale seascape management that helps to ensure healthy ecosystem goods and services. The Program will further consolidate efforts to integrate divergent sectoral interests by building upon the impressive efforts of the MIHARI Network and the range of different actors supporting MPAs, LMMAs and other fisheries improvement initiatives from national to local levels. The seascape level, multi-stakeholder approach will provide clear models for similar approaches with important marine biodiversity and fisheries. Success in the intervention zones will help orient other implementers and financial partners with different geographical priorities.

Strengthened, coherent policy and legislation. The Program represents the first time that national biodiversity conservation and fisheries policy and legislation is harmonized. At the very least conflict between the two interests will be reduced but, more likely, the cross-sectoral collaboration will bring added value to both as MPAs provide a geographical foundation for improved productivity while improved fisheries management and the commensurate increased benefits reduce the negative pressures on biodiversity at the seascape level. Coastal community and other local stakeholder appropriation of local marine resources will be facilitated by the changes supported by the program. These groups will also have stronger influence on how their local resources are managed and the how ensuing benefits are shared. Finally, the current confusion regarding LMMAs and community managed MPAs will be resolved. All MPAs will conform to IUCN definitions and the protection status of both entities will be strengthened.

MPA and LMMA expansion and consolidation. MPA and LMMA Network expansion and consolidation will avoid many of the problems experienced during the process of expanding the terrestrial PA network over the previous 15 years because of two primary shifts in approach. Firstly, sustainability will be a goal from the outset of the Program rather than a belated afterthought as in early years. Secondly, MPAs and LMMAs at least in priority Program intervention zones will be strongly embedded into a seascape management framework wherein the focus on biodiversity and development is equitably balanced. The Program will ensure that expansion and consolidation are systematic, and that best practices are consistently adopted across the networks, including management effectiveness evaluation and integration of climate change adaptation.

Improved fisheries and resulting benefits. Improved fisheries productivity and the resulting economic and social benefits provide a positive feedback loop that encourages long-term adherence to best practices. It provides the same positive feedback to MPA establishment as coastal communities recognize the importance of healthy ecosystems and habitats to their wellbeing.

The program is designed to contribute to the GEF's Biodiversity focal area with respect to programs 1-4, 6, 9 and 10 in particular. It will also contribute to programs 1, 6 and 7 of the International Waters focal area.

Brief program summary: he Program comprises two child projects: MPA network development and improved small-scale fisheries. This sub-section provides both a brief description of each Program Component and the main outcome of each. Some additional information on the intermediate results by Program Component are also presented but it should be noted that these are indicative and will be negotiated in the PRODOC phase in negotiations with Program implementing partners.

Program Component 1. MPA/ LMMA expansion and MPA and priority fisheries management plans implemented in key areas

Tripling the area of the national MPA system from 820,000 ha to over 2.5 million ha will constitute a significant contribution towards Madagascar's commitment to Aichi Target 11 under the CBD and substantially contribute to its national strategic objectives defined in the NBSAP and NDP concerning MPAs. As some LMMAs are expected to become MPAs (the newly termed CMMPAs) coverage may be as high as 3.5 million ha. MPA expansion will be based on existing data such as the ASCLME MEDA results using conservation-planning tools such as MARXAN and ZONATION.

Substantial investment will be oriented towards consolidating the entire MPA and LMMA network including existing sites through activities aimed at increasing long-lasting benefits from marine resources to both local and national economies. The benefit-generating activities primarily concern fisheries but alternatives include sustainable mangrove utilization and ecotourism. Improved revenues from fisheries or other activities as well as other social benefits will help to compensate the opportunity costs of MPA establishment and increase local appropriation. The MIHARI consortium will also play a key role as there is considerable geographical overlap between MPAs and LMMAs, and the aspirations of the communities are very similar.

The Program will build upon the current CEPF-funded WCS/REBIOMA marine spatial planning results. Based on existing knowledge including KBA distribution, some priority areas are already identifiable from earlier prioritization exercises, four MPA priority zones have already been identified, although these await confirmation by the current planning exercise. These are Antongil Bay in the northeast, the northwest including Ambaro Bay, the Barren Islands and adjacent mainland central western coastal areas, and the southwest. Combined MPA and LMMA planning will occur in these four priority zones thus ensuring a seascape or ecosystem level approach to marine biodiversity conservation. Joint MPA/LMMA and fisheries management plan will be developed in those geographical zones where two interests overlap. These management plans will integrate fisheries management and biodiversity interests at both site- and ecosystem levels. Where they do not overlap in the southwest where only MPAs have been prioritized, the experiences gained from joint management planning will be adopted and support from other fisheries improvement projects will be sought.

The priority zones for MPAs and fisheries are shown in the map above. All four biodiversity priority zones were selected in part on the presence of KBAs. Long-term sustainability for MPAs, LMMAs and additional forms of fisheries management is a recurrent challenge. Two approaches are proposed for the program, focusing primarily on locally managed MPAs and LMMAs. They are described in more detail in the Innovation, Sustainability and Scaling Up section but briefly they are the following.

Sustainability Strategy 1: Focus complementary donor efforts on key MPA and LMMA priority zones and sites. The opportunities offered by USAID, KfW and GIZ (see baseline) offer an excellent opportunity to leverage additional funding for MPAs, LMMAs and additional fisheries improvement initiatives. Program implementers will therefore work with these donors and their implementing agencies to leverage this extra input to sustainability.

Sustainability Strategy 2: Build upon existing community well-being approaches that engender sustained local stakeholder commitment. It is clear from experience to date that increased revenues from fisheries and additional resource utilization projects such as ecotourism increase local stakeholder buy-in to MPAs and LMMAs. This local support is critical to long-term sustainability.

The ***output of Project Component 1*** is: Seascape level coordination of biodiversity and priority fisheries management in target areas. Intermediate results will include:

Favorable regulatory frameworks for MPAs and LMMAs in place by 2018.

MPA developments covering at least 2.5 million ha with 60% attaining full protection status by 2021.

National LMMA legal framework consolidated.

Fisheries plans developed in at least two priority zones.

Improved surveillance and subsequent reduced levels of illegal fishing, measured by rates of serious fishing infractions

Program Component 2. Improved biodiversity and priority fisheries governance

This component has four sub-components: policy and legislation strengthening, capacity strengthening and management effectiveness, co-management arrangements at local levels, and accompanying social development measures.

The PA and Fisheries Codes have been developed and/or revised. The next steps will focus on developing their respective regulatory frameworks, ensuring that they are coherent with regard to biodiversity conservation and fisheries management. Coherence will be fostered through the Environment-Fisheries

Commission, the Sydney Promise Steering Committee and the Program's own coordination structures (see Section 6, Coordination, below). The regulatory frameworks will be consistent regarding MPA and LMMA definitions, co-management arrangements, rights and responsibilities, and environmental and fisheries norms that must be respected. They will also define the respective roles of MEEMF and MRHP.

Capacity strengthening is required at all levels from national to local. At national level, training will be provided to MEEMF and MRHP personnel involved in Program management as well as other members of these ministries as well as other institutions that are involved in related marine planning and development. Similar support will be provided to local government officials at regional and local level, but adapted to their specific roles in MPA, LMMA and fisheries development. Training will be crosscutting in order to strengthen inter-sectoral coherence. Coastal communities and other local stakeholders management will be trained and supported by ministry personnel and their local NGO/SCO partners involved in MPA, LMMA and small-scale fisheries management. Experts from IUCN's World Commission on Protected Areas (WCPA) as well as experts from countries where LMMAs and related small-scale fisheries management will provide input to help guide the process of adapting successful models elsewhere to local conditions.

IUCN and the Western Indian Ocean Science Association (WIOMSA) will provide additional support to develop management toolkits that are well-adapted to locally-managed MPAs and LMMAs. These are currently in their design phase at the present time but the Program will offer to test them in field conditions. They include toolkits for management effectiveness evaluation, equitable governance and stakeholder participation, as well as resource management.

The progress to date regarding co-management arrangements will be further consolidated ensuring that stakeholder participation is equitable and that benefits distribution emerging from MPAs, LMMAs and improved fisheries are equitable. Co-management involves both intra-community arrangements and inter-community cooperation with larger fisheries management areas or MPAs.

The *output of Project Component 2* is: Strengthened governance and management of MPAs, LMMAs and priority fisheries in target areas. Intermediate results will include:

- Key instruments for management of the priority fisheries in place in target areas
- Comprehensible information on the status of fisheries available to all stakeholders
- Stakeholder roles and responsibilities in MPAs and LMMAs legally defined.
- Effective local stakeholder governance and management mechanisms in place.
- Best practices defined and systematically adopted.

Program Component 3. Increased economic and social benefits from priority fisheries and other economic developments

This component aims to increase revenues from priority fisheries while at the same time reducing pressures on marine resources. MRHP recognizes the need to compensate fishers for a more strongly regulated access to fisheries resources. In effect, MRHP aims to empower local fisher communities to manage small-scale fisheries areas and their resources, a step towards ending the current open-access regime that underlies a range of threats including overfishing and habitat degradation or loss.

The project will support (i) professionalization among priority fisheries stakeholders, including facilitation of access to microcredits and sustainable small-scale fisheries development activities, (ii) promotion of alternative revenue-generating activities, (iii) improvement the seafood products value-addition and value chains enhancement, including strategic small-scale infrastructures development; (iv) other direct compensation measures when necessary to support fisheries management plan implementation and (v) planning of strategic infrastructures.

In addition to the above and where possible within the geographical priority PA and fisheries zones, external donor and government support will be obtained for social development initiatives including health, education and additional services.

Program Component 3 is considered a mechanism that contributes to the sustainability objectives summarized in Component 1. Increased wellbeing and other benefits should motivate local stakeholder appropriation with regard to supporting MPAs, and LMMAs and additional marine resource management initiatives.

The *output of Project Component 3* is: Increased local value added from the fisheries and other sectors such as ecotourism in target areas. Intermediate results will include:

Small-scale fisheries revenues measurably increased in all priority fisheries zones.

Community-led alternative initiatives including ecotourism with private sector partners established in at least five localities.

Partnerships for social development established in at least two priority zones.

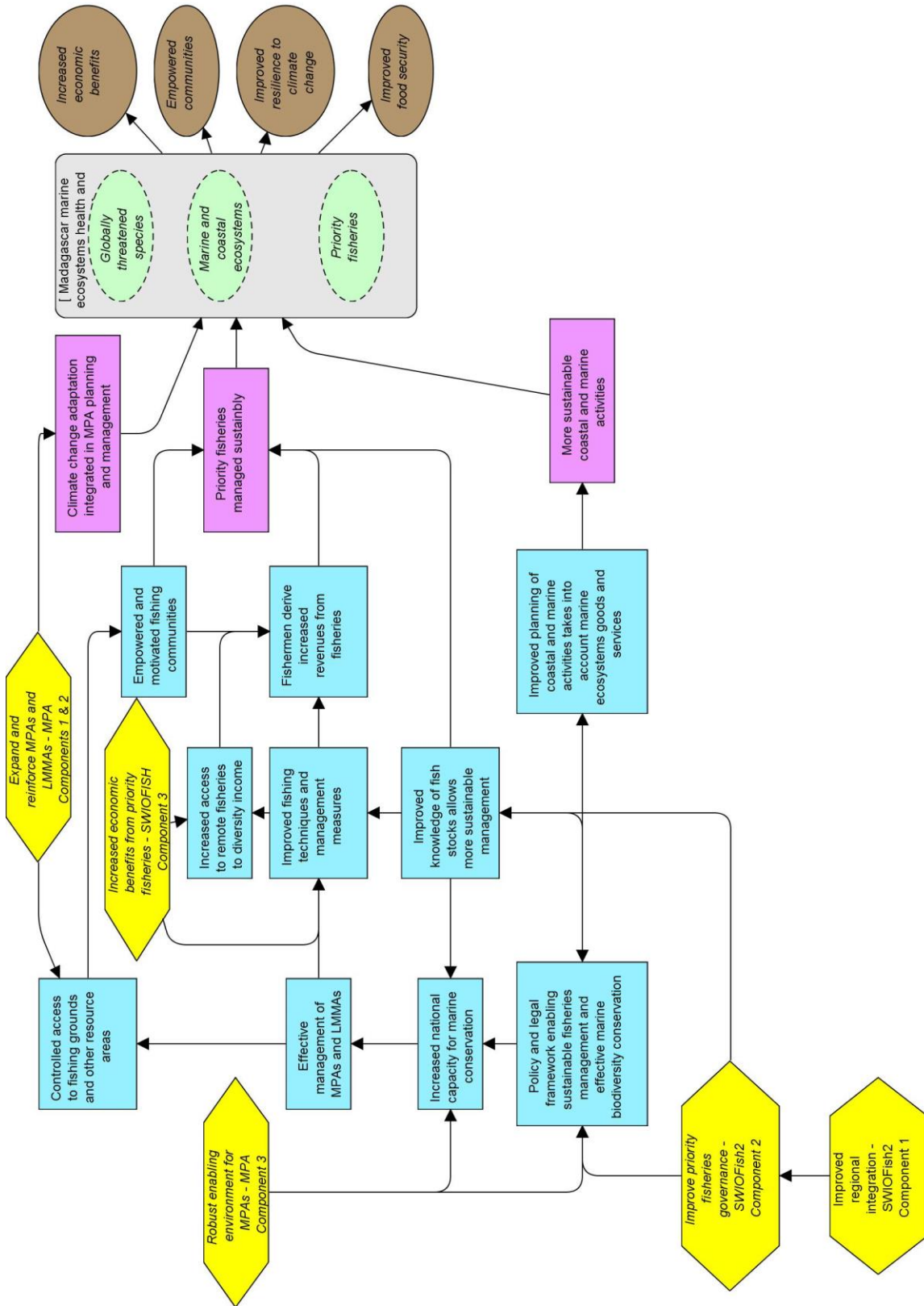
Program Component 4. Enhanced regional integration

This component aims to ensure regional cooperation in fisheries management under the broader SWIOFish program and additional ASCLMA project family initiatives. SWIOFC Member states will be supported to strengthen conformity with the Indian Ocean Tuna Commission's (IOTC) resolutions for tuna and tuna-like species conservation and management, including Port States Measures. This Program Component will help to monitor progress with respect to the objectives of the ASCLME project family including the Strategic Action Programme for the Protection Coastal and Marine Environment of the Western Indian Ocean (WIOSAP).

The *output of Project Component 4* is: Cohesion and coordination to improve regional fisheries management efficiency for Madagascar and neighboring countries.

The following results chain shows summarizes the Program described above.

Results chain analysis integrating the MPA and SWIOFish2 child projects.



D) INCREMENTAL/ADDITIONAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF, SCCF AND CO-FINANCING

The Program proposes incremental GEF investments into strategic areas that build off several decades' worth of initiatives to improve Madagascar's marine resources. The GEF funds will support actions that are highly complementary to interventions funded by existing and upcoming bilateral funding from the European Union, USA, Germany, France and others, regionally funded activities through the IOC, and private sources that include a range of private foundations. Key initiatives, including GEF funded ASCLME, WIOLAB, and SWIOFP efforts, combined with government and CSO projects and programs present an often piecemeal approach missing opportunities for coordination among ministries, organizations, and funding efforts. The overall proposed incremental reasoning of the program aims to invest GEF funds into key areas of coordination, synergy, and sustainability for a more integrated and strengthen management of marine resources.

