PROJECT IDENTIFICATION FORM (PIF) [1]

PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND:GEF TRUST FUND

PART I: PROJECT IDENTIFICATION

Project Title:	Strengthening the Marine Protected Area System to Conserve Marine Key Biodiversity Areas		
Country(ies):	Philippines	GEF Project ID:[2]	4810
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	4389
Other Executing Partner(s):	Dept. of Environment and Natural Resources- Protected Areas and Wildlife Bureau, Dept. of Agriculture - Bureau of Fisheries, National Fisheries Research and Dev't. Institute, Haribon Foundation, Kabang Kalikasan ng Pilipinas Foundation (WWF Philippines), Conservation International Philippines, Univ. of the Philippines Marine Sciences Institute, Fishbase Research and Information Group, RARE Philippines	Submission Date: Resubmission Date:	February 2, 2012 February 27, 2012 March 12, 2012
GEF Focal Area (s):	Biodiversity	Project Duration (Months)	60
Name of parent program (if applicable): ➢ For SFM/REDD+ ☐		Agency Fee ($):	800,000

A. FOCAL AREA STRATEGY FRAMEWORK[3]:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount ($)	Indicative Co-financing ($)
(select) BD-1	1.1:Improved management effectiveness of existing and new protected areas	Output 1: New Protected Areas (10) and coverage (441,268.2ha) of unprotected ecosystems	GEFTF	6,202,947	30,289,217
(select) BD-1	1.2: Increased revenue for protected area systems to meet total expenditures required for management	Output 3: Sustainable financing plans (at least 20)	GEFTF	1,397,053	4,113,500
		Sub-Total		7,600,000	34,402,717
		Project Management Cost[4]	GEFTF	400,000	3,225,000
		Total Project Cost		8,000,000	37,627,717

B. PROJECT FRAMEWORK

Project Objective: Strengthening the Conservation, Protection and Management of Key Marine Biodiversity Areas in the Philippines

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount ($)	Indicative Co-financing ($)
Effective Management of Marine Protected Areas (MPAs) and MPA Networks (MPANs)	TA	1. Conservation effectiveness of existing and new Marine Protected Areas (MPAs) and MPA Networks (MPANs) is enhanced through improvements in spatial coverage and representativeness (particularly coverage of under-represented Key Biodiversity Areas), strengthening of the national system for MPA identification, designation and management under the NIPAS legislative	At least 3 new MPA Networks (MPANs) established in designated priority sites, such as the Verde Island Passage, Davao Gulf and Southern Palawan Management improved in at least 95 existing MPAs through the development and effective implementation of local government or community-based MPA management plans, with management effectiveness scores	GEFTF	5,205,736	28,775,717

[1] It is very important to consult the PIF preparation guidelines when completing this template.
[2] Project ID number will be assigned by GEFSEC.
[3] Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.
[4] GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

Project Objective: Strengthening the Conservation, Protection and Management of Key Marine Biodiversity Areas in the Philippines						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Co-financing ($)**
		framework, and quantifiable improvements in management of at least 10% of identified Marine KBAs nationwide, with concomitant increases in local stakeholder participation and support. Indicator/s: * Marine PAs under the overall national NIPAS PA framework have specific management, planning and technical oversight capacities, together with intersectoral mechanisms for coordination with other marine sector stakeholders such as BFAR. * MPAs established to strengthen conservation of at least 13 marine key biodiversity areas covering 441,268.2 hectares. * MPA/MPAN management plans formulated and implemented in at least four regions, encompassing at least 10% of the total Marine KBAs in the Philippines. * Technical and management capacity scorecards for target MPAs shows an average increase in capacity scores of 20% by mid-project and 35% by end-project, against baseline scores determined during the PPG phase.	rising at least 25% on average over baselines at PPG/ project inception[5]. MPA and MPAN management structures institutionalized in at least four regions; Southern Palawan, Verde Island Passage, Lanuza Bay, Davao Gulf, with efficiency improvements reducing management costs by at least 10% in each newly-established MPAN. Capacity development scorecards incorporated into management planning and monitoring processes for MPAs/ MPANs at all four target sites, with capacity scores increasing at least 20% on average for the top 75% of MPAs across the lifetime of the project. At least 20% of LGUs or local partners in each target site provide funding or other tangible support for capacity building on marine conservation, MPA management, ecological monitoring or related activities at site level.			
MPA Financing	TA	2. Financial resources available for the management of MPAs and MPANs are sufficient to meet all critical management needs (estimated at US$66/ha/yr for MPAs >150ha)[6], and are growing in line with the expansion of the MPA system. Sources of revenue for MPA management are being progressively diversified, with the percentage of revenue being derived from central	Benchmark management costs established for MPAs of varying size (<5 ha, < 50ha, <250ha, >250 ha) through a national cost-effectiveness assessment, and potential cost savings of at least 15% on average per region identified through consolidation of management in MPANs. At least two MPANs (Verde Island Passage and Davao Gulf) have financial strategies and	GEFTF	1,482,053	2,600,000

[5] As measured using the MPA MEAT tool: http://www.coraltriangleinitiative.org/library/toolkit-marine-protected-area-management-effectiveness-assessment-tool-february-2011. The MPA MEAT tool has been adopted as the standard MPA management effectiveness measurement system under the Coral Triangle Initiative. The GEF METT will also be completed as part of the standard BD-1 Tracking Tool.

Project Objective: Strengthening the Conservation, Protection and Management of Key Marine Biodiversity Areas in the Philippines						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Co-financing ($)**
		Government fiscal sources declining to less than 50% by end-project. Indicator/s: * Resources for conservation and management of MPAs and MPANs in six site regions increases by at least 50% by end-project, against baselines to be established for each site during the PPG process. * Percentage of MPA funding coming from sources other than government budgets increases by at least 20% against 2011 baseline * Participatory multi-stakeholder systems in place to oversee utilization of MPA funds and revenues in at least 30% of participating sites. * At least 30% of MPAs in six site regions have sustainable financing plans being implemented as part of their management plans.	business plans under implementation targeting increases in revenue generation from the tourism and fisheries sectors of at least 10%. (Field level activity) At least five target sites in each of four regions have revenue generation schemes in operation, including market-based visitor and service fees for tourism operators, pilot ecological service payments from the fisheries sector and local taxes for conservation and management of key tourism draws. (Field level activity) MPA financing plans developed and piloted in at least 30% of MPAs in each of six site regions, incorporating governance mechanisms to ensure participatory management of revenues and resources involving local communities, local government and national government agencies as appropriate. (Field level activity)			
Policy Harmonization and implementation	TA	3. A comprehensive policy framework in place and effectively implemented for the conservation, protection and management of the country's marine ecosystems and fishery resources, that harmonizes mandates, plans and activities amongst all key MPA stakeholders including PAWB, BFAR and relevant Local Government Units. Indicators: * At least 50% of the policy recommendations identified through the policy review are rectified through legislative and regulatory action at the national or local levels. * Scientifically-based ecological conservation criteria (species abundance and distribution,	A set of policy recommendations under implementation to strengthening laws, policies and regulations governing major facets of marine resource management (including fisheries, tourism, coastal resource management, shipping, etc.), to reduce external threats and pressures on MPAs. Effective policy and regulatory frameworks in place for the designation and management of MPA Networks (MPANs) encompassing subsets of the national MPA system according to ecological connectivity and/or management effectiveness criteria. Existing mechanisms and resources for fisheries and marine	GEFTF	912,211	3,027,000

[6] Derived from Butardo-Toribio, Maria-Zita, *et.al.*(2009); *Cost-benefit study of Marine Protected Areas*; Philippine Environmental Governance Project 2 (EcoGov2), USAID and subject to validation during the PPG phase.