Building off the baseline MPA initiatives, strengthened government policy and legislation together with clear strategic objectives for MPAs and improved fisheries governance as defined in the NDP and sectoral documents will create a solid framework for improved fisheries governance and marine biodiversity protection for a sustainable economy based on natural capital preservation. Opportunities for local stakeholders to benefit from changes in the two domains will increase as their rights and responsibilities regarding local resources will be strengthened. In particular, they will have the dual benefits of Oceans Directorate-led support for healthier marine ecosystems and MRHP-led fisheries governance support that together are expected to bring about improved benefits from marine resources in general and priority fisheries in particular. The commercial fisheries sector will also have new opportunities to obtain high quality fisheries products. Institutions supporting MPAs and LMMAs, including NGOs, will benefit from GEF funding for their support to local stakeholders and in turn leverage additional funds from elsewhere. The two child projects offer a unique opportunity to coordinated MPA and fisheries planning where the latter integrates LMMAs.

Relying on baseline contributions, MPA expansion will occur but is not clear that all aspects of the NBSAP and NDP objectives as well as Aichi Target 11 will be achieved. While it is possible that coverage will be tripled, resources required to consolidate the entire network will be difficult to guarantee. Existing MPAs and LMMAs will continue to act as local oases for strengthened biodiversity protection and marine resources management, while some larger sites will also have positive impacts at the seascape level. Most are likely to remain dependent on donor funding as site-based economic opportunities are missed. The potential role of MPAs and in managing natural capital for sustainable development will be quite limited as their ability to compete with other economic sectors remains unrecognized and low. The same outcome may be predicted for small-scale fisheries.

Under the present scenario, marine ecosystems will continue to degrade and globally threatened species will decline. Opportunities for coastal ecotourism may be reduced. Fisheries stocks that are the mainstay for many coastal communities will decline and coastal community wellbeing may be negatively impacted. Commercial fisheries such as crabs and wild shrimp may deteriorate as vital habitats such as mangroves are degraded or cleared. Numerous opportunities for small-scale fisheries to contribute more to the national economy will be missed, although trade partnerships between government, private sector and communities will continue to expand and consolidate in at least some areas.

The Program is committed to building on recently strengthened government policy concerning improved ocean governance where MPAs and fisheries governance have pivotal roles. It is also committed to fulfilling Madagascar's Aichi Target 11 goals as stated at the 2015 World Parks Congress. GEF investments will be used to support and catalyze several actions that will have global and regional benefits beyond national level benefits. The GEF funds will provide the catalyst for proposed marine spatial planning leading to strengthened ocean governance in Madagascar's waters. It will help to maintain some of the richest marine ecosystems on the planet as well protected globally threatened species including a range of endemic marine taxa. A national MPA network designed to protect biodiversity and maintain or restore ecosystem goods and services across at a seascape level may have positive impacts elsewhere within the ASCLME. The funds will also help to strengthen regional cooperation on priority fisheries while contributing to the maintenance or restoration of migratory stocks. And lastly, as part of improved integrated management, GEF incremental funding will provide better resiliency to climate variability. As Madagascar is playing a leading role in the region to systematically integrate climate change issues within MPA/LMMA design and management already, the GEF investment will provide an opportunity for to measures target biodiversity health,

fisheries productivity and human wellbeing, the latter seeking to diversify economic activities to improve resilience, with and further emphasis on gender equality.

E) INNOVATION, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

The Program is innovative primarily in that it brings together the contributions of two ministries with interests in conservation and sustainable management of marine biodiversity and resources. This is the first time that this has been systematically coordinated in Madagascar. MEEMF fully appreciate the need for well-managed fisheries as inappropriate fishing practices lead to ecological imbalances that effect population structures and have negative impacts on marine and coastal ecosystems and habitats. In turn, MRHP understands the clear benefits it derives from well-managed healthy biodiversity areas through MPAs and the contribution to fisheries productivity. To this end, the two ministries will work together to coordinate marine policy, legislation and strategies at central levels while at the same time close developing rollout strategies at regional and local levels.

The two ministries working together is an early step towards multi-sectoral marine spatial planning and improved ocean governance. Already it is attracting the interest of other ministries with legitimate interests in marine spatial planning and development, and by working together at this early stage, should help to ensure that biodiversity conservation and management of marine resource is firmly embedded in national management strategies for sustainable development of the sea's valuable resources.

The Program is also innovative in that it is using good science to identify critical marine biodiversity and resource areas at the same time. It is also the first attempt in the region to take an ecosystem or seascape approach to define how biodiversity conservation and priority fisheries management should be articulated in practical terms. MPA design and management will be closely coordinated spatially with fisheries LMMAs taking an ecosystem perspective, thus promoting ecological stability at scale.

While earlier MPAs were conceptualized from a largely biodiversity conservation perspective, the future MPA and LMMA networks will fully integrate the interests of local stakeholders. Local coastal communities constitute the majority of local stakeholders but others include those trading in fisheries and other marine resources, and tourism operators among others. Assuring that their interests are integrated into the Program equitably will help to ensure that local stakeholders will maintain their support for MPAs, LMMAs and fisheries management approaches. This approach supersedes the more traditional practice of providing stakeholders with a one-off compensation package for opportunity costs.

The Program draws upon a key lesson from the previous decade: it is imperative that sustainability, for all aspects including MPAs, LMMAs and priority fisheries management, results in clear benefits for the stakeholders. In effect, local stakeholders must see that the advantages that accrue are tangible and make a difference to their wellbeing. For many coastal communities the key will be increased revenue from fisheries, other harvestable marine/coastal resources such as mangroves or ecotourism. Generating these benefits must be a prime objective from the beginning.

Scaling-up will be greatly facilitated by the two ministries working together. In doing so they help to generate outcomes that together are worth more than their individual contributions taken separately. First, staff within each ministry will acquire skills from the other and be more effective in influencing marine planning and management by speaking with a shared voice. Secondly, their impacts at the field level will be complementary and have greater tangible impacts. Coordinated implementation will also have measurable positive impacts on marine biodiversity and priority fisheries, and thus facilitate the process of replication elsewhere. Already interest in the LMMA network, for example, is growing steadily as coastal communities learn of the impacts elsewhere in the country. Finally, success will attract investment from additional donors and, probably, the private sector.

The sustainability of any form of protected area, including MPAs, has been a major preoccupation throughout the world. In Madagascar, the Program proposes two specific sustainability strategies for MPAs and indeed LMMAs and small-scale fisheries improvements. These are as follows.

Sustainability Strategy 1: Focus complementary donor efforts on key MPA and LMMA priority zones and sites.

This process has in effect begun through closer coordination between MPA and small-scale fisheries objectives and

interventions (the two child projects) and lobbying additional technical or financial support from additional donors. The latter include USAID that is planning to build upon existing MPA and LMMA interventions to strengthen marine biodiversity conservation through MPAs but also supporting local revenue generating measures and improved community livelihoods where these will contribute to conservation. In addition, German bilateral support has recently committed to marine biodiversity conservation and improved small-scale fisheries management through KfW and GIZ projects. This support is currently aiming to respond to funding or technical gaps not covered by other sources including GEF- and IDA-supported interventions or USAID. All of these projects recognize the same priority zones identified by the MPA and SWIOFish2 child projects. Additional donor support for MPA and LMMA sustainability will include cooperation with Madagascar's Protected Areas and Biodiversity Foundation, a trust fund aimed entirely at supporting PAs. This cooperation may include negotiating reserved allocations for MPAs and/or additional long-term donor commitments to the Foundation for MPA support. The Foundation has indicated an openness to this form of cooperation.

Sustainability Strategy 2: Build upon existing community well-being approaches that engender sustained local stakeholder commitment. The longer established MPAs and LMMAs enjoy broad local stakeholder support linked to their increased revenues through better marine resource management and general improved wellbeing. In part, this factor is clearly a financial sustainability strategy but it has broader sustainability value as it is clearly understood that local appropriation is a – if not the – very important factor in PA success. This objective generally requires partnership with the private sector as a means to develop value chains that benefit local people. In most cases up to the present traditional fisheries have provided the most opportunities but there is clearly potential for ecotourism also. This may involve benefit-sharing agreement between local operators and local communities or may be simpler involving direct investments by operators to establish MPAs. Additional factors that contribute to sustainability are social benefits that accrue from MPAs and LMMAs. For example, development agencies have shown willingness to establish basic social services such as improved access to health, hygiene and education, and these are clearly seen by local stakeholders as a direct link with the benefit associated with MPA or LMMA creation.

2. ***Stakeholders.*** Will program design include the participation of relevant stakeholders from [civil society organizations](#) (yes /no) and [indigenous peoples](#) (yes /no)? If yes, identify key stakeholders and briefly describe how they will be engaged in program preparation.

Coastal communities. Coastal communities are the key stakeholders in nearly all MPAs and small-scale fisheries improvement initiatives such as LMMAs. At the present time they are largely supported by NGOs or other experienced institutions but the intention is to progressively reduce their input as communities take increasing responsibility and are able to manage their relations with other stakeholders such as fisheries companies. One indicator of coastal community interest is the steady growth in their numbers within the MIHARI association.

Government. The principal government stakeholders are MEEMF represented by the Oceans Directorate and MRHP. Additional ministries that have responsibility for managing marine resources are also stakeholders in this program, for example the ministries responsible for transport, tourism, land use planning, climate change adaptation and meteorology. These ministries have formed commissions to promote and oversee different aspects of marine and coastal development and these should benefit from the Program. For example, there is a National Integrated Coastal Development Commission that is currently promoting Integrated Coastal Zone Management (ICZM) initiatives in selected areas. At higher levels the offices of the President and Prime Minister will benefit as they are leading NDP implementation. Decentralized administrations in maritime areas are key stakeholders. These administrations as well as more localized entities are expected to have spatial use plans together with strategies to manage priority fisheries and other development initiatives such as tourism. Support for the present Program is marked at the Malagasy regional level.

Regional neighbors. The SWIOFish2 child project will coordinate with the project's activities in other countries in the region as well as other partnership programs and associations.

Private sector. Private fisheries companies already benefit from strengthened relations with fisher communities in areas where MPAs, LMMAs and additional local fisheries governance projects have been developing. MRHP already collaborates with the World Bank's Integrated Development Poles in the region of Toliara, Ambaro Bay and

Tolagnaro / Fort Dauphin to foster this collaboration while mainstreaming conservation and sustainability aspects. Tourism operators are also key stakeholders in some MPAs. However, the number of MPAs that have been developed to welcome tourists is still limited with several sites as yet to develop their potential. Some of the best developed MPAs are among the most popular in the country. It is noteworthy that a small number of terrestrial PAs have agreements to develop local lodges or tented camps through co-management agreements. Some of these have had remarkable success and are win-win situations for the community and the private operator.

Social development services. Where possible, LMMA and MPA supporters will try to attract social development agencies to provide essential services such as health and education. For instance MRHP intend to work with a Social Development Agency such as FID in the frame of the SWIOFish2 project. To date various UN agencies and USAID among others have been active contributors.

Donors. Donors supporting biodiversity conservation and sustainable development programs in coastal area find a ready platform wherein government agencies, local authorities, communities and the private sector are receptive to their initiatives. While donors often like to keep their projects separate, there are indications that synergies are being increasingly sought.

CSOs, CBOs and NGOs. The growing LMMA/MPA network offers opportunities for CSOs with specific interests to reach communities that are otherwise difficult to access. CBOs underpin the both child projects within the Program and receive considerable support from MEEMF, MRHP and NGOs. Additional community-based entrepreneurial groupings are arising as new economic opportunities arise through fisheries or other activities. Many of these are women's groups. The MIHARI network that is to be supported by the Program will help NGOs based in Madagascar to share knowledge and coordinate their activities while also fostering a positive enabling environment for their MPA and LMMA initiatives. Some of these NGOs are members of regional consortia and will share knowledge through them.

3. *Gender Equality and Women's Empowerment.* Are issues on [gender equality and women's empowerment](#) taken into account? (yes /no). If yes, briefly describe how it will be mainstreamed into program preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

The Program will build local capacity among coastal communities. Through cooperation among Program partners and additional specialist organizations, particular attention will be given to strengthening the role of women within their communities. Some of the actions that will be undertaken will include strengthened women's participation and leadership within community decision making processes and ensuring that women share the economic benefits from sustainable use of natural resources. Experience to date in Madagascar clearly indicates that women are often the initiators of new enterprises and often the most important beneficiaries of new successful projects. Some small-scale fisheries activities are the domain of men but women are often active in trading and marketing and fishing activities not requiring boats, e.g, gleaning.

Women often lead the community in identifying and establishing basic community services such as health and education. The Program will support their efforts. The Program will actively seek opportunities for gender-sensitive opportunities such as those promoted for reproductive health by donors such as USAID. Additional gender equality initiatives will draw upon non-fisheries projects that have demonstrable women's empowerment value. These include local agricultural activities in coastal communities, small-scale ecotourism projects in partnership with professional operators and additional options provided by non-fisheries marine and coastal resource management. The latter include mangrove restoration and harvesting, marine alga farms and sea cucumber production, all of which are showing promise in Madagascar.

4. *Benefits.* Describe the socioeconomic benefits to be delivered by the program at the national and local levels. Do any of these benefits support the achievement of [global environmental benefits](#) (for GEF Trust Fund), and/or adaptation to climate change?

At the local and national levels the benefits are numerous. Locally, coastal communities will have better control over access to small-scale fisheries or other natural resources areas. Limited data suggests that this helps to reduce inter-community tensions. Such benefits include better gender and age representation in community-level decision-making

As an example, larger MPAs in the southwest that are in reality a complex of MPAs, smaller LMMA and other forms of fisheries management zones require regular intra- and inter-community dialogue and coordination. This process has measurably reduced social tensions at both levels while also fostering heightened social cooperation. Accompanying this benefit, coastal communities will have new and improved economic opportunities through strengthened fisheries governance and access to buyers. Where it is possible they may benefit from improved social services. Local traders in marine resources will benefit from more stable and higher quality product that will obtain higher prices. Regional and local administrations will benefit from increased revenues and will be able to show success with respect to the development plans.

At the national level priority fisheries will increase their contribution to the country's economy including revenues to government. The small-scale fisheries that have for a long time been marginal contributors to the national economy will increase their contributions and help to maintain wellbeing and prosperity at both national and local levels. This can be achieved through building upon existing trial agreements between responsible buyers (such as MUREX and Copefrito in the southwest) and coastal communities. The agreements offer a stable market for producer companies, and consistent and stable products for the buyers. Government benefits from increased taxes for improved products prepared for export and national markets.