Project Objective: Strengthening the Conservation, Protection and Management of Key Marine Biodiversity Areas in the Philippines						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Co-financing ($)**
		threats and pressures, larval transmission and dispersal, climate change stresses, etc) are clearly and systematically incorporated into the development and implementation of policies for MPAs/MPANs management	PA policy implementation at BFAR and DENR assessed, improved and institutionalized. Tools, guidance and best-practice examples available to support LGUs in implementing effective regulations and policies for MPA establishment, management and financing within their local government regulatory frameworks.			
Sub-Total					7,600,000	34,402,717
Project Management Cost[7]				GEFTF	400,000	3,225,000
Total Project Costs					8,000,000	37,627,717

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, ($)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount ($)
Local Government	Local Government Units in site regions	Grant	15,723,331
GEF Agency	UNDP	Grant	1,000,000
CSO	Conservation International	Grant	3,291,580
CSO	Haribon Foundation	Grant	1,967,744
CSO	WWF	Grant	1,895,500
Others	Univ. Phil. Marine Sciences Inst.	In-kind	2,699,562
CSO	FIN	Grant	1,000,000
National Government	DENR	Grant	3,300,000
National Government	BFAR	Grant	3,750,000
CSO	RARE Philippines	Grant	3,000,000
Total Cofinancing			37,627,717

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
UNDP	GEFTF	BD	Philippines	8,000,000	800,000	8,800,000
Total Grant Resources				8,000,000	800,000	8,800,000

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.The GEF Focal Area Strategies:

The project addresses the objectives of the Biodiversity (BD) focal area, and will support Strategic Objective BD-1: Improving the sustainability of protected area systems. Within BD-1 the project focuses on both primary Outcomes, namely Outcome 1.1 on improving management effectiveness of existing and new PAs and Outcome 1.2 on increasing revenue for PA systems to meet total expenditures required for management. The project will contribute to Outcome 1.1 by bringing at least 441,268.2ha of important marine ecosystems under protection in new PAs, and by strengthening management of marine PA (MPA) networks in six important marine regions. It will contribute to Outcome 1.2 by increasing and diversifying the sources of financial support for MPA management. The overall level of funding available for MPA management will increase by at least 50% in target sites, generated from a diverse range of sources to improve

[7] Same as footnote #3.

sustainability. By the end of the project approximately 50% of financial resources supporting the targeted MPAs are expected to derive from sources other than national government fiscal transfers.

A.2. National Strategies and Plans or Reports and Assessments Under Relevant Conventions:

The project was identified as the first priority under the biodiversity component of the GEF National Portfolio Formulation Exercise (GEF NPFE), as documented in the Philippines NPFD submitted to the GEF in August 2011. The GEF NPFE was a highly participatory exercise which included extensive consultations with academia, civil society and conservation NGOs as well as across Government. The draft prioritization document was presented and discussed at a national workshop prior to submission, and also benefitted from inputs by GEF Secretariat representatives at that meeting.
The project is also fully consistent with the country's priorities and policies on biodiversity conservation. It contributes to the 2011-2016 Philippines Development Plan by enhancing coastal and marine resource management under the national integrated coastal management (ICM) program. The policy-level actions being proposed will support Presidential Executive Order EO 533 (Adopting Integrated Coastal Management as a National Strategy to Ensure the Sustainable Development of the Country's Coastal and Marine Environment and Resources and Establishing Supporting Mechanisms for Its Implementation).
The project also contributes to the Philippines' National Plan of Action for the Coral Triangle Initiative (under Executive Order 797), specifically in achieving the goals and targets on Marine Protected Areas, Climate Change Adaptation and Ecosystem Approach to Fisheries Management. It will designate priority CTI seascapes for sustainable management and help to integrate coastal and marine use plans into the comprehensive land use plans of Local Government Units (LGUs).
The project is also consistent with national laws such as the Fisheries Code of 1998 (Republic Act 855), the Local Government Code of the Philippines, the (Republic Act 7160) and the Wildlife Resources Conservation and Protection Act (Republic Act 9147) which will provide the framework for fisheries management, local governance and the conservation of wildlife resources, respectively. It also supports Republic Act 9729 (the Philippine Climate Change Act of 2009), by strengthening marine PA systems' capacity to respond to climate variability and climate-induced risk.
The project is also part of the Philippines' efforts to support the CBD Aichi Biodiversity Targets and the Programme of Work on Protected Areas. It will support targets 6, 10, 11 and 19 of the Aichi Targets[8], and Goal 1.1, 1.4, 2.2 and 3.1 of the PoWPA[9].

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

The Philippines is located within the Coral Triangle, which is a global centre of marine diversity, with diverse coral reefs, sea grass beds, mangrove and beach forests, fisheries, invertebrates, seaweeds, and marine mammals. The Philippine waters have been identified as the "center of centers" of marine shorefish biodiversity[10]. The country contains six distinct marine biogeographic regions; the South China Sea, the Sulu Sea, the Visayan Seas, the Celebes Sea, the North Philippine Sea and the South Philippine Sea.[11] Each of these biogeographic regions contains distinct assemblages of species and ecosystems, with 65 distinct Marine Key Biodiversity Areas identified as biodiversity hotspots for conservation purposes. These include ecosystems as diverse as the Apo Reef (the second-largest reef in the world), the Verde Island Passage which contains the greatest assemblage of endemic marine species in the region and coastal mangrove forests containing 45 out of the 50+ known species of mangrove flora in the world.
Variation in habitat diversity and ecosystem composition are driven by a range of factors including the influence of pelagic currents (such as the Kuroshio Current in the north and the Mindanao eddy in the south), and latitudinal variation in organic diversity (stretching from 4° 40' N in the south to 21° 10' N in the north). This archipelago of 7,107 islands is also home to a broad range of coastal and near-shore habitats. The country has nine marine biodiversity corridors which were identified based on their position as transition areas between the marine biogeographic regions and their strategic importance as gateways for the exchange of propagules and energy[12]. The Philippines has 3,000+ of the 16,000+ marine

[8] Target 6 on sustainable management and harvesting of fish, invertebrate stocks and aquatic plants; Target 10 on minimizing anthropogenic pressures on coral reefs; Target 11 on coverage of marine PAs and Target 19 on improving the knowledge and science base on biodiversity. http://www.cbd.int/sp/targets/

[9] Goal 1.1 on establishing and strengthening national PA systems; Goal 1.4 on substantially improving site-based PA planning and management; Goal 2.2 on enhancing and securing involvement of indigenous and local communities, and Goal 3.1 on providing an enabling policy, institutional and socio-economic environment for PAs. http://www.cbd.int/protected/pow/learnmore/intro/

[10] Carpenter, Kent E. and Victor G. Springer (2005); "The centre of the centre of marine shore fish biodiversity: the Philippine Islands" in Environmental Biology of Fishes, Vol.72, No.6

[11] Marine Environment & Resources Foundation (MERF) et. al. (2009); "Marine Protected Areas (MPA) Gap Analysis for Philippines and Malaysia"; ASEAN Centre for Biodiversity, p.14

[12] Philippines National Biodiversity Strategy and Action Plan.

fish species globally (FishBase[13]), 25 species of cetaceans, one sirenian, five species of marine turtle and hundreds of species of chondrichthyes[14]. This diversity of species has given rise to a large multi-species fishery sector.