Globally and regionally, Madagascar's waters are among the most biodiverse on the planet. The Program will help to maintain this natural heritage and maintain or restore its productivity. As the Program is targeting the very heart of the ASCLME, it should contribute to the health of this major biome. Climate change adaptation measures are systematically integrated into MPA and LMMA design and management in Madagascar. These include ecological, social and economic measures.

5. *Risks*. Indicate risks, including climate change risks, potential social and environmental future risks that might prevent the program objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the program design:

Risks	Probability/ Importance	Management measures
Political instability: government takeover or public unrest.	Importance: Moderate.	Both ministries have been able to maintain their respective basic activities during recurring political crises. Partnerships with NGOs and other partners have helped to ensure that MPA and local fisheries management initiatives continued and the lessons learned will be applied if the risk reappears in the future.
Adverse policy and legislation development.	Importance: Low/High.	Key MPA, LMMA and additional fisheries must be developed to provide a secure environment for the Program. These must in turn be coordinated to ensure that conflict between the two sectors is avoided as well as conflict with other sectors.
Weak or absent enforcement MPA and fisheries regulations.	High/Moderate.	Two solutions are possible. The first is to support local enforcement agencies at the local level. The second is to empower local communities to enforce their traditional agreements with support from government.
Weak inter-agency or government cooperation.	Moderate/Moderate.	Collaboration between the environment and fisheries ministries has been progressively strengthening in recent years, especially regarding LMMA policy, legislation and implementation. However, government decision-makers may feel encroached and may be pressured by donors. The best solution is to have regular planning and coordination meeting through Program implementation. Additional donors will be investing in marine resource management and it will be critical to share information and coordinate activities.
Low or negative private sector involvement. In some cases, local seafood companies may be reluctant to adjust prices or may reject small-scale fisheries products for quality reasons. In other cases, the number of seafood traders is growing, increasing pressures on stocks. Some may pressure communities into overfishing or destructive practices.	Low to Moderate/Moderate.	Good companies are already working with us, government agencies and environmental groups sustainable fisheries management. This has been strengthened through the project. New entrants present a higher risk and they must be monitored and brought into a dialogue with agencies in the regions where they operate.
Threat displacement. Effective protection of MPAs and associated LMMAs intensify threat levels in other areas that are also important for biodiversity and fisheries.	High/High.	The SWIOFish2 child project is best placed to deal with threats from overfishing. However, destructive mangrove exploitation is the responsibility of the MEEMF and the Oceans Directorate will therefore catalyze appropriate action by appropriate departments.
Climate change impacts.	High/High.	The two ministries will actively promote climate change impact assessments and promote adaptation measures. Models for this approach have been specifically developed for MPAs and LMMAs, including fisheries adaptation measures and critical habitat actions.

6. *Coordination.* Outline the institutional structure of the program including [monitoring and evaluation](#) coordination at the program level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

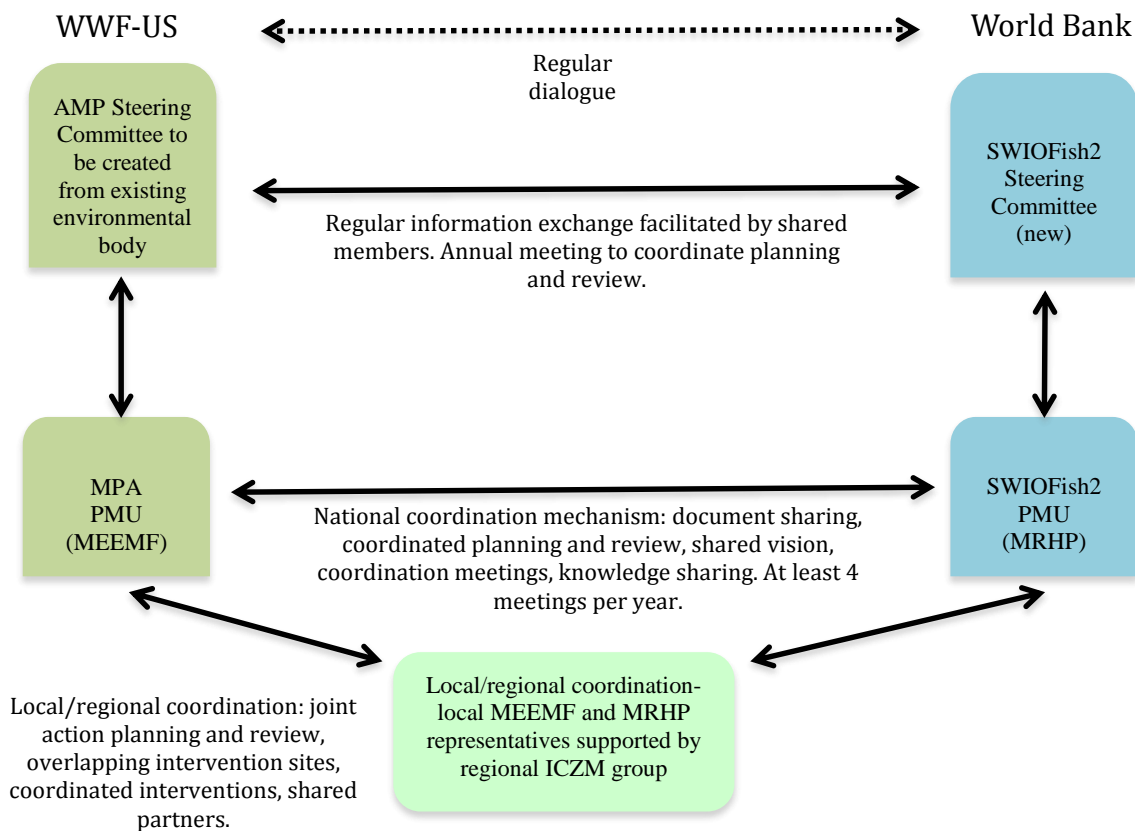
The Program will be coordinated through a regular communication between the two steering committee of each child project. It should be noted that the overall steering committee has representatives who are in the respective child project steering committees.

Coordination of the two child projects is based on shared principles. These are:

- Management of fisheries and other marine resources will ensure that ecosystem approaches are adopted.
- The managers of both projects will work together to identify potential synergies as well as program gaps that need to be addressed.
- The two child projects will work together to harmonize sectoral policies and legal frameworks.

Each of the two child projects will have an executive Project Management Unit comprising members of the parent ministry. The SWIOFish2 PMU is composed of 10 individuals including a coordinator, two project component leaders, thematic experts (environmental, social and communications), a monitoring and evaluation officer, and finance and administration personnel. The PMU for the MPA child project will be similar but smaller. In addition, each ministry has a Partnerships Management Director who will support PMU cooperation.

Proposed Program structure and coordination mechanisms between child projects.



To avoid unnecessary additional transaction costs it is not deemed necessary to create an overall coordination *unit* but rather to ensure that synergies between the two projects are ensured by coordination *mechanisms*. Details of what is entailed will be more precisely defined during the PRODOC phase, but the two ministries propose that information is exchanged through regular meetings, some of which can be fixed to coincide with specific project management phases such as planning or evaluation. The exchange mechanisms will help to coordinate the respective interventions of each ministry in a practical manner. The aim of the coordination activities will be to i) ensure ecosystem-based approaches to MPA and fisheries management; ii) build synergies and optimize resource use in each project; iii) share information and data; iv) ensure co-planning to harmonize the roll out of conservation and fisheries activities and ensure complementarity of actions and iv) coordinate interactions with stakeholders.

Each coastal administrative region has MEEMF and MRHP teams and these will manage coordination mechanisms. Other members of the regional administrations, including those not attached to central ministries, will be integrated in these decentralized coordinatory activities. In areas where only one project is operational (the southwest for MPAs and the southeast or south for SWIOFish2) it may be desirable to instigate similar coordination mechanisms to improve knowledge sharing at national and regional levels. Coordination at the regional level focuses primarily on ensuring that the MPA and fisheries child projects are planned, implemented and monitored together to optimize overall program harmony. This will require that regional ministry representatives work closely together while also coordinating the activities of implementing partners. Regional-level coordination means that related activities such as coastal planning are taken into account with regard to Program implementation.

Each PMU will be supported by a deliberative Steering Committee. MRHP recently created its committee by ministerial order, but MEEMF will call upon an existing national steering committee established to monitor marine and coastal conservation projects. At the present time, the most likely candidate is the Sydney Promise Steering Committee created in 2015 to oversee implementation of Madagascar's commitments made during the recent World Parks Congress.

Each PMU will be supported by a deliberative Steering Committee. MRHP recently created its committee by ministerial order, but MEEMF will call upon an existing national steering committee established to monitor marine and coastal conservation projects. At the present time, the most likely candidate is the Sydney Promise Steering Committee created in 2015 to oversee implementation of Madagascar's commitments made during the recent World Parks Congress.

Each PMU has a monitoring and evaluation expert who will be responsible for routine progress assessments. The World Bank and WWF will ensure compliance to GEF requirements as well as their respective internal reporting/monitoring requirements.

The World Bank SWIOFish2 team will promote coordination efforts with other ASCLME projects while MEEMF and WWF will liaise with those responsible for relevant GEF-supported PA projects including Project 4172 Managed Resources Protected Areas, Project 5263 A Landscape Approach to conserving and managing threatened Biodiversity in Madagascar with a focus on the Atsimo-Andrefana Spiny and Dry Forest Landscape, and Project 5351 Strengthening the Network of New Protected Areas in Madagascar, including New Protected Areas.

Program outputs have been described above but a full *monitoring and evaluation* program will be drawn up during the PRODOC phase as it depends on further negotiations between the two ministries, MEEMF and MRHP. It also requires inputs at the same time from implementing partners and donors that are currently planning their respective support programs for PAs and fisheries management. The latter have agreed that the GEF Program will provide a framework for determining how and where they will provide support. Finally, the two ministries have allocated USD 200,000 for joint planning and monitoring, while implementing partners have agreed to support M&E in their zones of intervention.

7. Knowledge Management. Outline the knowledge management approach for the program, including plans for the program to learn from other relevant initiatives, and to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The Program will have a multi-pronged approach to knowledge management.

- The coordination mechanisms presented above will ensure that the two PMUs regularly share information and share this within the respective ministries.
- The proposed decentralized coordination mechanisms will have a similar role to the former but will share knowledge with the regional administration and its partners including municipalities, the private sector and interested NGOs and CSOs.
- The MIHARI network organizes a national meeting of all members and regional meetings more frequently. These are already active knowledge sharing opportunities. It may be noted that MIHARI members will be active in implementing the two child projects.
- The MIHARI and WWF websites will actively report on progress and lessons learned. Both will target national audiences primarily, but have significant external followings. For example, there is an international LMMA platform that MIHARI can feed with information.
- There will be a focus on collaborative learning-by-doing with child projects coming together in the field and sharing experiences. Local stakeholders will be active participants adding their own input.
- There will be a focus on testing approaches against clear criteria such as set objectives and, where it exists, a theory of change. Some of the most effective site-based initiatives will be highlighted and host exchange visits with others.
- Lessons learned from the Program will be collated and documented for sharing among interested parties. The ministries may also prepare press releases.
- The program will actively seek knowledge from similar initiatives in the region and more widely. Examples include SWIOFish1 implementation in Tanzania, Mozambique and the Comoros, MPA development in Eastern Africa, local fisheries projects in the Comoros and LMMA developments in the Pacific region. Lessons learned can be assimilated and tested in Madagascar.

8. *National Priorities.* Is the program consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, etc.

Regarding the Convention on Biological Diversity, the Program will make significant contributions to achievement of two Aichi Biodiversity Targets: (i) Target 6 – By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits; and (ii) Target 11 - By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

The Program will also contribute to additional Aichi Biodiversity Targets:

- (a) Target 1 – Awareness of biodiversity values.
- (b) Target 2 – Integrate biodiversity and development.
- (c) Target 4 - Sustainable production and consumption.
- (d) Target 6 - Sustainable fisheries.
- (e) Target 10 – Reduction in pressure on coral reefs.
- (f) Target 12 – Reduction in threatened species extinctions.
- (g) Target 14 – Ecosystem goods and services.
- (h) Target 19 – Science based management.

At national level the Program will contribute to NDP and NBSAP implementation. It will also significantly contribute to regional and municipality development plans. More details are provided in the child project documents.

9. *Child Selection Criteria.* Outline the criteria used or to be used for child project selection and the contribution of each child projects to program impact.

The criteria used or to be used for child project selection followed are:

1. The child projects focus on supporting national strategies to improve governance of marine resources and strengthened marine biodiversity protection, while also meeting international commitments in these areas.
2. Although the child projects are essentially independent, they will coordinate their work using agreed upon mechanisms that are being developed by their parent ministries, developing synergies that increase positive impacts above those anticipated working alone.
3. Each child project will measure their progress against a suite of indicators designed to measure overall Program impacts over and above those of the individual child projects.
4. The child projects will focus on learning to provide a platform to positively influence marine governance policies and strategies across relevant development sectors.
5. Each child project and their respective implementing agencies will agree to partake in sharing in knowledge, lessons and testing approaches for replication both within the Program and among other comparable initiatives through the project coordination mechanisms.
6. Each child project will secure significant co-financing from government, bilateral donors, foundations, NGOs and the private sector that together enhance the effectiveness, scope and sustainability of the GEF investment.
7. Each child project will focus on sustainable impacts at both the level of individual projects and the Program as a whole.


PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
(Please attach the [Operational Focal Point endorsement letter](#) with this template).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
RALALAHARISOA, Edmée	Director General of the Environment	MINISTRY OF ENVIRONMENT, ECOLOGY, FORESTS AND OCEANS	02/24/2016

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies⁸ and procedures and meets the GEF criteria for program identification and preparation.

Agency Coordinator, Agency name	Signature	DATE (mm/dd/yyyy)	Program Person	Telephone	Email Address
Hervé Lefeuvre, WWF-US		03/28/2016	Hervé Lefeuvre	+12024598533	Herve.Lefeuvre@wwfus.org

C. Additional GEF Project Agency Certification (*Applicable Only to newly accredited GEF Project Agencies*)
For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PFD.

⁸ GEF policies encompass all GEF managed trust funds, namely: GEFTF, LDCAF, and SCCF

ANNEX A

Child Projects under the Program^{a/}							
<u>Country</u>	<u>Project Title</u>	<u>GEF Agency</u>	<u>GEF Amount (\$)</u>			<u>Agency Fee (\$)</u>	<u>Total (\$)</u>
			<u>Focal Area 1</u>	<u>Focal Area 2</u>	<u>TOTAL</u>		
			<u>Project</u>	<u>Project</u>	<u>Project</u>		
	<u>FSPs</u>						
Madagascar	1.Expanding And Consolidating Madagascar's Mpa Network	World Wildlife Fund, Inc		6,284,404	6,284,404	565,596	6,850,000
Madagascar	2.Swiofish2	WB	6,422,018		6,422,018	577,982	7,000,000
	3.	(select)			0		0
	4.	(select)			0		0
	5.	(select)			0		0
	<u>Subtotal</u>		0	0	0	0	<u>13,850,000</u>
	<u>MSPs</u>						
	1.	(select)			0		0
	2.	(select)			0		0
	3.	(select)			0		0
	<u>Subtotal</u>		0	0	0	0	0
	<u>Total</u>		6,422,018	6,284,404	12,706,422	1,143,578	<u>13,850,000*</u>

- Madagascar GEF FP endorsement letter indicates an additional 150 000\$ for PPG WWF MPA project

LIST OF CHILD PROJECTS UNDER THE PROGRAM FRAMEWORK

a/ Total amount of child project concepts should equal the GEF program financing requested and consistent with Tables A, B and D.

CHILD PROJECT CONCEPT NOTES

Name of the Project; Second South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish2)

PART I: Project Information

Project Title:	Second South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish2)		
Country(ies):	Madagascar	GEF Project ID: ⁹	
GEF Agency(ies):	WB (select) (select)	GEF Agency Project ID:	P159562
Other Executing Partner(s):	Ministry of Fish Resources and Fisheries.	Submission Date:	2016-03-01
GEF Focal Area(s):	International Waters	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	Sustainable Management of Madagascar's Marine Resources]	Agency Fee (\$)	577,982

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES¹⁰

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
IW-3 Program 7(select) (select)	GEFTF	6,422,018	23,000,000
Total Project Cost		6,422,018	23,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: is to improve the management effectiveness of selected priority fisheries at regional, national and community level.						
Project Components	Financing Type ¹¹	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Enhanced regional integration	TA	Regional cohesion and coordination improved to increase regional fisheries management efficiency	IOTC resolutions better incorporated into SWIOFC countries national legal framework SWIOFC countries capacity to implement IOTC resolutions, including Port States Measures, improved		0	2,000,000
2. Improved priority fisheries governance	TA	Key instruments for management of the	National and local policy / legal /	GEFTF	6,422,018	15,800,000

⁹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

¹⁰ When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

¹¹ Financing type can be either investment or technical assistance.

		<p>priority fisheries in place in target areas</p> <p>Improved surveillance and subsequent reduced levels of illegal fishing, measured by rates of serious fishing infractions</p> <p>Comprehensible information on the status of the fisheries available to all stakeholders</p>	<p>institutional reforms adopted</p> <p>Implementation of fisheries management plans and co-management arrangements</p> <p>Fishing unit and license registries in place</p> <p>Strengthened fisheries catch and effort database to feed real-time information into management decisions</p> <p>Strengthened units for fisheries monitoring, control and surveillance</p> <p>Increased patrols in national waters / landing sites</p> <p>Use of satellite-based vessel monitoring systems where appropriate</p> <p>A dashboard of publicly available information on the fisheries sector in place</p> <p>Communications campaigns with stakeholders on sustainable fisheries</p> <p>Participation in IW:LEARN</p>			
3. Increased economic benefits from priority fisheries	TA	Increased local value-added from the fisheries sector in target areas	<p>Small-scale fish landing site infrastructures</p> <p>Access to finance, equipment and know-how facilitated for enhanced income-generating activities or alternative livelihoods</p>		0	3,700,000

			compatible with management plans			
				Subtotal	6,422,018	21,500,000
				Project Management Cost (PMC) ¹²	0	1,500,000
				Total Project Cost	6,422,018	23,000,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Marine Resources and Fisheries	In-kind	1,000,000
Total Co-financing			1,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
WB	GEFTF	Madagascar	International Waters	(select as applicable)	6,422,018	577,982	7,000,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total GEF Resources					6,422,018	577,982	7,000,000

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)¹³

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$150,000					PPG Agency Fee: 12,385		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ¹⁴ (b)	Total c = a + b
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total PPG Amount							0

¹² For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

¹³ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

¹⁴ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS¹⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
6. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>Hectares</i>
7. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>Hectares</i>
8. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>0.1 Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
10. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
7. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area¹⁶ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

PROJECT DESCRIPTION

I. Introduction and Context

A. Country Context

Regional context

The fisheries sector plays a key role in the economy of the South West Indian Ocean riparian countries. Fisheries direct contribution to South West Indian Ocean (SWIO) countries gross domestic products range from 2 to 9 percent. Fish exports play a crucial role for the SWIO

¹⁵ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

¹⁶ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

countries' trade balance. Industrial fisheries – mainly tuna, followed by shrimp and other crustaceans – provide an important source of foreign exchange revenue through fish exports to markets in developed countries, especially in Europe and Asia.

The fisheries sector further plays a crucial role for the livelihoods of SWIO coastal populations. The small-scale and subsistence fisheries are of major social importance as an economic backbone of livelihoods and economies in rural coastal communities. The sector is a major contributor to nutritional health and food security in the SWIO region. The coastal rural population, and in particular the poorest, has often limited alternatives to fish for providing animal protein, as well as essential nutrients, vitamins, minerals and trace elements. Fish represents the main source of animal protein intake in most of the countries of the region.

The SWIO countries have engaged in regional collaboration to promote a sustainable utilization of their resources. The nine countries bordering the waters of the South West Indian Ocean (SWIO) – the island nations of Comoros, Madagascar, Mauritius and Seychelles, and five mainland countries: Somalia, Kenya, Tanzania, Mozambique and South Africa, as well as Yemen, Maldives and France, created a regional fisheries body, the South West Indian Ocean Fisheries Commission (SWIOFC), to promote the sustainable utilization of the living marine resources of the SWIO region. With the exception of Somalia, they are also members or cooperating non-contracting party of the Indian Ocean Tuna Commission (IOTC).

Rationale for a Regional Approach

The SWIO marine fisheries are part of a larger marine ecosystem shared by all countries of the region. They are a regional resource, whose health and sustainability require regional coordination to limit the negative and enhance the positive externalities yielded by national activities. The migratory species, such as tuna, are archetypes of this shared regional common good, and their sustainable harvesting requires coordination to avoid a “tragedy of the commons” scenario. The fisheries sector in the SWIO is already largely regional, with each country's decision impacting on the other countries' activities. In particular, large national investments, such as ports, fishing fleets, or processing plants, are competing against each other. Regional coordination is therefore needed to avoid conflicts and suboptimal sectorial investments, and to promote equitable distribution of wealth. Furthermore, several technical aspects of the sector are regional in nature, and their implementation would benefit from economies of scale if managed at a regional level (e.g., monitoring, control and surveillance).

The countries face common contexts and constraints with regard to their fisheries sector: weak governance, weak human and institutional capacity, and a fragile business environment. The SWIO countries therefore benefit from addressing these challenges jointly. They already use regional platforms to share their experience in implementing more sustainable and economically viable fisheries policies and practices, and agree on common management measures. These platforms include the Indian Ocean Commission (IOC), the SWIOFC and the IOTC. Reinforcing SWIO countries' capacities to participate actively to the IOTC forum and to implement the IOTC resolutions is essential for the management and sustainable use of the tuna resources and for further harnessing the tuna fisheries to regional economy for the benefits of coastal populations.

Madagascar country context

The long political crisis has taken a toll on the economy of Madagascar. After 5 years of political stalemate, presidential and legislative elections finally took place in Madagascar at the end of 2013. At this point, the country will not reach the UN Millennium Development Goals (MDG) by 2015. In particular, the MDGs for child mortality, primary education net enrollment and completion rates, and especially the eradication of extreme poverty, which in 2007 was deemed potentially achievable, can no longer be achieved. Madagascar ranks 155 out of 187 countries in the 2014

Human Development Index . A natural rebound after the prolonged crisis has not taken place yet. Growth slowed in 2013 to 2.4%, down from 3% in 2012 compared to a pre-crisis rate of 5% (2004–2008). Faster and inclusive growth is necessary to make a dent in the elevated rate of extreme poverty , estimated at 82% of the population.

The weak economy remains vulnerable to shocks. The Malagasy economy is dominated by its primary sector (agriculture, hunting, forestry and fisheries) which represents 28% of its GDP, 20% of the exports and employs 75% of the population (African Economic Outlook, 2012). However, growth was mainly sustained by the secondary sector which progressed 3.8% between 2011 and 2012. This performance was mainly due to export-oriented activities in the mining sector and dedicated manufacturing and processing zones, targeting European and Asian markets. Madagascar's economy remains fragile and its capacity to absorb further shocks is at a bare minimum. Such shocks include natural disasters – mainly cyclones, droughts and flooding. In 2008, cyclones caused economic losses equivalent to 4% of GDP. It is estimated that one quarter of the population, or five million people, currently live in zones at high risk of natural disasters. At the same time, the governance of natural resources is weak and illicit activities are widespread.

B. Sectoral and Institutional Context

The fisheries sector is a key contributor to the Malagasy economy, important for local livelihoods and national growth. With 5,600 km of coast, 327,000 ha of mangroves, an exclusive economic zone covering over 1 million km², and more than 117,000 km² of continental shelf, Madagascar is endowed with substantial marine and coastal resources. Fisheries and aquaculture are of great economic and social significance for national development, representing 7% of GDP and 13% of exports. It is one of the main foreign currency suppliers in the country and provides around 500,000 jobs.

The general decline in catches reveals a worrisome state of the marine resources. Very few stock assessments have been conducted, but the limited amount of data available indicates that most fisheries are in decline. This is mainly due to overfishing and is accentuated by habitat destruction (mainly mangroves), pollution, climate change, and harmful fishing practices. Moreover, the illegal market represents an important threat for the Malagasy ecosystem. The total illegal catch is estimated at 50,000 tons of fish per year , half of the entire sector's legal production. The human capacity and the fishery institutions in Madagascar are weak, which contributes to the management deficiency of the fisheries sector.

With artisanal fisheries reaching overexploitation, there is a need to enhance fisheries value-chains and reorient the sector towards higher value-added and sustainable activities: (i) Developing artisanal fisheries value-chains, which have promising income generation potential for the poor in the current context of difficult access to markets and low value-addition. Several constraints currently hamper this development, including systemic lack of access to finance and market barriers linked to certification requirements; (ii) Increasing aquaculture fish production for internal consumption, exports, job creation and reduction of the pressure on the marine ecosystems. Several promising models are being developed in Madagascar and in the region, and greater attention to the facilitating environment is required to significantly scale up the approaches. Out-grower schemes in sea-cucumber aquaculture are tested to address rarefaction of the resource while supporting poverty reduction, and are progressively industrialized.

The development of the fisheries sector is hampered by a weak institutional and legal framework. The Ministry of Aquatic Resources and Fisheries, which comprises over 40 separate directorates, services and agencies, is responsible for the fisheries sector, while other Government agencies are responsible for related activities (e.g. the Ministry of Environment and Forests administers environmental regulation and marine protected areas planning, and the Prime Minister's office oversees Integrated Coastal Zone Management). All these agencies suffer from a lack of human,

technical and financial resources and suffer from high staff management turnover. The policy and legal framework governing the sector is ambiguous and outdated. The national sector strategy expired in 2008 and, despite renewed commitment to updating and coordinating the fisheries policy framework, the preparation of updated sector-wide legislation is showing little progress and lacks consensus amongst stakeholders. The recent National Development Plan (2015-2019) underlines the lack of a Fisheries Law and its implementing legislation essential to enable the development of a consistent legal framework for sustainable fisheries.

C. Relationship to CAS

The proposed Project is designed to contribute to the World Bank Group's corporate goals of ending extreme poverty and promoting shared prosperity in a sustainable fashion. It recognizes the importance of fisheries as a key contributor to food security, nutrition, and job creation for rural coastal populations of Madagascar, which are among the poorest and most vulnerable. It also acknowledges the potential for seafood value chains to further contribute to inclusive economic growth and poverty alleviation. Promoting sustainable exploitation of fisheries, linking small-scale operators to extended value chains and better harnessing fisheries to national economies will ensure that the sector socio-economic benefits are better captured and their distributive feature is optimized. This will contribute to boosting shared prosperity in Madagascar.

The proposed project is in line with the Malagasy Interim Strategy Note FY12-FY13, by supporting two of the main pillars of the strategy: improve governance and public sector capacity, and support employment and competitiveness. The improvement of the governance, especially the management of renewable natural resources, is explicitly mentioned in the draft Systematic Country Diagnostic, recognizing the importance of fisheries management in order to improve the sustainability of the sector, sustainability being considered the most critical challenge for Madagascar to achieve growth and shared prosperity. The proposed project also supports the Government National Development Strategy of the sector, which addresses: (i) sustainable management of fisheries and preservation of resources; (ii) efficient and accountable governance of the sector; (iii) promotion of alternative opportunities and activities (including aquaculture and post-harvest); and (iv) professional strengthening and capacity building of the stakeholders.

The proposed Project would be a part of the regional South West Indian Ocean Fisheries Governance and Shared Growth (SWIOFish) Series of Projects, which adopts a regional and long term approach to supporting the South West Indian Ocean countries in sustainably developing their fisheries sector. By supporting building competitiveness and employment and addressing vulnerability and resilience, with a foundation on governance and public sector capacity, the proposed project would also be in line with the World Bank's Africa Strategy. Madagascar is already benefitting from the regional component of the first project within this Series of Projects, SWIOFish1.

II. Proposed PDO/Results

A. Proposed Development Objective(s)

The proposed Project Development Objective is to improve the management effectiveness of selected priority fisheries at regional, national and community level.

B. Key Results

The proposed PDO-level Results Indicators of the project are:

- a) Improvement in compliance rate of SWIO countries with IOTC resolutions;
- b) Number of national priority Fishery Management Plans (FMP) with measures to control fishing activity implemented;
- c) Number of community-based management units achieving performance targets ; and
- d) Number of direct beneficiaries (of which % are women).

III. Project Context

A. Concept

1. Description

The proposed project would be the second project within the SWIOFish Series of Projects. The challenges it intends to address are regional in nature. Addressing these regional challenges also requires action at the national level, which will yield important regional benefits, enhance country ownership and efficiency, and strengthen national institutions. Following the approach developed under SWIOFish1, project implementation will adopt a principle of subsidiarity: only project activities that are transnational will be managed at the regional level through a regional body operationalized by the SWIOFish1 (component 1). Most of the activities will then be implemented at the national level (component 2 and 3). Component 4 will support regional and national project management activities.

At the regional level, the proposed project would build on and extend the activities supported by the SWIOFish1. It would increase the participation of the SWIO countries to the IOTC and improve their compliance with resolutions agreed among the IOTC member countries. This is essential to ensure the sustainability of the tuna and tuna-like resources and the productivity and profitability of the fisheries, key to the economies of the region.

At the national level, the proposed project would focus on Madagascar. The improved management of the Malagasy fisheries is critical to ensure their sustainable contribution to the country's economy and food security. This will be the focus of the second component. Yet, the economy will only benefit from better managed fisheries if they are better harnessed to the national economy. Moreover, in a context of limited production growth perspectives, the development of the sector will have to focus on enhancing the value-chains. These aspects will be addressed in component 3.

Component 1. Enhanced regional collaboration

This first component will expand the support to regional coordination implemented under the SWIOFish1 by targeting the management of tuna and tuna-like species, through the IOTC. It would support the substantial and physical participation of the SWIO countries in the IOTC forum, and enhance their compliance with their international fisheries obligations, including IOTC resolutions.