Threats: However, the Philippines is also an area of high human population growth accompanied by even higher fishing pressure. It is estimated that 60% of the Filipino population live within the 832 municipalities lying along the archipelago's 36,289 kilometers of coastline. The Philippines is the 12th-largest fish-producing nation in the world, accounting for approximately 2.1% of total global production.[15] Coastal fishing activities in the 26.6 million ha of coastal waters account for an estimated 40-60% of total fish catch, with the fisheries sector accounting for 4.3% of GDP. The fishing industry provides employment to about 1 million people (3.3% of the country's labor force), of which 68% are in the municipal (local) fishing sector, 26% in aquaculture, and the remaining 6% in commercial fishing[16]
Other pressures on coastal ecosystems include loss and conversion of coastal ecosystems (particularly mangroves), degradation of critical coral systems due to tourism, pollution runoff and solid waste, and coral bleaching and destruction due to climate-induced extreme weather events (heat waves, cyclones and typhoons). As a result of these pressures, the country's coral reefs, mangrove forests, sea grass, algal beds and associated fisheries are declining at an alarming rate. More than 70% of the country's mangrove areas have been converted into aquaculture, logged or reclaimed for other uses (PEM, WB 2005). Of the 27,000 sq km. of coral reef, over 70 percent are in poor or fair quality and only five percent are in excellent condition.[17] The country's coral reefs are considered to be one of the most highly threatened reef areas in the world.[18] Likewise, about half of the seagrass beds have been lost or degraded since 1950 and the rate is increasing due to land reclamation and pollution (PEM, WB 2005). Rapid population growth especially in coastal communities has put strong pressure on the country's coastal fisheries. The average annual fish catch exceeds 2 million metric tons, with nearly half made by municipal and subsistence fishers who operate small boats in shallow coastal communities.[19]
Threats affecting individual project sites are detailed as part of the project site descriptions under Section B2 (1) below.

Baseline Project: The response to these pressures, which underpins the baseline project for this initiative, consists of a range of interventions at different scales supported by a broad coalition of government, academic and non-Government actors. Taken together, these interventions leverage well over US$100 million in resources to support the conservation goals addressed by this project. At the national level, the Government response is led by the Bureau of Fisheries and Aquatic Resources (BFAR) under the Department of Agriculture, and the Protected Areas and Wildlife Bureau (PAWB) under the Department of Environment and Natural Resources. BFAR are responsible for the development, improvement, management and conservation of the Philippines' fisheries and aquatic resources. The Bureau undertakes a range of monitoring, enforcement and surveillance activities in coastal waters, as well as providing technical assistance and capacity-building support to local (municipal) fisherfolk and local government administrations. Support to municial fisherfolk includes fisheries-based Integrated Livelihoods programmes, specific programmes to increase the participation of women in fisheries and the "Lakbay-Aral" exchange visit programme for exemplary municipal fisherfolk to share experiences. The Bureau also provides technical assistance to local government units in the development of municipal and community-based fisheries industries, particularly in areas such as post-harvest processing and value-addition. These activities serve to increase the revenue generated per tonne of raw fish catch, thereby reducing harvesting pressures on coastal fisheries and associated ecosystems. BFAR has an annual budget of approximately US$10.7 million, of which approximately US$7.5 million per year is devoted to on-the-ground programs and activities.[20]

The DENR Protected Areas and Wildlife Bureau (PAWB) are responsible for the national protected area system, which is managed under the National Integrated Protected Area System (NIPAS) regulatory framework. NIPAS is designed to cover both terrestrial and marine protected areas, however the existing system is dominated (both in total area as well as number of PAs) by terrestrial resources.. At present there are only 33 MPAs included under NIPAS, covering a total of 1,706,141 hectares in eight provinces. These are mainly Category I or Category II PAs by the IUCN classification. PAWB are now focusing their efforts on strengthening the marine PA system under NIPAS, both by increasing the area of seascape brought under formal protection under NIPAS and by supporting the expansion of community- and local-government supported MPAs within local jurisdictions. There are more than 1,000 locally-promulgated and locally-

[13] Froese, R. and D. Pauly. Editors. 2011.World Wide Web: www.fishbase.org
[14] MERI et. al. (2009), p. 18.
[15] www.bfar.da.gov.ph/pages/Programs/gma-fisheriessector.html
[16] Habito,C., as cited in World Bank PEM 2004
[17] Gomez et. al., 1994.
[18] Burke et al., 2002
[19] Habito,C., as cited in World Bank PEM 2004
[20] http://www.dbm.gov.ph/GAA09/DA/C.pdf

managed MPAs in the Philippines, though the exact number is not yet known. These sites are generally quite small, being usually less than 50ha in size and sometimes being as small as one hectare. These locally-managed MPAs are designated and managed in a form roughly equivalent to IUCN Category IV. PAWB is also establishing partnerships with a range of international and national conservation organizations to pilot community-based coastal and marine conservation initiatives in key marine biodiversity areas, working in concert with local government units and other local stakeholders. PAWB has an annual programme budget of approxmiately US10.87 million, with an additional US$900,000 per year allocated to conservation and management of major marine resources such as Tubbataha and Apo Reefs.[21]

At the local level, marine conservation and sustainable management of coastal resources is mainly supported by Local Government Units(LGU), which are the main providers of government services and development programmes in the Philippines. LGUs support a range of livelihood, poverty alleviation and natural resource management activities, including promoting municipal fisheries activities and small-scale fisheries-based enterprises, providing livelihood assistance to poor and marginalized households and development of small scale local infrastructure. LGUs are also responsibie for local natural resource management, including the issuance of small scale mining and development permits, etc. As part of their natural resource management mandate, LGUs have increasingly supported the establishment of local-level marine reserves and networks of no-take zones. A recent estimate indicated that more than half of identified MPAs in the Philippines have been established by LGUs.[22] These local reserves do not form part of the formal national PA system, and receive little technical or financial support. Many of these reserves are also very small, usually less than 50ha in size and sometimes as small as one hectare. Site selection is generally on the basis of local needs and priorities (e.g. no-take zones for local fisheries management, mangrove protection, etc.) rather than scientific assessment and ecological prioritization. As a result many of these reserves, in isolation, have limited ecological or financial viability. However the existence of these reserves and the local support and commitment they carry provides a strong basis on which to build wider systems and networks of marine PAs which can fulfil ecological conservation goals.

The financial resources LGUs devote to coastal conservation and management and fisheries development is difficult to estimate on a national basis, however the total resources involved would far exceed the funding available to national agencies such as BFAR and PAWB. Forty percent of national fiscal revenues (US$15.8 billion in 2005) are disbursed by LGUs, and 54% of these LGUs (817 of the 1,496 member municipalities of the League of Municipalities of the Philippines) are coastal. Therefore the resources available to these local municipalities would total in the hundreds of millions of dollars per year.

A significant portion of the technical support LGUs receive in their conservation efforts comes from the broad and active coalition of conservation NGOs working on coastal and marine conservation in the Philippines. Organizations such as the Haribon Foundation, WWF Philippines, Conservation International Philippines, RARE Philippines and the Fisheries Information Network (FIN) have extensive and long-running programmes focused on various aspects of coastal and marine conservation. Each organization focuses on a number of local sites in the country according to its mandate and local partnerships. They support a range of activities including the establishment of local marine reserves and local MPA networks, sustainable fisheries and sustainable fisheries supply chains, local capacity building, advocacy and public awareness, and training and capacity-building partnerships with local governments, academic research units and government agencies. Some of the main activities being udertaken by NGOs which are included in the baseline project are:

Conservation International Philippines: Over the past five years, CI has fostered the creation, expansion and improved management of the Verde Island Passage Marine Biodiversity Conservation Corridor MPA Network (MPANs), encompassing 16,627 hectares (ha) of critical habitat, 2,411 ha of no-take zones, 14,015 ha of Fishery Management Areas (strict hook and line areas and fishery management areas) and 336 ha of Mangrove Forest Conservation Areas. This work is supported by the three main provincial governments in the VIP; Batangas, Occidental Mindoro and Oriental Mindoro.