Component 2. Improved governance of priority fisheries

The component would primarily target policies, strategies, institutional and legal frameworks, and actions by the public sector necessary to improve priority fisheries management and performance, as well as coastal and marine environmental health and resilience to climate change. It would be backed by activities aimed at understanding the resource base, and building human and institutional capacity necessary to implement fisheries policies and management plans. Three closely-linked and mutually supportive activities, directed to both the public sector and coastal communities, are envisaged: (2.1) Efficient and accountable governance; (2.2) Sustainable fisheries management and resource preservation; and (2.3) Institutional capacity building.

Component 3. Increased economic benefits from priority fisheries

The component would primarily target increasing the value addition and diversifying communities' livelihoods to reduce poverty and pressure on the fisheries, improving the business climate, enabling the private sector productivity and investment, and supporting public investments critical to a viable private sector. Compensation for potential access restrictions among other support measures decided by the co-management plans developed under component

2 would be implemented here. The project would support the following sub-components: (3.1) Improved business and investment climate; (3.2) Promotion of alternative opportunities and activities; (3.3) Expansion of priority fisheries value chains; and (3.4) Planning of strategic infrastructure.

Component 4. Project management

The fourth component would support project coordination and implementation at regional and national levels, including monitoring and evaluation. It will operate through the Regional Implementation Unit (RIU) already set-up under SWIOFish1 for Component 1, and a Project Implementation Unit (PIU) for the implementation of the national activities under Components 2 and 3.

2. Overall Risk and Explanation

Overall Risk Ratings. The overall risk rating is Substantial for both preparation and implementation.

Preparation risks. The Substantial risk rating for project preparation is due to the capacity constraints and lack of experience with World Bank-financed projects of the Ministry of Marine Resources and Fisheries (Ministère des Ressources Halieutiques et de la Pêche - MRHP). It also reflects issues stemming from working not only with the fisheries agencies, but also with the Finance Ministry (fiscal issues) and the private sector. Political instability in the country might also delay the preparation process.

Implementation risks. The Substantial risk rating for project implementation is due to potential risks associated with: (i) complex policy issues, including the management of reform processes; (ii) weak capacity of the participating governmental agencies, particularly with respect to Bank fiduciary and safeguard procedures, and the logistics and project management challenges associated with the island geography and regional dimension; (iii) resistance of key public and private sector stakeholders to introduction of reforms, which may not provide equal or short-term benefits; (iv) difficulty in developing viable and functional production and value chain models and alternative livelihoods at different levels; (v) dependence on factors and conditions outside the control of the Project, in particular natural disasters, environmental changes, credit institutions and foreign investment; (vi) the poor investment climate baseline; (vii) high dependency of coastal fishing communities on the resource; and (viii) the contrast between a highly centralized administration and the potentially dispersed and remote project locations. The investments in capacity building and leadership, a cautious selection of project sites, careful design of reform processes and use of development marketplaces and private sector innovation will mitigate these risks.

B. Economic Analysis

1. Briefly describe Project's development impact in terms of expected benefits and costs

The magnitude and main types of expected benefits from the project include improved and transparent resource assessment and access rules at national and regional level; increased resource rent captured by public and private actors in particular from Madagascar and the region; improved income and safety for fishers and coastal communities and increased local and national value added from healthy fisheries and post-harvest activities. A cost-benefit analysis and a financial analysis will be during preparation to assess the potential development impact of the Project.

2. Rationale for public sector provision/financing, if applicable

The activities proposed under the project should be financed by the Governments. Institutional reforms in the fisheries sector, strengthening of the enabling environment for private sector

development and fostering coordination on regional issues can only happen through government action.

3. Value added of Bank's support

The World Bank has a comparative advantage in financing the proposed Project: it has been at the forefront in supporting the management and development of the SWIO fisheries sector in the past decade, mainly through the successful implementation of the Bank-managed, GEF-financed South West Indian Ocean Fisheries Project (SWIOFP) and preparation of the SWIOFish Series of Projects. The World Bank's convening power will also be a critical asset to the Project to foster cooperation across sectors, boundaries and donors. In addition, the Bank's experience in developing and implementing similar operations in Comoros, Mozambique and Tanzania, and at regional level as well as West Africa and the Pacific will bring significant value-added to the achievements of this Project.

4. Brief description of methodology/scope and next steps

A cost-benefit analysis and a financial analysis will be during preparation to assess the potential development impact of the Project.

C. Implementing Agency Assessment

The project will be implemented by a Regional Implementation Unit (RIU) set-up under SWIOFish1 and hosted by the IOC and a Project Implementation Unit (PIU) within the Ministry of Aquatic Resources and Fisheries (MRHP). The IOC has dedicated personnel to cover all the fiduciary and project management aspects and has experience to work with the IOTC in the frame of the implementation of a regional DGF grant. It is expected that the Malagasy PIU will be composed of dedicated staff from the MRHP supported by consultants, when and if required. The key positions of the PIU will be: (i) Project Coordinator; (ii) Financial Management Specialist; (iii) Procurement Specialist; (iv) Safeguards Specialist; and (v) Monitoring and Evaluation Specialist. The PIU will implement the project under the oversight of a Steering Committee, which composition and role will be determined during project preparation. To address current institutional weaknesses in the sector, capacity building will be a core, cross-cutting aspect of the project and will benefit from regional knowledge and experience exchange.

Monitoring and evaluation of outcomes and results will be a core part of the project design. The RIU and the PIU will collect and present data and reports for six-monthly reviews by the Regional and National Steering Committees in conjunction with World Bank implementation support missions. Discussions during these missions related to institutional capacity building, financial viability, technical reviews and site visits will also provide effective means of monitoring progress.

The Malagasy PIU will appoint a dedicated Monitoring and Evaluation Specialist to organize data collection and processing, keep track of project indicators, and prepare regular results reports. The role of the Monitoring and Evaluation Specialist's will also include taking an integral part in the development of the fisheries sector statistics in the country and the development of scientific, economic and social dashboards to support fisheries management and decisions related to the development of the fisheries sector.

Annex 1 - Systematic Operations Risk- Rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Substantial
9. Other	
OVERALL	Substantial

Annex 2
Preparation Schedule and Resources

Preparation Schedule			
Milestone	Basic	Forecast	Actual
AIS Release			13-Nov-2014
Concept Review	24-Feb-2015	25-Mar-2015	22-Apr-2015
Auth Appr/Negs (in principle)	16-Dec-2016		
Bank Approval	15-Mar-2017		
Sector Unit Estimate of Resources Required from Preparation through Approval			
Source of Funds	Preparation Expenses to Date (USD)	Estimate of Resource Requirements (USD)	
		Fixed	Variable
Bank Budget		245,000.00	105,000.00
Trust Funds		930,000.00	400,000.00
Team Composition			
Bank Staff			
Name	Role	Title	Unit
Xavier F. P. Vincent	Team Leader (ADM Responsible)	Sr Fisheries Spec.	GEN07
Benjamin Garnaud	Team Leader	Natural Resources Mgmt. Spec.	GEN07
Sylvain Auguste Rabeloson	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	GGO07
Hugues Agossou	Financial Management Specialist	Sr Financial Management Specialist	GGO31
Edith Ruguru Mwenda	Counsel	Senior Counsel	LEGAM
Jayne Angela Kwengwere	Team Member	Program Assistant	GEN07
Marie Bernadette Darang	Team Member	Information Assistant	GEN07
Paul-Jean Feno	Safeguards Specialist	Senior Environmental Specialist	GEN07
Shri Vasantt Kumar Jogoo	Safeguards Specialist	Consultant	GENDR
Vohangitiana Josiane Rarivoson	Team Member	Team Assistant	AFMMG

**Name of the Child Project: EXPANDING AND CONSOLIDATING
MADAGASCAR'S MARINE PROTECTED AREAS NETWORK**

PART I: PROJECT INFORMATION

Project Title:	Expanding and consolidating Madagascar's marine protected areas network		
Country(ies):		GEF Project ID: ¹⁷	
GEF Agency(ies):	World Wildlife Fund, Inc.	GEF Agency Project ID:	G0012
Other Executing Partner(s):	Ministry of Environment, Ecology, Oceans and Forests	Submission Date:	03/04/2016
GEF Focal Area(s):	Biodiversity	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	Sustainable management of Madagascar's marine resources	Agency Fee (\$)	565,596

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES¹⁸

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-1 Program 1 (select) (select)	GEFTF	3,142,202	8,719,150
BD-1 Program 2 (select) (select)	GEFTF	3,142,202	8,243,100
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
Total Project Cost		6,284,404	16,962,250

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Madagascar's marine biodiversity and productivity are effectively managed through a sustainable, resilient national network of MPAs						
Project Components	Financing Type ¹⁹	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Marine protected area expansion	TA	MPA coverage at least tripled from 2015 levels to	MPA priorities determined based on multi-sectoral marine mapping	GEFTF	2,567,574	7,891,500

¹⁷ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

¹⁸ When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

¹⁹ Financing type can be either investment or technical assistance.

		reach at least 2.5 million ha by 2020 All major Madagascar marine ecosystems adequately represented and conserved in MPAs Ecosystems-based MPA management designed to integrate fisheries stocks maintenance at local and seascape scales through MPA/CMMPA integration	(LME MEDA and CEPF projects) integrating other sectoral interests Partnerships established for MPA coverage increase to at least 2.5 million ha by 2020 Ecosystem-based MPA design and management plans showing integration of fisheries interests Improved fisheries production in MPAs			
	TA	Enhanced MPA-based management of globally threatened species	Priorities for conserving globally threatened species identified and plans operational	GEFTF		
	TA	Climate change adaptation systematically integrated in MPA management	CC integration into management and monitoring plans	(select)		
2. Strengthened management effectiveness and performance of MPAs	TA	Improved MPA management effectiveness	Annual PA management effectiveness assessments	GEFTF	2,567,573	7,000,000
	TA	MPA management tools operational	Toolkits developed/ adapted and operational	GEFTF		
	TA	Coastal community livelihoods improved through improved marine resources management and access social services	Cooperative partnerships with development agencies and private sector partners signed and operational	GEFTF		

			Participation of women in development initiatives Annual site assessments			
3. Building a robust enabling environment for effective MPAs	TA	MPA policy and planning strengthened in line with NBSAP and NDP	Specific policy for MPAs in place MPA planning guidelines developed as a foundation for marine spatial planning	GEFTF	850,000	750,000
	TA	MPA legislation strengthened to strengthen protection for MPAs and to enhance their role in sustainable development in line with NDP	Definitions for MPA status updated based on PA Code PA Code implementing regulations developed for flexible MPA development taking into account local governance roles Codes and regulatory legislating other sectors refined to integrate MPA needs (oil, gas, mining, fisheries, tourism)	GEFTF		
	TA	Institutional cooperation structures for MPA development and consolidation enhanced	Aichi Target 11 National Steering Committee progress reports MPA/SWIOFish2 Unit operational National GEF portfolio management unit reports	GEFTF		
	TA	Sustainable funding strategies developed based	FAPBM financial strategy defined and operational	GEFTF		

		on improved marine resources management to obtain at least 15% of MPA network financial needs and at least 30% of at least 10 MPAs	Analysis of MPA network benefits with respect to NDP goals Financial needs assessments and innovative funding strategies including value chains development with private sector established for at least 30 MPAs			
Subtotal					5,985,147	16,142,250
Project Management Cost (PMC) ²⁰				GEFTF	299,257	850,000
Total Project Cost					6,284,404	16,992,250

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Environment, Ecology, Oceans and Forests	In-kind	2,424,510
Recipient Government	Madagascar National Parks	In-kind	3,000,000
CSO	WWF-Madagascar Country Office	Grants	4,678,068
CSO	WCS	Grants	500,000
CSO	Blue Ventures	Grants	2,048,401
Donor Agency	KfW	Grants	4,311,271
Total Co-financing			16,962,250

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
World Wildlife Fund, Inc.	GEFTF	Madagascar	Biodiversity	(select as applicable)	6,284,404	565,596	6,850,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0

²⁰ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total GEF Resources					6,284,404	565,596	6,850,000

b) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)²¹

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$150,000					PPG Agency Fee: 12,385		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ²² (b)	Total c = a + b
World Wildlife Fund, Inc.	GEF TF	Madagascar	Biodiversity	(select as applicable)	137,615	12,385	150,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total PPG Amount					137,615	12,385	150,000

²¹ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

²² PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

PROJECT DESCRIPTION

A.1. The global environmental problems, root causes and barriers that need to be addressed

Madagascar is at the heart of the Agulhas and Somali Large Marine Ecosystem (ASCLME) that is the source of wellbeing for the people of the region. Recent research has shown that Madagascar marine biodiversity is globally important with, for example, the richest coral diversity outside of Asia's Coral Triangle. Numerous marine and coastal species are endemic and/or globally threatened. The country's marine ecosystems face numerous threats including habitat degradation or loss, overexploitation and climate change impacts. Even so these marine environments continue to support industrial and small-scale fisheries. The combination of exceptional biological richness, productivity and threats has attracted the attention of the global conservation community.

Marine protected area coverage

Marine protected area coverage in Madagascar is significantly below global averages notwithstanding a three-fold increase in the size of the national PA system over the last decade. Marine parks and reserves constitute 11% of national system, covering 3-4% of territorial waters and coastal ecosystems, and less than 1% of the 1.2 million km² EEZ.

Existing MPAs largely focus on coral reefs and associated habitats, and several important ecosystems are under-represented or not yet included in the national network. These sites tend to be relatively small and most do not guarantee the maintenance at an ecosystem or seascape scale. Recognizing these weaknesses, the government has prioritized MPAs in the National Development Plan (NDP) as a means to protect the country's natural heritage and to maintain or restore fisheries. The Ministry of Environment, Ecology, Oceans and Forests (MEEMF) established a new Oceans General Directorate mandated to develop a national oceans policy and to triple the MPA coverage by 2020 in compliance with Aichi Target 11 and national development strategies.

The earliest MPAs were established by Madagascar National Parks and classed as IUCN Category II sites. This strong protection status has led to difficulties with respect to traditional community fisheries practices but measures have been taken to defer these opportunity costs including new fishing boats better adapted to work further offshore where stocks are relatively underexploited together with adjacent set-aside areas reserved exclusively for community needs. Most new MPAs are classed as more flexible Category V or VI sites and integrate community interests including fisheries and mangrove exploitation. This broad model was widely adopted in many coastal areas and are known as locally managed marine areas (LMMAs) that may be established purely for fisheries or other marine resource use, or as combined resource/conservation sites. Government and NGOs have helped communities and other stakeholders to establish LMMAs. Although by definition LMMAs are locally managed, NGOs have developed partnerships with the communities to support their development. In those sites where communities have decided go beyond fisheries management only and integrate biodiversity conservation, they now have the option to become community managed MPAs (CMMPAs) that have stronger legal protection.

Threats, pressures and drivers

The direct pressures and threats include overfishing, destructive fishing practices that damage marine environments, mangrove clearance and excessive timber extraction, illegal exploitation of protected species including marine turtles, black corals, sea cucumbers, sharks and rays, seabirds and sea horses, soil runoff related to forest clearance and poorly regulated infrastructure development in fragile coastal areas. Additional threats related to climate change are intensified coastal erosion, acidification, coral bleaching and increased frequency of severe weather events such as cyclones.

The main drivers for marine and coastal ecosystems degradation are: 1) a persistent open-access regime that allows free access to key ecosystems increasing stresses on habitats, species and ecosystem goods and services; this is underpinned by 2) a strong dependence on marine resources among coastal communities that drives unregulated exploitation and heightens social and economic vulnerability; and 3) a limited enabling environment where MPAs have difficulty in competing with other legitimate use of marine and coastal areas, while at the same time inter-sectoral cooperation is rarely encouraged, even where the advantages are clear. The enabling environment thus encompasses institutional capacity and collaboration, policy, legislation, and adequate financial instruments.

Barriers

1. Open-access regime

The critical barrier to regulating natural capital exploitation is the current open-access regime, particularly as competition for fish is increasing as new fisher communities are established, often in the traditional fisheries of other coastal villages. Open access leaves no formal recourse for traditional and artisanal fishers to manage their customary fishing grounds including ecosystem quality or to respond to declining local marine resources. Migrant fishers and industrial fishing boats may enter traditional fisheries grounds and exploit their resources with impunity. The same is the case for mangroves and other important resource areas.

2. Lack of knowledge at site level.

Some critically important marine areas have been surveyed including Antongil Bay in the northeast, northwestern Madagascar and the southwest. However, many areas are underexplored. A series of survey have recently been conducted under the auspices of the GEF-supported ASCLME family of projects and data availability has increased significantly. This information and data from additional recent studies now permits a national priority a multi-sector setting marine spatial planning exercise where biodiversity conservation and fisheries management are prioritized. However, scientific knowledge at the site level – MPAs or LMMAs –is limited and site managers depend heavily upon local knowledge.

3. Weak coastal community empowerment and limited tangible benefits from MPAs

National fisheries and protected areas policies have recently shifted from strong central control to local appropriation and responsibility. The transition is a significant challenge and many some

decision-makers and many coastal communities are finding difficult to adapt. Although local stakeholders are empowered to take a firmer control over their local resources, the process may be slow. The main incentive for local stakeholders to establish and manage MPAs or LMMAs is the belief that fisheries or other resources will provide increased benefits including higher revenues. In many MPAs and LMMAs this has been clearly demonstrated but in many cases supporting government agencies and NGOs have not had the resources to help communities improve their traditional practises to increase productivity and/or develop improved supply chains to increase revenues.

4. Weak capacity and limited management resources

Capacity is relatively weak from central government to local stakeholders. Local empowerment and ownership is a new practice in Madagascar and the stakeholders at the different levels have had insufficient time or support to develop their skills or develop effective management tools. The latter may include guidelines on best practices or essential management tools such as manuals.

5. Lack of a robust enabling environment for MPA effectiveness

The changes in MPA and small-scale fisheries policy and the recent shift towards multi-sectoral marine spatial planning have been relatively swift. Traditionally, MPAs were subordinated to other more conventional development sectors including oil and gas, industrial fisheries for export and tourism. The shift should mean that MPAs, LMMAs and small-scale fisheries will have a stronger status in NDP implementation but this has yet to come about, with the risk that they will remain less important than the other sectors unless appropriate new policy, legislative and strategic frameworks are developed and implemented.

A.2. The baseline scenario

The government's new NBSAP and NDP define natural capital as a foundation for development, maintaining food security and a major axis for the country's economic future. The NDP also calls for a tripling of MPA coverage as a commitment made at the 2014 World Parks Congress towards attaining Aichi Target 11. In parallel, government and NGOs supported the establishment of the MIHARI network of LMMAs and community-based MPAs.

The government has completed a national MEDA through support from the GEF-funded ASCLME projects, providing a solid knowledge base to help identify future MPAs, LMMAs and priority fisheries zones. This knowledge base will be complemented by additional data collected through NGO research and inventory as a framework for marine spatial planning exercises led by WCS and funded by the Critical Ecosystem Partnership Fund (CEPF). MPA priority mapping will be completed by the end of 2016 and will be used to prioritize MPA site selection and design.

MPA success is a critical factor for improved fisheries management and coastal community wellbeing. As follow up to the successful World Bank regional Southwest Indian Ocean Fish Project (SWIOFP), the Government of Madagascar is currently developing with the World Bank a \$65 million IDA loan plus a GEF IW grant of \$8 million to strengthen its fisheries sector: the SWIOFish2 child project. The synergies between the two child projects will help to maintain

and/or restore small-scale fisheries in priority areas. Most of the latter are also areas of exceptional marine biodiversity value. This is a valuable step towards multi-sectoral marine spatial planning. For example, MPAs and LMMAs are integrated within a larger fisheries reserve in Antongil Bay in the northeast where overfished sharks are now protected along with many globally threatened marine species.

Over the past 2 decades, Madagascar National Parks and a number of NGOs have increased MPA coverage to over 800,000 ha with a further 400,000 ha identified and approved by government as a future MPA. More than 60 sites are being developed as fisheries LMMAs, with many integrated within MPAs. These institutions have acquired critical new skills and have encouraged increased local stakeholder appropriation. Their approaches now enable them to address NDP MPA goals and Aichi Target 11. There is strong recognition among them that improved fisheries management is a powerful incentive to motivate coastal communities and additional stakeholders to commit to MPAs to manage their environment and its resources. Organizations involved in MPA development have and continue to test and develop marine approaches for sustainable marine resource management including no-go zones, aquaculture and improved regulation of supply chains.

There is growing momentum to design MPAs and associated fisheries LMMAs to ensure ecosystem-based management over larger seascapes, although this trend is still nascent. However, without the proposed MPA child project, MPA supporters may be forced by resource limitations to remain very local with respect to their objectives, focusing primarily on species or habitat goals.

New and effective governance mechanisms for MPAs and LMMAs are emerging as experience grows. Stakeholders including government, communities, the fisheries private sector and environmental NGOs will continue to refine governance models through experimentation and exchanges with the aim of defining future standards for the network. There is now a need to create or adapt management tools such as ecological monitoring protocols or evaluation formats that are well adapted to local conditions. There is a commitment at national level to integrate climate change adaptation measures at all MPAs. However, this will be limited unless the MPA child project is implemented.

Taking the above scenario in its entirety, progress in MPAs will continue and they will play a significant role in sustainable development through ecosystem-based management. However, the objectives of the NBSAP and the NDP wherein MPAs are a vital pillar for sustainable development and improved security will not be fully realized; indeed, progress will be limited and MPAs will only partially fulfill their potential. Future NGO contributions aimed at consolidating progress to date will continue but are unlikely to guarantee full commitment to Aichi Target 11. The commitment to triple MPA coverage is likely to be partial or not fully consolidated with a commensurate erosion of marine biodiversity and natural resources in critically important areas. Many MPAs will continue to be primarily reliant on grants secured by NGOs.

Additional funding from the EU, USA and the Government of Germany has been allocated for improved marine resources management and conservation. These funds will support complementary activities while the GEF MPA project will provide a platform for these initiatives.

A.3. The proposed alternative scenario, GEF focal area strategies, and project description

The alternative scenario involving GEF support, including the contribution of the SWIOFish2 child project, comprises: MPAs will significantly contribute to increased priority fisheries benefits and community wellbeing objectives; greatly strengthened marine biodiversity protection; and Madagascar's MPA network will meet both national objectives and Aichi Target 11 commitments.

Through GEF support, MPAs will be a key contributor to improved management of fisheries stocks and other marine resources through increased revenues at national and local levels. In this, the MPA child project helps to maintain or restore healthy marine ecosystems while SWIOFish2 promotes improved fisheries management practices in these productive areas.

MPA coverage will at least triple from 820,000 ha to 2.5 million ha. Some of these will be LMMAs that are converted into CMMPAs. The LMMA network itself and other forms of fisheries reserves may further ensure improved biodiversity conservation and marine resource management over a considerably larger but as yet undefined scale, but likely adding at least another 1 million ha. Drawing upon lessons learned over the last decade, there will be a clear focus on consolidating management effectiveness in both new and existing MPAs. There will be a parallel drive to explore sustainability strategies including financial security, strong local ownership and clear benefits derived from MPA creation. The increased resilience to climate change will also be enhanced.

A 2009 attempt to create an MPA network for the SWIO region was apparently premature but the current MPA project will establish a new network in Madagascar. The network will develop a knowledge base and organize regular exchanges between sites.

The institutional barriers that have long separated fisheries management and biodiversity conservation will be removed or at least greatly reduced as MRHP and MEEMF develop a shared vision and cooperate actively at all levels from central government to site-level. The vision will be founded upon the knowledge that effective marine ecosystems conservation is essential to good fisheries management and *vice versa*. Other ministries will increasingly recognize the need to integrate MPAs and LMMAs in marine spatial planning and integrated ocean governance in a way similar to approaches being developed through the Nairobi Convention for the Northern Mozambique Channel Marine Ecoregion.

The project will help strengthen policy and legislation using the NBSAP, NDP and the PA Code as a foundation. In particular it will strengthen MPA status with respect to other legitimate uses of the sea. It will provide a more flexible definition adapted to local stakeholder responsibility for MPAs thus encourage more effective management for critical habitats and globally threatened species. A critical contribution will be capacity strengthening at all levels from national government agencies, through decentralized government offices to NGOs, community groups and private sector partners working directly in MPAs.

The outcomes of the three MPA child project components are briefly presented below.

Component 1: MPA expansion. The project will build on the opportunity of the pledge made by the President of Madagascar at the 2014 World Parks Congress in Sydney, Australia to triple the

number of existing MPAs by 2020. Tripling the area of the national MPA system will help Madagascar attain its commitment to Aichi Target 11 under the CBD and fulfil its national strategic objectives defined in the NBSAP and NDP concerning MPAs and improves marine resource management.

MPA coverage will be increased from the present 820,000 ha to more than 2.5 million ha. With the additional area provided by LMMAs, there may be as much as 3.5 million ha in total. ASCLME MEDA results will be one foundation to define priorities for biodiversity conservation and fisheries management using CEPF financed and WCS supported marine spatial planning process. Priority setting is fully participative involving all ministries interested in developing marine and coastal resources together with additional stakeholders throughout the country.

MPA network expansion will be accompanied by investments to consolidate existing sites and to strengthen integration of local stakeholder interests. Where possible, project partners will work at ecosystem or seascape level, integrating MPAs, LMMAs and other measure to ensure a holistic approach. Depending on the site, additional specific measures may be required for globally threatened species protection.

There are four priority MPA zones. These are:

Antongil Bay. This northeastern region is home to two national parks, Masoala and Mananara-Nord that include marine PAs. MRPH has declared the entire bay to be a fisheries reserve wherein 20 LMMAs are nested. Apart from the direct biodiversity and fisheries interests, this area has high ecotourism interest, in part because of its seasonal whale-watching opportunities. All of Antongil Bay is defined as a marine KBA.

The northwest including Ambaro Bay. Several MPAs exist in this area, including marine parks managed by four Madagascar National Parks and additional community-based MPAs supported by NGOs. LMMAs are also present within the mangrove zone on the mainland. The area arguably supports the most diverse marine and coastal ecosystems in Madagascar, including numerous small islands, extensive mangroves, and the highest coral reef diversity in the country. Large-scale and small-scale fisheries are important to the region's economy and tourism is steadily growing with the support of multilateral and private investments. The entire priority zone comprises a series of marine and coastal KBAs.

Barren Islands and central western coastal areas. This central western region has extensive reef coverage, small islands and some of the largest mangroves in the country. It is a critical area for endemic seabirds. The diverse natural ecosystems underpin important large-scale and small-scale fisheries. The former is centered on shrimp trawling and the latter on mangrove crabs and shrimp. Three MPAs exist in this zone. A fourth is in the process of being established and is likely to be the biggest PA in the country covering over 450,000 ha. It will integrate numerous LMMAs. Several marine and coastal KBAs identify the most important sites for MPA development.

The southwest. This zone includes the Nosy Ve – Androka marine national park south of the city of Toliara and the new Soariake and Velondriake MPAs to the north of the city. Each MPA integrates LMMAs. This area has a rich biodiversity and coastal community economies are based on fisheries. The area is an important tourism destination. Most of this zone is covered by marine and coastal KBAs.

Component 2: Strengthen management effectiveness and performance of MPAs This component has 4 sub-components: capacity to manage MPAs and strengthen biodiversity conservation within associated LMMAs; consolidating MPA governance; development and adoption of MPA tools and best practices; and refining development approaches contributing to strengthened management effectiveness through local development. These sub-strategies will be pertinent to CMMPAs and LMMAs within the MIHARI network and there will be considerable exchanges as MPAs and LMMAs develop. The lessons learned will also be fed into the SWIOFish2 and WIO LME SAPPHERE projects, as well as regional bodies such as WIOMSA.

Capacity strengthening must be more consistent and systematic, taking into account the strong participation of local stakeholders and the diversity of governance structures that are emerging. Capacity building will be led by NGO leaders in MPA development with support from MEEMF and MRHP, including organizations based elsewhere in the region. Care will be taken to build upon capacity development expertise that already exists in the SWIO region.

Effective local governance is a challenge in all PAs in Madagascar. However, some successful approaches are emerging and these will be tested and honed through project support. The challenges at the site level include under-representation of community members through barriers based on education levels, gender, age or social status, and building equitable partnerships between local resource managers and private sector buyers.

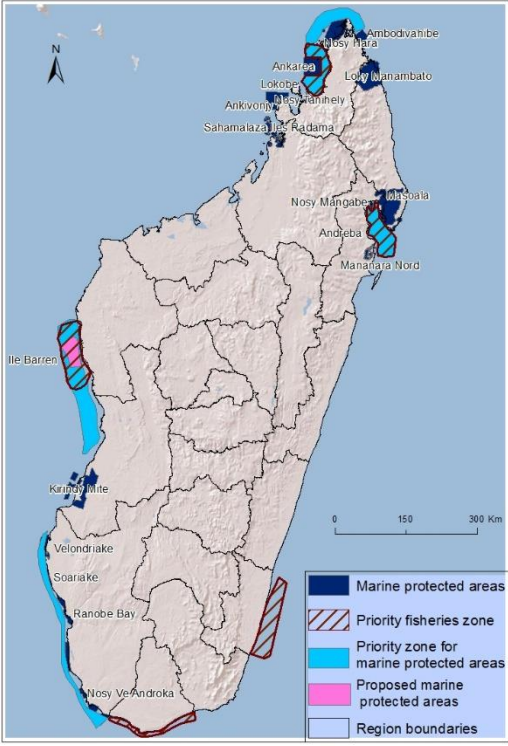
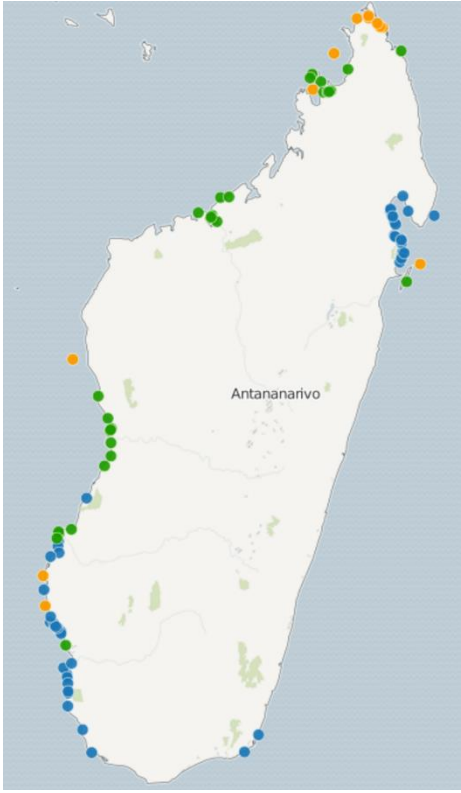
Component 3. A robust enabling environment for effective MPAs The MPA child project focuses on the most immediate and direct measures contributing to sustainability: strengthened MPA policy and planning; strengthened legislation; institutional cooperation; and sustainable funding strategies. These components will feed into more ambitious goals involving multi-sectoral marine spatial planning and integrated ocean governance, large-scale goals that will be critical for sustainable use of the marine environment and its resources but more aligned with larger-scale projects that are either being implemented or proposed.