WWF Philippines: The WWF Philippines has been working on the conservation of the Davao Gulf region for many years, in parthership with the Davao Gulf Management Council composed of 23 Local Government Units. Most recently, WWF Philippines and the DGMC collaborated to assess the gulf's sensitivity to oil spills and the leaching potential of soils, as part of activities to reduce the threats of the land and water-based pollution.

[21] http://www.dbm.gov.ph/GAA09/denr/denr.pdf
[22] http://www.reefbase.org/key_topics/pdf/Philippines%20mpa.pdf

Haribon: Haribon is collaborating with the School of Marine Science & Technology of Newcastle University, UK and Ateneo de Manila University on an initiative called "Responding to Fish Extirpations in the Global Marine Biodiversity Epicentre", to be funded by UK Darwin Initiative. The objectives of this proposed project which targets Verde Island Passage, Palawan, Polillo, Danajon Bank and Lanuza Bay are:

a. determine which fish species are threatened through capturing fishers' knowledge and well-replicated underwater survey
b. ascertain temporal abundance trends of fish species and groups and see how these trends vary among the five areas
c. strengthen capacity in resource management in Lanuza Bay through training and working among LGUs and POs
d. reconcile conservation needs with sustainable livelihoods in Lanuza Bay
e. make policy recommendations at local, national and international levels through lessons learned from sites

Data generated from this project will provide guidance to the GEF project in the identification of new and/or expansion of existing MPAs in Lanuza Bay, their management, policy making and law enforcement. Objectives c and d of the proposal submitted to Darwin Initiative will complement the GEF project's activities in Lanuza Bay. Resources will be maximized to achieve optimum results and reach more stakeholders.

RARE Philippines: RARE are working to strengthen community-based conservation and sustainable management of coastal and marine resources through the use of social marketing and mobilization approaches in a number of municipalities across the country. These approaches target local leaders and opinion-makers to encourage greater engagement in the sustainable management of coastal resources, and to strengthen activism and advocacy against illegal or unsustainable resource use.

The Fisheries Information Network (FIN): FIN focus on the collation, analysis and dissemination of scientific and technical information on coastal and marine resources, particularly in terms of regional and transboundary data sharing and networking. FIN have been active in the Philippines particularly in the context of the Sulu-Sulawesi Ecoregion, and in the generation, analysis and dissemination of information on transboundary marine resource flows (migratory species, larval flows and dispersal, etc.). The networks, information and analysis being generated by FIN will help to strengthen the management of marine resources under the project, including through science-based identification and prioritization of potential new MPA sites and MPA networks.

These conservation organizations have come together to support the proposed project, and their network of activities, partnerships and local capacities on the ground are a core component of the baseline project. The financial resources these conservation organizations have committed to support the proposed project exceeds US$11 million, excluding indirect support and additional funding which may be leveraged during project implementation.

Technical and scientific support is also being leveraged from major research and academic partners, particularly the Marine Sciences Institute of the University of the Philippines and its local partners. This support includes scientific capacity for baseline surveys, stock and carrying capacity assessments, technical training on marine monitoring and conservation, national databases and inventories of marine data, and field survey and monitoring facilities such as research vessels and field stations. The resources being made available to the project as part of this baseline investment totals approximately US$2.7 million over the project duration.

Long-term solution and barriers to achieving it: Although the baseline project contains a broad range of conservation activities with extensive financial resources, it is insufficient to achieve the long-term solution of bringing a viable, representative and resilient sample of the Philippines' marine and coastal biodiversity under sustainable forms of protection from present and future threats. The various conservation activities and investments being undertaken under the baseline project are insufficient to achieve the long-term solution due to three major barriers:

1. *Inadequate bio-geographic representation and spatial coverage* The existing marine PA system consists of a small number of relatively large 'flagship' sites (notably the Apo Reef Marine Reserve and Tubbataha Reef National Marine Park), and a large number of small, locally-promulgated municipal PAs, with limited representation of sites in the 100-1000ha range. An initial MPA gap analysis (MERF et. al. 2009) indicated that only 53 of the 65 identified Marine Key Biodiversity Areas are represented in the existing MPA network, and in most cases these MPAs only cover a small proportion of the identfied MKBAs[23]. A parallel analysis which attempted to quantify the extent to

[23] MERF et. al (2009), p. 29

which existing reserves meet conservation objectives[24] determined that only 0.5% of municipal waters and 2.7-3.4% of coral reef area are protected in no-take MPAs, well below national[25] or global targets.

2. *Insufficient and unpredictable funding levels for the long-term sustainability of MPAs and an MPA system*. Funding for marine PAs is erratic, often ad-hoc and inefficiently allocated. Since the bulk of existing funding is provided through individual LGUs rather than through a national system, resources are fragmented into small allocations for the management of isolated MPA sites, with a high degree of replication and redundancy amongst neighbouring sites and very limited funding for higher-level technical, scientific or managerial capacities. Funding is also subject to political risk due to changes in LGU administrations, with shifting priorities and political preference making it difficult to plan against predictable financial envelopes. The overall amount of funding potentially available is large, however the amount actually being allocated to marine PAs and coastal conservation is currently well below optimal requirements. An initial sustainable financing scoping exercise which examined five archetypal MPAs of varying sizes identified financing gaps for 2012 ranging from 38.66% for Apo Reef (a large flagship national MPA) to 66.3% for the Palm Reef Marine Reserve, a small LGU-managed MPA in the Visayas[26].
3. *Weak institutional framework for the identification, establishment and management of a national marine PA system*. Over the last few years, the main focus of national-level conservation and protected area expansion has been on terrestrial ecosystems, as a response to pressing threats such as large-scale deforestation, mining and agricultural conversion. With the limited financial and technical resources available being mostly focused on terrestrial PAs, the development of the marine PA system has lagged. Support has been provided to a small number of flagship national marine reserves such as Tubbataha and Apo Reefs, however other important marine systems (e.g. the Verde Island Passage, Davao Gulf, etc.) have not received systematic national support. Technical and institutional capacities within the NIPAS system have focused mostly on terrestrial management issues, resulting in relatively weaker capacities for managing marine PAs.
4. *Incoherent policy frameworks, mandates and strategies amongst central and local actors inhibit the sustainable management of marine resources on a seascape basis*. Management of marine conservation issues and sustainable seascape management is currently divided between BFAR, which is mainly mandated to manage fisheries production and conservation of fish stock, and PAWB which is responsible for marine PAs under the national NIPAS system. Most 'on the ground' conservation activities are undertaken by individual LGUs and conservation NGOs, which coordinate amongst themselves and with Government partners as much as possible but lack a coherent overall framework and set of priorities to work against. The overlapping mandates between BFAR and PAWB have not generated conflict, rather it has resulted in marine PA management 'falling through the cracks' between the two agencies. This lack of a clear, coherent and prioritized set of targets and actions limits most marine conservation work to small-scale local initiatives within the mandates of LGUs, resulting in very few broader regional programmes or sustained investment.

B. 2 Incremental Cost Reasoning and the associated Global Environmental Benefits:

The **objective** of the proposed project is therefore to strengthen the conservation, protection and management of key marine biodiversity areas in the Philippines, by bringing a comprehensive, adequate, representative and resilient sample of marine biodiversity under protection in Marine PAs and MPA networks. The project will greatly expand the area of marine and coastal biodiversity under protection, particularly through the establishment of larger Marine PA Networks in key seascapes and regions. The project will also strengthen the management and conservation of existing MPAs (both nationally-managed and LGU-managed) by increasing technical and insitutonal capacities for MPA management and be increasing, systematizing and streamlining funding flows for MPA management. In order to achieve this objective, the project will implement four components, the design of which has been elaborated in consultation with a broad range of partners including various levels of Government, NGO and academic partners.:

1. Effective Management of Marine Protected Areas.

This component will focus on the improvement and expansion of the marine PA system in the Philippines. It will assist national partner agencies (DENR and BFAR) and local-level LGU partners in identifying, delineating and establishing at

[2424] Weeks, R, G.R Russ, A.C. Alcala and A.T. White (2009); *Effectiveness of Marine Protected Areas in the Philippines for Biodiversity Conservation*. Conservation Biology vol. 24, No. 2, 531-540

[25] The 1998 Fisheries Code calls for 15% of coastal municipal waters to be protected within no-take MPAs, while the Philippine Marine Sanctuary Strategy (2004) aims to protect 10% of coral reef areas in no-take MPAs by 2020.

[26] Bacudo, Imelda (2011); *An initial sustainable financing scoping exercise: SSME MPAs*, (Presentation made 15 December 2011), Mazar Starling Resources.

least thirteen new MPAs, covering at least 441,268.2 hectares of key marine biodiversity habitat. The identification and establishment of these new MPAs will draw upon existing key biodiversity area (KBA) prioritization exercises undertaken by DENR, as well as analysis and prioritization undertaken by conservation partners such as WWF, RARE and Conservation International. These existing analyses will be augmented by rigorous, scientifically-based ecological analysis, using data from academic and research institutions such as UP-MSI, NFRDI, FIN and Reefbase as well as additional field surveys and site analysis. Site selection and delineation will be undertaken in partnership with LGUs in the site areas, to agree on the specific areas to be protected (reefs, mangroves, seagrass beds, etc.), types of protection approach (strict PA, permanent or seasonal no-take zone, etc.) and the management and governance systems to be established for each site. Each newly-established MPA will be furnished with a costed management plan which incorporates an MPA business plan and financial sustainability strategy as well as a multi-stakeholder management and governance framework.

The system and process for MPA identification and management, including the governance mechanisms to be employed, will be further defined during the PPG phase. This process requires detailed consultations with the various stakeholders involved (including BFAR, PAWB and the LGUs), and final decisions are dependent on baseline data to be collected during the PPG process, including e.g. more detailed information on present and potential future funding flows for MPA management, and collaboration and division of responsibility between the LGUs and central agencies (BFAR/PAWB). New MPAs to be established may include small areas already under LGU protection. In these cases the intention would usually be to expand the area under protection (including by consolidation of fragmented local MPAs) and to upgrade these areas to higher categories of protection (i.e. category II) wherever possible.

In addition to identifying and establishing new PAs, this component will also strengthen the management of a large and diverse subset of existing MPAs (at least 95 of the approximately 600 existing MPAs). Management improvement will focus largely on existing MPAs, most of which (>50%) are LGU-managed MPAs falling under IUCN category IV. The major barrier to effective and sustainable management of many existing MPAs is their small size and fragmented management. Therefore the project will focus on establishing MPA Networks (MPANs), which bring together complementary sets of MPAs on a seascape basis. An MPA Network is defined as a collection of individual MPAs "*operating cooperatively and synergistically at various spatial scales, with a range of protection levels that are designed to meet objectives that a single reserve cannot achieve.*"[27] MPA networks to be established and supported will fall mostly under IUCN category V. Consolidation of management and financing systems under MPANs will reduce costs, increase efficiencies and allow the introduction of more rigorous technical PA management capacities to complement the community-based management structured already in place and supported by LGUs. This will increase the management effectiveness of the individual MPAs while reducing overall system costs.

This component will also ensure that the various parties responsible for the development and management of MPAs and the overall MPA system have the technical skills and expertise required to establish and maintain a robust and sustainable MPA system. One of the major constraints affecting the existing portfolio of MPAs is limited technical capacities in areas such as ecology, marine conservation, PA management and economic valuation and financial management. More than half the existing MPAs have been established by LGUs, and operate on a very limited scale. MPA management is generally restricted to basic patrolling and enforcement of sanctuaries and no-take zones, general activity planning and community outreach activities. Many MPAs are managed by locally-recruited guards with limited training or technical capacities, and broader technical and institutional management systems are very limited. This component addresses these issues in two ways; firstly it will systematically incorporate capacity assessment and development into the management of all marine PAs, by making capacity scorecards an integral part of MPA management and monitoring systems. Secondly it will work with the main funders of MPAs - primarily the LGUs- to ensure that funds and resources are allocated for capacity building, rather than support being restricted to infrastructure development, salaries and consumables.

Training will be provided to staff and stakeholders involved in MPA management at the national and local levels, including:

1. For PAWB and BFAR staff (at national and subnational levels) on topics such as MPA site identification and systems planning using scientific information and data (species estimation, larval dispersal and connectivity, carrying and adaptive capacities, etc.), and also on financial planning and business planning for revenue generation.
2. For program partners (NGOs, CSOs, academic research institutions involved in site level implementation) on current best practice in MPA/MPAN and coastal resource management (including peer-to-peer learning); project management, coordination and collaboration skills; policy formulation and

[27] IUCN WCPA (2008); *Establishing Marine Protected Area Networks – Making it Happen*, Washington D.C., IUCN-WCPA, NOAA, TNC; page 12.

harmonization (particularly local level policies and regulations); research and scientific management; and IEC and advocacy.

3. For local level partners (LGU staff, community MPA managers and management board members): on MPA/MPAN site management; environmental management, monitoring and surveillance; the economics of MPAs and revenue generation approaches; participatory resource assessment and governance; and formulation of local regulations and ordinances for MPAs within local government statutes.

Training programs and activities will be undertaken, wherever possible, in conjunction with existing BFAR, PAWB, LGU or academic training programmes. Academic research institutions involved in the project (such as the University of the Philippines and Diliman University) will lead the provision of technical and scientific training activities. The specific number of participants to be trained, topic and approach of individual training events, etc. will be determined during detailed project formulation and implementation. The capacity assessment framework and capacity scorecards to be applied (at site, network and overall project levels) will guide these plans and monitor impact and results.

The focus on capacity scorecards rather than capacity building plans allows the project to focus on the impact of capacity improvements, rather than on the details of capacity building activities. The specific capacity building activities to be undertaken will vary by location and across the lifetime of the project, and will be guided by the capacity gaps and weaknesses identified in the scorecards, which will be updated on an annual basis. Initial capacity scorecards will be developed for each site area during the PPG formulation phase. These initial assessments will provide more information on the specific kinds of capacity building activities that are likely to be undertaken at each site.

MPANs will be identified and established in four priority seascapes:

a. **Southern Palawan (West Sulu Sea)**: encompassing Aborlan, Narra, Espanola, Brookes Point and Bataraza. This area has been identified as a marine conservation priority area, however few MPAs have been established here to date. Southern Palawan (which is biogeographically a part of Sundaland unlike the rest of the Philippines) is a major nesting ground for turtles (including hawksbill and green turtles) and has a significant population of dugongs. The turtles in particular are subject to significant poaching pressure, particularly from foreign fishing vessels which encroach into Philippine waters[28]. Overfishing is also a major threat, both from inadequately-regulated domestic fishing operations and from foreign trawlers which easily access Southern Palawan waters from the South China Sea. Other threats include coral destruction from blast and cyanide fishing, mangrove harvesting and conversion and some coral degradation from unregulated dive tourism.

b. **The Verde Island Passage**: the VIP has been identified as the foremost 'centre of centres' of shorefish biodiversity globally. It has been the focus of various individual conservation efforts but lacks a comprehensive, system-wide management structure. The VIP is also faced with a range of threats and pressures, including:

- *Population growth:* The population in the VIP in 2000 was at 3,449,165, with an average annual growth rate of 2.27% between 1995-2000, which is higher than the national growth rate average of 2.04%. The population in the VIP is estimated to reach to about 5M in 2015 and 5.8M in 2020. This rapid growth in population in a region which is mainly dependent on fisheries and marine resources has caused overharvesting and habitat degradation in many parts of the region.
- *Higher fishing pressure*: VIP contributes to a total of 239,220 metric tons of fish production or 5.42% of the total fish production in the Philippines. VIP's total fish production come primarily from aquaculture (47.9%), followed by marine municipal fishing (30.6%), commercial fishing (14.6%), and inland municipal fisheries (7%). Fisheries in VIP are predominantly artisanal in nature and are confined within shallow coastal waters. Commercial fishing sectors are categorized as small-scale commercial fishing operations and employ fishing gears that are banned within the municipal waters. The combined fishing pressure (both from aquaculture and from fishing) has resulted in a depletion of fish stocks, and concerns over pollution and chemical/ antibiotic buildup from aquaculture operations.
- *Loss and conversion of coastal ecosystems (particularly mangroves):* The expansion of aquaculture in the VIP region has also resulted in the loss of mangrove areas, many of which were converted to fish ponds. Precise estimates of the total area converted are not available, however anecdotal evidence from conservation organizations active on the ground indicate that such mangrove concern is a growing threat.
- *Polllution:* Point sources for pollution include industrial effluents, water run-off from urban areas and sewage discharges, as well as garbage and discharge from passing shipping. Non-point sources are from land clearance,

[28] See for instance media reports on illegal turtle poaching here: http://www.ecologyasia.com/news-archives/2010/jun-10/gma_100608_1.htm

livestock production and agricultural activities including fertilizer and pesticide runoff. The cumulative effect of this solid waste pollution has not yet reached critical levels however it represents a growing concern requiring preventive action.

c. **Lanuza Bay (northeastern Mindanao)**: the Bay is located in the Caraga region of Surigao and along the Mindanao Current in the Southern Philippine Sea. The Bay has fourteen MPAs established within seven LGUs (municipalities). It has been identified as an Extremely High priority in the Philippine Biodiversity Conservation Priority framework. The primary threat to Lanuza Bay arises from overfishing (illegal, unregulated and/or unsustainable), particularly for tuna. Runoff and pollution from land-based activities such as logging, wood processing and forest conversion are also a growing threat. The large mangrove forests (found particularly in Carrascal Municipality) are under threat from over-harvesting and conversion, which also exacerbates runoff pressure on the important inshore coral reefs. These threats have combined to decrease live coral cover in reef areas from 42.43% to 40.32% and increasing dead coral areas from 11.88% to 32.77% between 2002 and 2009.

d. **Davao Gulf**: The Davao Gulf is a critically important marine resource, which supports the economies of 18 municipalities and 5 cities. It covers an estimated 5,000 ha of sea area with a coastline of 276 kilometers, with a total population in excess of 2.9 million people. It is one of the top ten fishing grounds in the country, supporting about 20,000 fisher families. The Gulf is also the site of important marine sites such as Ligid and Talicud Islands, and reef systems such as Pearl Farm and Mushroom Rock in Samal. Threats identified in the Davao Gulf region include pollution and solid waste discharge from the ports, oil depots, factories and other industrial activities ringing the Gulf (in particular those located around Davao City) as well as pollution and discharge from shipping activity. Davao City is a transportation hub for the southern Philippines and hence the impact of shipping and transportation is significant. The Gulf is also a major fishing ground, supplying fish and marine products not only to local markets but also to national and international buyers such as the Japanese. Fishing pressure has increased over time, particularly as fishing grounds in central and northern Philippines have come under overharvesting pressure.

In addition, two further seascapes will be used as 'control sites' to benchmark (and establish costs for) sustainable management of marine PAs and PA networks. These two sites have been identified as the most effectively managed marine PA sites in the Philippines at present. Data collection and monitoring activities at these sites will provide a baseline for the effectiveness of the overall national MPA system. These sites are:

a. **El Nido, Palawan**: El Nido is composed of 45 islands and islets on the northernmost tip of mainland Palawan, with the South China Sea to the west, the Linapacan Strait to the north and the Sulu Sea to the east. El Nido hosts a marine protected area of 54,303 ha, and its western portion is part of the El Nido- Taytay Managed PA under NIPAS.

b. **Tubbataha Reef National Marine Park**: Tubbataha is the largest coral atoll in the Philippines, located 192 km southeast of Puerto Princesa City in Palawan. It was the first national marine park established in the Philippines and is a UNESCO World Heritage Site. Over 1,000 species inhabit the reef, many of which are endangered. Tubbataha Marine Park was the subject of a prior GEF MSP intervention in 2000-2004[29], which supported the establishment of the Park.

This component was carefully developed in consultation with the Government of the Philippines and the broad range of partners involved in this initiative. The primary outcome and outputs on expanding spatial coverage, representativeness and management effectiveness of MPAs will be accomplished in collaboration with the coalition of LGU, NGO, academic and central Government partners described in the baseline project, with significant support reflected in the US$27.8 million of co-financing being leveraged for this purpose.

Field activities to be undertaken under this component include:

a. Establishment of at least 3 new MPA networks
b. MPAs established in at least 13 marine key biodiversity areas
c. Implementation of management plans (and management improvement) in at least 95 existing and 10 new MPAs
d. Technical and management capacity improvement activities in at least 95 existing and 10 new MPAs.

All GEF funding under this compoent will be utilised for field-level activities.

2. MPA Financing

This component will strengthen, systematize and professionalize the financial management of MPAs, MPANs and the national MPA system by linking together the various streams of financial support currently available and channeling them through a well-structured system for maximizing revenues and cost-efficiencies and minimizing duplication and

[29] http://gefonline.org/projectDetailsSQL.cfm?projID=799

redundancies. At the national level, the component will undertake a multi-tier cost-effectiveness assessment to establish benchmark establishment and management costs for MPAs and MPANs at a variety of spatial scales. The cost-effectiveness assessment will evaluate potential savings to be generated by consolidation of technical capacities and management support across small individual MPAs, and the potential efficiency gains from establishment of MPANs on different scales (reef or bay level, seascape level, regional level).[30]

At the MPA Network level, the component will develop revenue generation models to monetize some of the ecosystem services provided by MPAs, focusing particularly on the tourism and fisheries sectors. Pilot agreements will be established in at least two MPANs, expanding to all priority seascapes if potential revenue sources are identified during the PPG phase. Revenue generation schemes for individual MPAs will also be piloted where suitable sites are identified, e.g. for reef or mangrove MPAs that can demonstrate direct benefits to local fishing industries or tourism operators.

Amongst the revenue generation schemes that may be piloted are recreational user and dive fees for sites with high recreational and dive tourism potential, fisheries concessions or the auction of fishing licences and catch quotas in areas where productive fishing grounds are directly dependent on nearby MPAs as refugia or breeding grounds, broader PES-type payments from commercial fisheries operators to support conservation of breeding grounds such as mangrove areas or coral reefs (where direct relationships between specific MPAs and fishing grounds cannot be demonstrated), as well as financial support from coastal LGUs as part of their development expenditure.

Potential revenue sources have already been demonstrated in some locations. For instance, the Apo Reef NP generates more than US$29,500 annually in recreational user fees, while Tubbataha generates more than US$310,000. Gilutongan Island Marine Sanctuary generates a net surplus of revenue above management costs, due to a concession for sustainable management of fisheries in its buffer zone[31]. Significant revenues can also be generated from local governments, as is already occurring at a number of local MPAs such as Apo Reef (approx. US$88,000 per year). The LGU capacity strengthening work under component 1 above, and the enhancement of LGU systems for identifying and delineating MPAs under component 3 below will help to enhance local government investments in MPAs/MPANs by more clearly demonstrating the value and role of well-managed marine reserves within sustainable local development plans.[32]

Model financing plans will be developed for a larger sample of MPAs (including ones where on-site revenue generation potential is more limited). These financing plans will cost out management and governance costs as well as identifying existing and potential sources of funding such as LGU transfers, local user fees, NGO and charitable contributions and national government support. Where financing gaps are identified, the plans will map out ideas and strategies to generate additional financing, and establish systems for annual monitoring and reporting of the financing gap to local and national agencies.