Component 3 is strongly complementary to the objectives of SWIOFish2 and to a lesser extent SAPPHERE projects and a coordination platform must be established to define the precise contributions and added value of the respective projects beyond those expected by coordination between the two child projects. SAPPHERE provides a general policy and legislation framework for marine management, SWIOFish2 will strengthen the fisheries sector, and the MPA project will protect key biodiversity areas critical to maintaining healthy marine ecosystems and habitats essential for sustainable natural resource management.

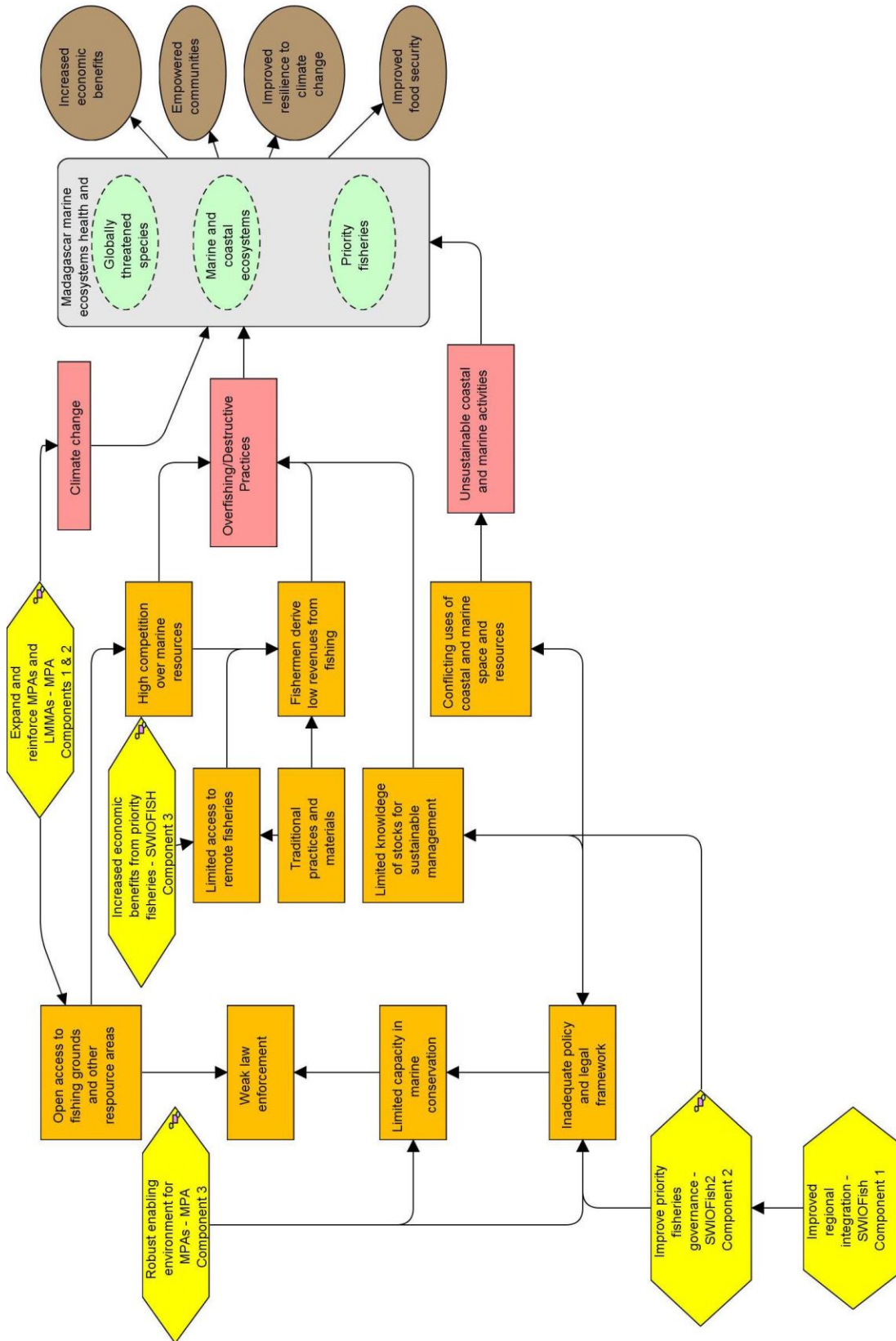
Special attention will be given to cooperation between stakeholders involved in marine resources management, particularly the articulation of the two child projects in this Program.

Maps of LMMAs distribution existing and proposed MPAs, and proposed MPA and SWIOFish2 priority zones.

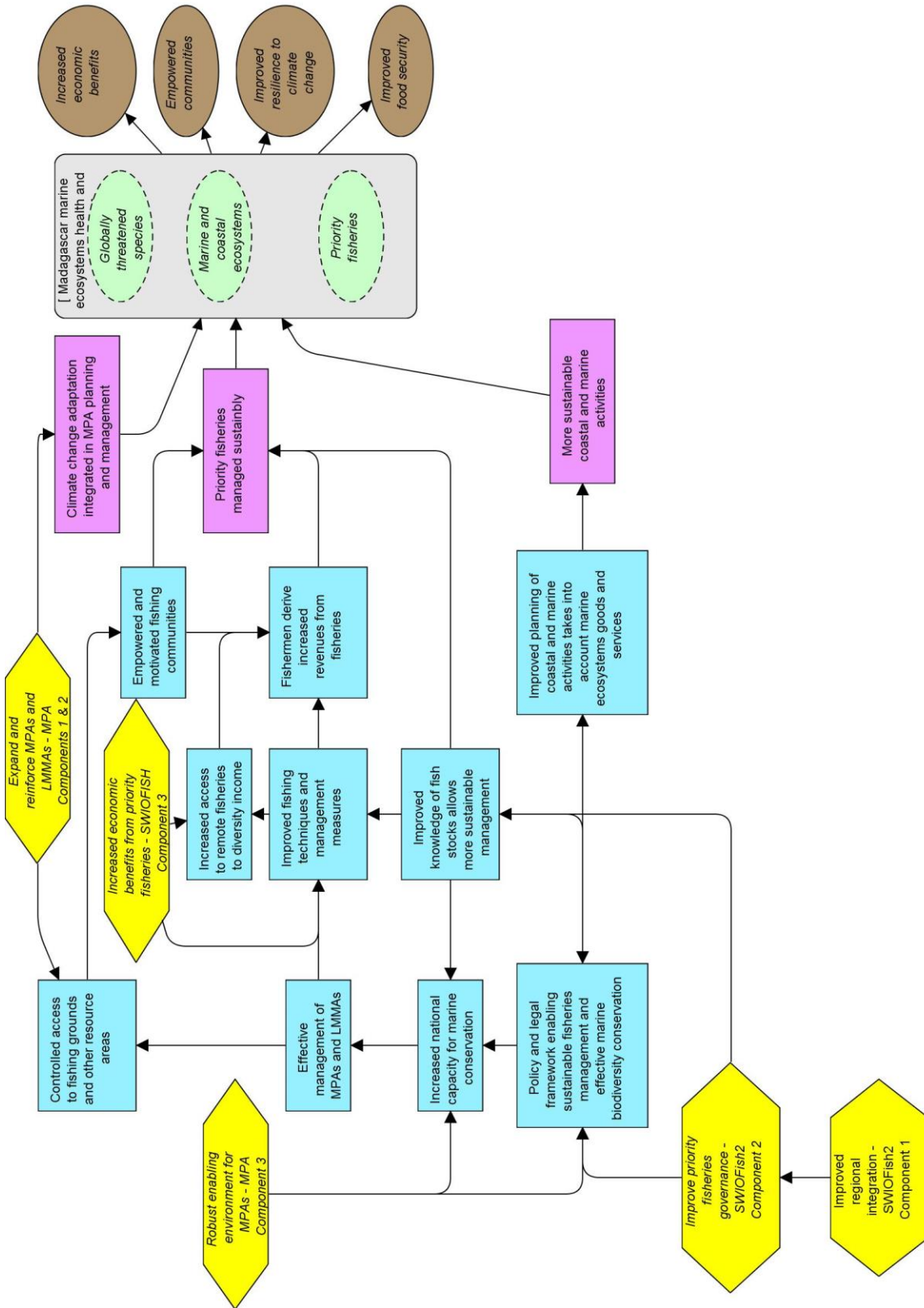
For the LMMAs map: Orange = co-managed MPAs; blue = traditional local agreement LMMAs; green = agreements for management transfer to communities.

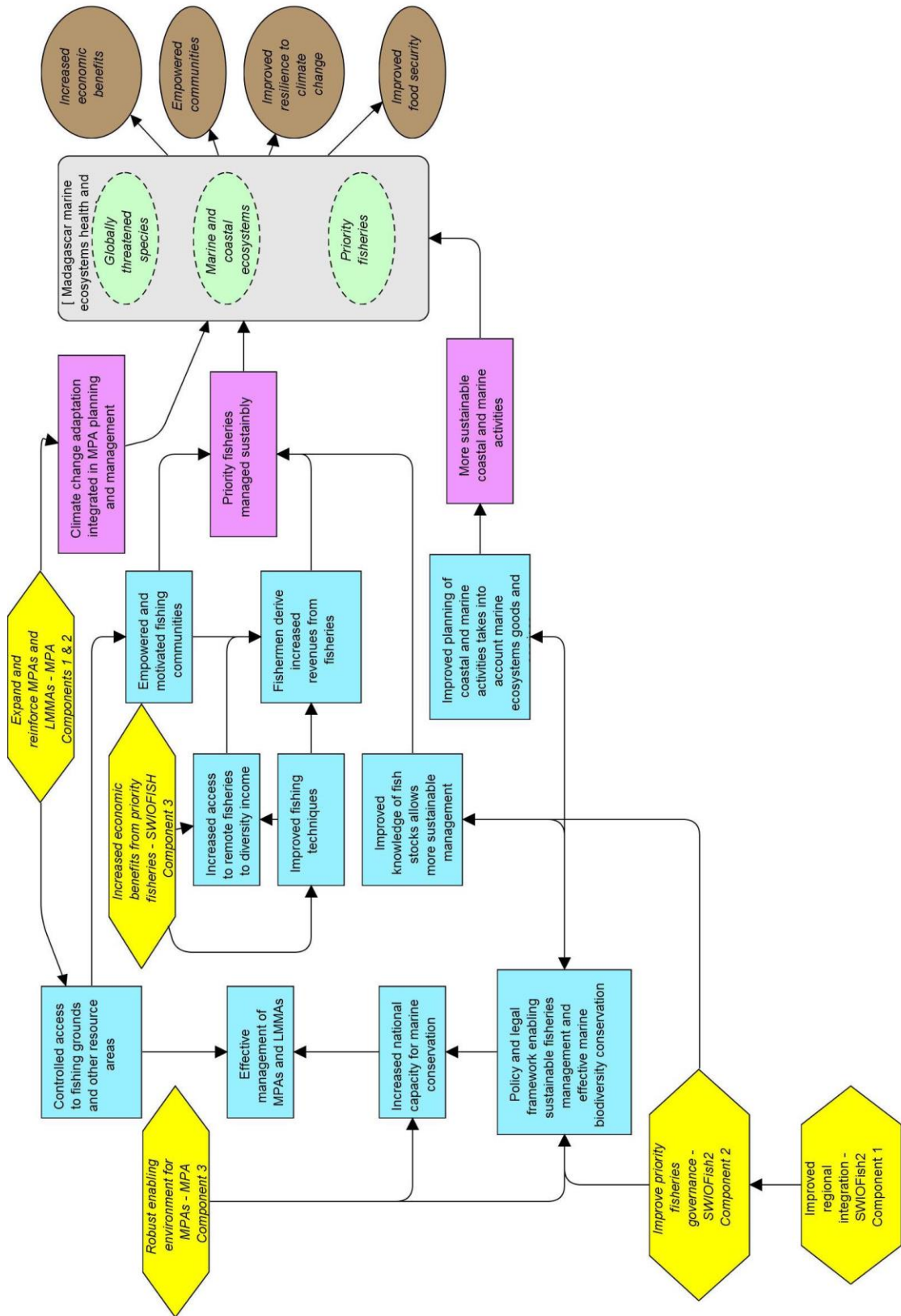


Combined MPA and SWIFish2 conceptual model



Combined MPA and SWIFish2 results chains analysis





A.4. Incremental/additional cost reasoning

Baseline contributions. The NBSAP and NDP strategic objectives for MPAs in sustainable development together with Madagascar's public commitment to achieving Aichi Target 11 will trigger increased interest among implementing bodies including NGOs and community groups. In turn they will stimulate efforts to secure resources for MPA network expansion. Government ministries with other legitimate marine and coastal development agendas will be more aware of the importance of MPAs in the country's development and increasing willing to mainstream biodiversity into their policies, legal frameworks and strategies as is the case at present. The MEDA results and complementary research will facilitate a robust prioritization for expanding the MPA network. MIHARI will continue to draw members and evolve as the network grows but will not fully integrate MPA interests.

MPA expansion will occur but is not clear that all aspects of the NBSAP and NDP objectives as well as Aichi Target 11 will be achieved. While it is possible that coverage will be tripled, resources required to consolidate the entire network will be difficult to guarantee.

Under the present scenario, marine ecosystems will continue to degrade and globally threatened species will decline. Fisheries stocks that are the mainstay for many coastal communities will decline giving rise to marked negative impacts on livelihoods where fishing is the main activity. The role of well-managed fisheries in ensuring food security will not be guaranteed. Commercial fisheries such as crabs and wild shrimp may deteriorate as vital habitats such as mangroves are overexploited or cleared. Sustainable funding strategies will be developed for a small number of MPAs but most sites will remain dependent of donor support.