Field activities to be undertaken under this component include:

a. Financial strategies and business plans implemented in at least two MPANs (Davao Gulf and Verde Island Passage), and revenue generation schemes operating in at least 20 target sites.

b. MPA financing plans piloted in at least 30% of MPAs within the project.

More than 80% of the GEF funds under this component will be utilized for field-level activities.

The three tiers of the MPA financing strategy are linked in a complementary manner. The national-level analysis will establish benchmarks for MPA site and network management costs to estimate the magnitude of funding necessary to sustain the targeted system. In addition, it will also help to identify and cost out the savings and efficiency gains that can be obtained by consolidating fragmented MPAs into networks. The MPA Network level analysis will then assess revenue generation potential for broader ecosystem services, such as national or regional/ provincial tourism benefits, ecosystem services to the fisheries and mariculture sectors, and other potential ecosystem services such as storm surge and erosion protection. These broad regional or national ecosystem service models for MPA Networks will then be augmented by specific, site-based revenue generation schemes and arrangements for individual MPAs where opportunities exist.

The estimate of costs at the overall national/ system level (including cost efficiencies) balanced against the revenue generation potential of MPA Networks and individual MPA sites will provide an estimate of the funding gap for marine PA management. Efforts to fill this funding gap will focus on the role and mandate of the LGUs to support marine protection, natural resource management and poverty alleviation/income generation as part of their development activities. In most coastal LGUs fishing activities provide incomes for the poorest segments of the community, including landless

[30] The per-hectare cost of MPA management varies significantly by scale, ranging from approximately US$66/ha/year for MPAs of around 150ha to more than US$500/ha/year for small MPAs of less than 20ha. These estimates are based on data provide in Butardo-Toribio et. al. 2009, pp 38-39.

[31] Bacudo (2011), based on data from Mazar Starling Resources.

[32] A full revenue options assessment will be undertaken during the PPG stage.

households. As a result the sustainable management of coastal marine resources should be a priority for LGU investment not only for conservation and environmental management reasons, but also as part of their poverty alleviation and income generation programmes. By tapping into these large local government funding flows, this component aims to increase the overall financial resources directed towards the MPA system quite significantly in the medium term.

3. Policy Harmonization and Implementation

This component will focus on ensuring that policy and regulatory frameworks governing marine resources in the Philippines support the expansion, management and conservation of marine protected areas in a coherent and comprehensive way. The component will identify gaps and inconsistencies in the policy framework (particularly gaps between the mandates and jurisdictions of BFAR and PAWB), develop new or revised policies and regulations to address these gaps and work with the relevant national and local stakeholders to have these strengthened instruments put into effect. The component will focus on policies and regulations at the national level, but will also work with Local Government Units and the League of Municipalities to strengthen local government policies and regulations where required. The identification of policy gaps and inconsistencies and recommendations for revisions will be developed by an inter-agency task team including the National Fisheries Research and Development Institute (NFRDI), the Fisheries Policy and Economics Division (FPED) of BFAR, the Planning Unit of DENR/PAWB, academic experts and other stakeholders.

This component will also ensure that the development and application of MPA/MPAN policies is grounded in strong scientific and ecological conservation criteria. The component will ensure that the selection and prioritization of MPA sites (under existing processes such as the Key Biodiversity Areas prioritization process, and the development of the updated Philippines Biodiversity Strategy and Action Plan – PBSAP2020) is strengthened based on marine ecological conservation criteria such as species abundance and distribution, threats and pressures, larval transmission and dispersal routes and connectivity and climate change stresses. These criteria will be incorporated through a range of measures including national-level ecological assessments and prioritizations (building on previous national prioritization exercises dating back to the formulation of the NBSAP), checklists, criteria and decision support tools for use by LGUs in establishing local MPAs, and strengthened or amended procedures for delineation and promulgation of marine PAs under NIPAS.

The range of approaches to be used recognizes that the identification and protection of MPAs is moving beyond the immediate purview of PAWB (under NIPAS and the PBSAP2020) to encompass additional actors such as BFAR and LGUs. Hence the formal national mechanism under NIPAS will be supplemented by a range of secondary decision-making processes at local and regional levels.

Under the baseline scenario, globally-significant marine biodiversity in the Philippines will continue to be lost due to overharvesting and habitat loss and degradation. Despite extensive local conservation efforts by a variety of committed actors as described in the baseline, the lack of a coherent strategy, clear scientifically-derived conservation priorities, inadequate technical and institutional capacities and insufficient and unpredictable financial support will gradually degrade the existing collection of individual MPAs, eroding their conservation and productive value and undermining local support for their protection and management. By helping to create and support a coherent, viable and well-resourced MPA sytem, the GEF alternative established by the project will help to shift this trajectory in a positive direction, increasing both the size and diversity of the MPA system, and the conservation and developmental benefits it provides for local communities and the nation. At least 80% of the funding mobilized under the GEF alternative will be utilized for direct conservation activities on the ground. Key elements of the shift from the baseline to GEF alternative trajectories are provided below:

Current Practice	**Project Alternative**
MPA identification and establishment: MPAs are identified and established on an ad-hoc local basis, mainly by LGUs and local communities, in response to community needs and local conservation concerns. Seascape, national and global ecological considerations play a limited role in MPA creation, and many critical marine ecosystems are missing or under-represented	New MPAs are operationalized based on robust, scientifically-driven analysis complemented by local stakeholder ownership and involvement. Management and technical support to smaller individual MPAs is consolidated and enhanced through networks, thereby strengthening management effectiveness and overall system robustness

MPA site and system financing: Individual MPAs are resourced largely on a stand-alone basis, mainly through government fiscal transfers via LGU grants. Resource allocation is fragmented and duplicative, resulting in significant inefficiency and redundancy, which reduces the overall impact of allocated funding.	Financial support to the MPA system is increased by a channeling funding through a comprehensive national framework built on rigorous cost-benefit analysis. Overall costs are reduced while increasing the impact of investments by streamlining institutional management and technical support through MPA Networks. Costed business plans and strengthened financial management and business planning skills improve resource mobilization capacity, resulting in greater, more sustained and more predictable financing for the MPA system.
Policies and institutional mandates: MPA establishment and management is fragmented amongst different national agencies (particularly DENR/PAWB and DA/BFAR) and local government units. Overlapping mandates and unclear responsibilities lead to continued neglect of the national system in favour of isolated site-level initiatives by individual agencies.	Distinct mandates and areas of responsibility for each institutional actor are established by a clear, coherent and prioritized national framework. The incorporation of scientifically-based ecological conservation criteria into policymaking strengthens the robustness, representativeness and resilience of the MPA system, increasing its effectiveness in conserving globally-significant marine biodiversity resources and critical ecosystems.

The **global benefits** to be generated include a 10% increase in key marine biodiversity areas under protection, with a net addition of at least 441,262.8 ha, and the improved management of at least 95 existing MPAs (out of an estimated total of approximately 600) covering approximately 400,000ha. Greater coordination and coherence, strengthened management capacity at national and local levels and increased and more predictable funding flows will result in the creation of a robust, representative and resilient system of marine PAs safeguarding an important sample of the Philippines' marine biodiversity.

B.3: The Socioeconomic Benefits to be delivered by the Project, including consideration of gender dimensions, and how these will support the achievement of global environmental benefits.