Incremental costs reasoning. The existence of several complementary regional WIO GEF projects, many now in their second phase, has built capacity, improved marine resource management practices, and created a firm foundation for this project. However, the broad geographical nature of these projects means that their interventions in MPA development are essentially limited to a small number of pilot sites in each country. SWIOFish2 is somewhat different from the other projects in that implementing the National Action Plan (NAP) will focus efforts on improving local fisheries management in many key areas in the country. But that focus will be on improving fisheries management and will not specifically aim to establish biodiversity-focused MPAs that are recognized under national legislation and CBD criteria. Indeed, one incremental benefit of the MPA project will be that it facilitates SWIOFish2 implementation by motivating local stakeholders with enhanced environmental awareness to develop integrated MPA/CMMPA sites where the fisheries project can intervene effectively.

The dedicated MPA project is well positioned to achieve Aichi Target 11. In terms of GEFTF contributions, the MPA project will strongly increase biodiversity protection for one of the world's richest marine environments that lies at the heart of the ASCLME, building upon the results attained through the regional GEF projects.

Co-financing. Secured co-financing from MEEMF, WCS, Blue Ventures and WWF with its donor partners is currently USD 16,962,250. The amount is strongly expected to increase as other donors including USAID and GIZ have finalized their program planning in coming months. FAPBM also indicates a strong interest but precise contribution awaits completion of its new sustainable finance strategy.

A.5. Global environmental benefits (GEFTF)

The principal global environmental benefits of the proposed project are those identified for GEF biodiversity and international waters funding. The first global environmental benefit will be the conservation of globally significant biodiversity through MPAs with additional contributions from associated high biodiversity value LMMAs. As noted earlier the seas around Madagascar are particularly rich in coral diversity and globally rare or threatened species including cetaceans, seabirds, turtles and fish. Madagascar's coastal habitats are essential for several globally threatened species also. The overall global importance of these waters is clearly recognized by both international bodies including WHS, CBD and IUCN and regional entities including IOC and the Nairobi Convention. The MPA child project is not supported by the GEF IW Focal Area but SWIOFish2 has support from this source. Together both child projects will contribute to the IW Focal Area by helping to sustain coastal and marine ecosystems goods and services, globally significant biodiversity, together with carbon sequestration within natural habitats.

Additional global benefits will include conservation and fisheries management at a seascape scale, sustainable use of marine and coastal resources, and improved climate change adaptation.

A.6. Innovation, sustainability and potential for scaling up

One of the innovations is improved prioritization of MPAs and priority fisheries zones in Madagascar's EEZ within a multi-sectoral marine spatial planning framework. New MPA design tools will enable ecosystem or seascape-level MPA design and fisheries zoning. Both MEEMF and MRHP will play a critical role in encouraging other sectoral interests to contribute to priority setting and MPA/fisheries design.

Sustainability will be target from the early design stages for MPAs, LMMAs and other forms of fisheries management. The key to sustainability will be local stakeholder appropriation following on from improved wellbeing and increased revenues from marine resource utilization. These objectives can only be attained if both improved biodiversity conservation and improved fisheries management are closely managed: their interdependence is clear.

STAKEHOLDERS

Stakeholder analyses have been carried at individual MPAs and LMMAs throughout the country by supporting NGOs. It should be noted that all stakeholders consider coordination of the two child projects within a single Program provides wider opportunities than each project working apart. The stakeholders are coastal communities, government ministries and other agencies, the private sector, social development agencies, donors, CSOs, CBOs and NGOs.

GENDER EQUALITY AND WOMEN'S EMPOWERMENT

The MPA project will emphasis women's participation, representation and access to resource and other benefits. Experience at local community levels demonstrates a strong interest in access to feminine health services as a priority. Women are frequently active in lobbying for improved access to schooling for their children.

Existing MPA and LMMA projects show that women's groups participate readily in community activities and are often the most apt to participate in community-wide social and environmental

projects such as restoring mangroves. They are often the most open to new entrepreneurial ventures. While most fishing activities in coastal areas are carried out by men, especially those requiring boats, women are active in other forms such as reef gleaning and aquaculture.

The MPA project will support MPA governance enhancements to empower and promote women’s roles in participative planning and decision-making and strengthen their control over natural resources. It will also provide incentives to women’s groups to lead initiatives to improve value chains such as shrimp and crab markets aimed at increasing community level revenues.

RISKS

Identified risks and their potential mitigation actions are briefly summarized in the following table.

Risks	Probability/Importance	Preventative Measures
Political instability: government takeover or public unrest.	Moderate/Moderate	Deploy proven measures used in earlier periods of political unrest.
Policy and legislation enactment. Regulatory frameworks for PAs and fisheries must be developed together with broad policy and strategies guiding ocean governance.	Low/High	Support MEEMF and MRHP coordinate their policies and legislation, and promote synergies with other sectors.
Weak or absent law enforcement. Local enforcement agencies may lack the means to visit problem areas. Migrant fishers or industrial fishers may be unaware of MPAs or deliberately exploit them because of low risks of detection.	High/ Moderate	The SWIOFish2 child project will strengthen surveillance and control with respect to illegal large-scale fisheries. Locally communities and other stakeholders are empowered to defend their own MPA and LMMA interests and this will be supported by regional MEEMF and MRHP agents.
Weak inter-agency cooperation at government and donor level.	Moderate/ Moderate	The degree of cooperation already occurring between the two ministries is encouraging. The coordination mechanisms described in the following section will help to further strengthen cooperation.
Low or negative private sector involvement. Local seafoods companies may be reluctant to adjust prices or may reject traditional fisheries for quality reasons. The number of seafood traders is growing, increasing pressures on stocks. Some may pressure communities into overfishing or destructive practices.	Low to moderate/ moderate	Several seafood companies are already working with communities, government agencies and environmental NGOs towards sustainable fisheries management. This trend will be strengthened through the project.
Threat displacement. Effective protection of MPAs and associated LMMAs intensify threat levels in other areas that are also important for biodiversity and fisheries.	High/High	The SWIOFish2 project is best placed to deal with threats from overfishing. However, destructive mangrove exploitation is the responsibility of the MEEMF and the Oceans Directorate will therefore catalyse appropriate action by appropriate departments.
Climate change impacts.	High/High	The NGOs involved in MPA project systematically integrate climate change adaptation plans into their respective programs.

COORDINATION

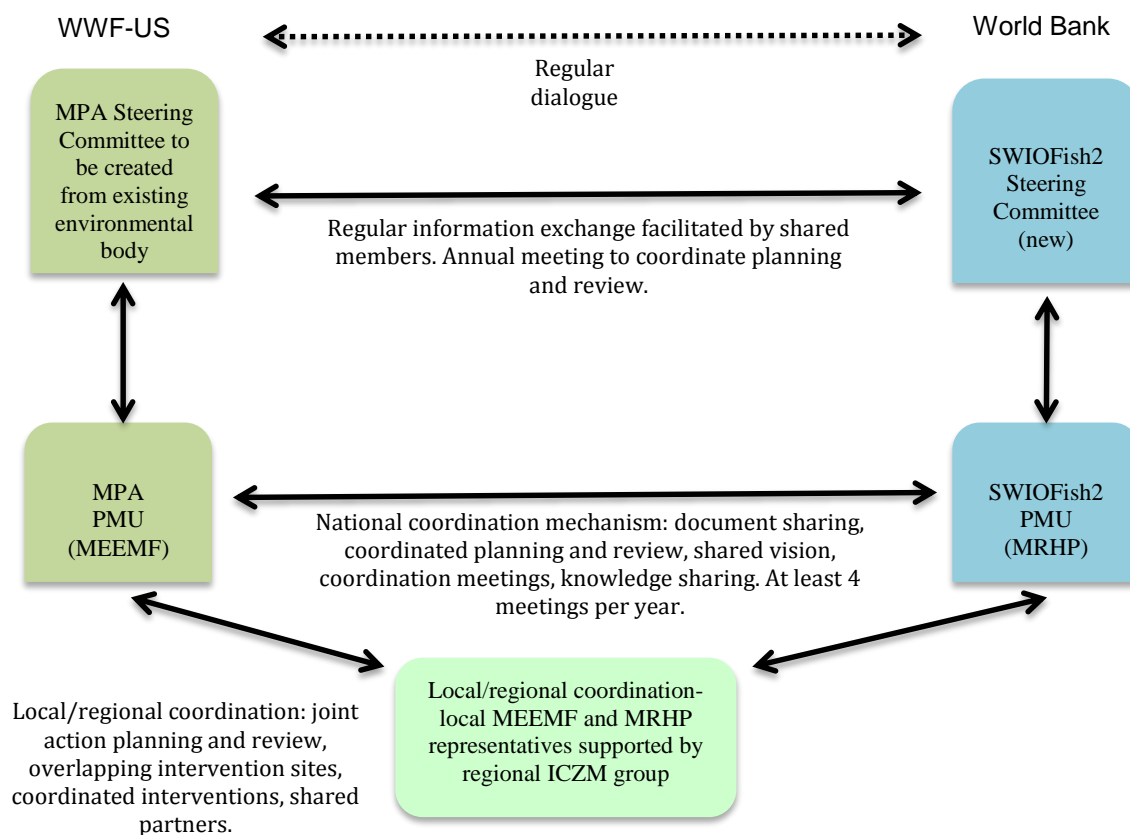
The project will have the structure shown below. Details concerning the mechanisms are provided in the Program PFD but a brief summary is presented here.

Coordination of the two child projects is based on shared principles. These are:

- Management of fisheries and other marine resources will ensure that ecosystem approaches are adopted.
- The managers of both projects will work together to identify potential synergies as well as program gaps that need to be addressed.
- The two child projects will work together to harmonize sectoral policies and legal frameworks.

Each child project has a PMU as its executive body. Each PMU is overseen by a steering committee that has a deliberative role. At the present time each child project has its own steering committee but these may eventually merge. Cross-sectoral exchanges are however facilitated in participants may be in both committees. For example, the General Director of Oceans in MEEMF sits within the SWIOFish2 steering committee and MRHP has a similar status within the MPA committee.

Proposed Program structure and coordination mechanisms between child projects.



At the present time, it is not deemed necessary to create a coordination *unit* but rather to ensure that synergies between the two projects are ensured by coordination *mechanisms*. Details of what is entailed will be more precisely defined during the PRODOC phase. These mechanisms include document sharing, joint planning and review, regular meetings and coordinated communications initiatives. It should be noted that three zones designated by MEEMF and MRHP for their respective child projects overlap geographically.

CONSISTENCY WITH NATIONAL PRIORITIES

National strategies and plans or reports and assessments under relevant conventions. The project is designed to implement NBSAP and NDP strategies to expand and consolidate the national MPA network to meet its sustainable development goals. The MPA project is strongly complementary to Madagascar’s NAPA as it provides a more robust marine environment to increase resilience to climate change by reducing risks associated with unusual weather events while equally strengthening coastal community resilience. Furthermore, it constitutes a major component of the NBSAP that calls for more extensive and effective protection of Madagascar’s marine and coastal biodiversity.

GEF focal area strategies. The project will contribute directly to both global impacts defined in the GEF biodiversity results framework: (a) Biodiversity conserved and habitat maintained in national protected area systems; and (b) Conservation and sustainable use of biodiversity in production landscapes and seascapes. It contributes primarily to Programs 1 and 2 within focal area objectives BD-1 together with Program 9 within BD-4. It also contributes indirectly to Program 3 within BD-2 and Programs 6 and 7 within IW-3. The international waters contributions are linked directly to the regional Northern Mozambique Channel initiative being promoted through the Nairobi Convention.

Regarding CBD obligations, the proposed project contributes primarily to Aichi Strategic Goal C, to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity, specifically Target 11. It also contributes to Aichi Targets 2, 4, 6, 10, 12, 14 and 15.

KNOWLEDGE MANAGEMENT

Knowledge management is an intricate part of adaptive management as the project progresses and contributes to capacity strengthening at all levels. A reliable and accessible knowledge base is also essential to guide MPA and LMMA development now and in the futures, and it will be a strong asset for the emerging fields of marine spatial planning and ocean governance in Madagascar.

Knowledge sharing will be more clearly defined at the PRODOC stage but some key points are as follows.

Each implementing partner will regularly update its website with new project information. The MIHARI network and website will be important knowledge sharing vehicles. At a central level, MPA child project results will provided to Madagascar’s biodiversity clearing house, REBIOMA. Through the SWIOFish2 child project, knowledge will be shared through the ASCLME project family.

APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT²³ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):


(PLEASE ATTACH THE [OPERATIONAL FOCAL POINT ENDORSEMENT LETTER](#)(S) WITH THIS TEMPLATE. FOR SGP, USE THIS [SGP OFP ENDORSEMENT LETTER](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
RALALAHARISOA Edmée	Director General of the Environment	MINISTRY OF ENVIRONMENT,	

²³ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies²⁴ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Hervé Lefeuvre		03/04/2016	Hervé Lefeuvre	+12024598533	Herve.lefeuvre@wwfus.org

²⁴ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

List of acronyms

ASCLME	Agulhas and Somali Currents Large Marine Ecosystem
CBD	Convention on Biological Diversity
CBO	Community-based Organization
CMMPA	Community-Managed Marine Protected Area
CSO	Civil Society Organization
EBSA	Ecologically or Biologically Sensitive Areas
EEZ	Exclusive Economic Zone
FAPBM	Madagascar Protected Areas and Biodiversity Foundation
FID	Development Intervention Fund
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
ICZM	Integrated Coastal Zone Management
IDA	International Development Association
IOTC	Indian Ocean Tuna Commission
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
KfW	Kreditanstalt für Wiederaufbau
LME	Large Marine Ecosystem
LMMA	Locally Managed Marine Area
M&E	Monitoring and Evaluation
MARXAN	Conservation priority setting software
MEDA	Marine Ecosystem Diagnostic Analysis
MEEMF	Ministry of Environment, Ecology, Oceans and Forests
MIHARI	National association of LMMAs and locally managed MPAs
MRHP	Ministry of Marine Resources and Fisheries
MSP	Marine Spatial Planning
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
NDP	National Development Plan
NGO	Non-governmental Organization
REBIOMA	Madagascar Biodiversity Network
PA	Protected Area
PMU	Project Management Unit
SAPM	Madagascar Protected Areas System
SAPPHIRE	Western Indian Ocean Strategic Action Program Policy Harmonization and Institutional Reform Project (part of ASCLME project family)
SCCF	Special Climate Change Fund
SWIO	Southwestern Indian Ocean
SWIOFish2	World Bank supported child project on small-scale fisheries implemented by MRHP
SWIOFP	Southwest Indian Ocean Fisheries Project
SWIOFPC	South West Indian Ocean Fisheries Commission
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
VME	Vulnerable Marine Ecosystem
WCS	Wildlife Conservation Society
WIOMSA	Western Indian Ocean Marine Science Association
WIOSAP	Western Indian Ocean Strategic Action Program
WWF	World Wildlife Fund
ZONATION	Conservation priority setting software