The proposed project will provide significant socioeconomic benefits at the national and local levels. At the national level, a strengthened MPA system will increase the resilience of the Philippines' marine resource base, safeguarding the productivity of an important national resource which supports industries such as tourism and fisheries. More resilient coastal and marine ecosystems will also reduce the potential physical, social and economic impact of extreme weather events such as typhoons, cyclones and storm surges, to which the Philippines is highly vulnerable. At the local level, the project will also contribute to the livelihoods, and more importantly the food security of large numbers of poor and vulnerable people, including women-headed households. A larger and more resilient MPA system will support more sustainable fisheries, particularly for small scale local (municipal) fisherfolk, for instance through spillover and recruitment effects on fishery productivity. Local fisherfolk are amongst the poorest households in the Philippines, with dependence on local fisheries correlating strongly with landlessness and marginalization. The creation of a larger network of MPA sites will also broaden opportunities for local communities (including women) to engage in alternative livelihood activities in the tourism and fisheries processing sectors.

The socioeconomic benefits of the project are expected to directly improve the livelihoods of at least 100,000 municipal fisherfolk households across the four proposed project sites. Economic benefits for these direct beneficiaries will vary according to household and location, however the increase in total annual income is expected to range as high as 25% for poor households directly benefiting from improved fish catch and additional income generation opportunities from tourism. Indirect economic benefits are difficult to quantify at this stage, and will be estimated further at site levels as part of baseline financial assessments during the PPG phase.

The socioeconomic benefits described above are closely linked to the achievements of global environmental benefits since it is these local developmental benefits which underpin the support LGUs provide for local MPAs. LGUs establish, manage and finance MPAs because they recognize the valuable role such reserves play in supporting and protecting the livelihoods of poor coastal communities. Thus a significant portion of the financial and political support MPAs receive is tied to their socioeconomic value, while also underpinning the global environmental benefits they provide.

Institutional and financial sustainability:

The project has been designed to also ensure the institutional, financial and social sustainability of its outcomes. At the institutional level, the project has been designed to integrate conservation of marine KBAs and associated marine protected areas into the activities and development programmes of Local Government Units, which are the primary governance structures at sub-national levels. By explicitly linking conservation of marine biodiversity resources to local development and livelihoods outcomes (e.g. through the role of MPAs as fish sanctuaries which promote replenishment

of fish stocks, and via tourism-related livelihoods), the project will ensure that conservation of these biodiversity resources becomes an integral part of local governance. Similarly, the financial sustainability of MPA/MPAN systems will be enhanced by strengthening and diversifying sources of revenue, including improving internal revenue generation from fees and concessions, as well as broadening the fiscal base for MPA systems through better integration into LGU budgeting and expenditure systems. The social sustainability of the project strategy is underpinned by the socioeconomic benefits describe above, particularly those being generated at the local level through improvements in livelihoods, income generation opportunities and food security. By expanding and diversifying the population that derives direct and indirect economic benefit from MPAs, the project will strengthen the constituency of support for conservation and sustainable management of the national MPA system. This will ensure that the project, and the MPA system that it is supporting, continue to receive strong social support in the future.

B.4 Risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

RISK	RISK RATING	RISK MITIGATING STRATEGY
LGUs may change priority and shift support from the program to other programs given the two election periods within the program life	M-H	Inclusion and participation of the LGU and larger community should emphasize that the program is non-partisan and stands to benefit the marginalized communities of the area. Engagement with LGUs should be at the very start of the program and incorporate functionality, transparency, accountability and participatory decision making, transparency, accountability, participatory principles in its systems, processes and standards
Difficulty in coordinating with the partners of the program given their different mandates and expertise	M	The process of designing and developing a single program has been a partnership building process. The partners also agreed that the PMU would not be managed by any of the project partners to ensure transparency, objectivity and efficiency in managing the program. An initial agreement has been reached to house the PMU in the Coastal and Marine Management Office of DENR, which will allow site-level support and coordination to be provided via DENR/PAWB's regional offices. However this arrangement and other coordination and implementation arrangements are subject to further analysis and consultation during the PPG phase.
Overlaps in the mandates of BFAR and PAWB will result in conflicts.	L	Analysis during the formulation of the project have thus far indicated that possible overlaps in the mandates of the two organizations have not been the source of conflict, as each organization has generally focused on activities within narrow interpretations of its mandate, thus avoiding areas of unclear jurisdiction. Rather than causing conflict, this has generally resulted in insufficient attention being paid to areas that appear to fall into the mandates of both organizations, e.g. support to fisheries no-take zones or seascape management. Where required, the project will work with both organizations to assess and clarify mandates, thereby providing more scope for each organization to expand its work on MPAs without generating inter-agency conflict.
Climate unpredictability may impact the outputs and outcomes of the program	M	Climate studies, as they affect the MPAs and MPAN are integral to the program and data on the site MPANs on resilience and CC impact will be compared among sites
Policy harmonization and complementation may go beyond program life	M	Policy advocacy, IEC and social marketing are important components of the program to ensure understanding of the benefits and experiences gained will effect change at national and local policies. This is also an ongoing effort by the partners (government and non-government)
Sustainability for MPANs at local and national levels may not materialize	M	Other options for sustainability have to be explored, not just the LGUs. Funding from LGU allocation is not reliable at all times. Finding incentive mechanism/ award mechanism (e.g., BRAVO awards; tourism, PES, Community trust funds, other sources like carbon markets potential will be explored.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

KEY STAKEHOLDERS	RESPECTIVE ROLES (INDICATIVE)

Communities/Fishers/Resource Users/IP	The base stakeholders of the project at the site level. They will be the resource managers of the MPAs/MPANs in partnership with the LGUs
Local Government Units	Local Government Units will be the primary project stakeholders at the local and municipal level. LGUs are responsible for the identification, promulgation, management and financing of local MPAs, and LGU budgets will be one of the main sources of financial support for these MPAs. LGUs will also be responsible for establishing supportive local regulatory frameworks to encourage the creation of MPAs, and for supporting enforcement and community monitoring activities to reduce poaching and encroachment.
National Agencies such as the BFAR-NFRDI and the DENR PAWB	Their mandates directly impact on MKBAs. The NFRDI will be part of the implementation at site level as well as leading the review of national and local policies and appropriate actions that need to be undertaken to make policies more relevant and significant for the sector.
The Private sector	This sector is essential ensuring that biodiversity principles and practices, payment for environmental services and full valuation of resource services are understood and supported
National and Local academic institutions and other research institution	These organizations will take part in the continuing efforts to build local and national data that will input to better policies in the management of the MKBAs, provide a national model and framework for MPANs and enhance the Philippine Marine Biodiversity database for the regional and national uses. Further, academic institutions will peer-review scientific papers that will be outputs of the project. Local educational and research institutions will be crucial in mentoring and adaptive management mainstreaming in the local and scaling up network process
Conservation International - Philippines	CI will be the primary project partner working in the Verde Island Passage site, building on its existing and long-standing support for marine conservation and sustainable use activities there.
WWF Philippines	WWF will be the primary project partner supporting establishment and management of MPA networks in the Davao Gulf. WWF will also support the coordination of project activities with regional CTI programmes, particularly the Sulu-Sulawesi Marine Ecoregion initiative.
Haribon International	Haribon will support research and conservation efforts focusing on threatened fish species and the sustainable management of fish stocks, focusing particularly on interactions between fisheries management and MPAs in Lanuza Bay.
RARE Philippines	RARE will focus on community development, social marketing and catalyzing support from local community leaders. RARE will build upon its existing social marketing initiatives in coastal communities to strengthen the integration of MPA management into local community leadership and governance processes.
Other National and Local NGOs	The NGOs play a large role in implementation and in networking with other initiatives in areas not covered by the program

B.6. Outline the coordination with other related initiatives:

The Project will establish synergies and linkages with other initiatives on marine biodiversity conservation beyond those included in the baseline project. It will collaborate with the ADB-GEF project on Integrated Coastal Resource Management, which addresses the critical issue of integrated management of marine and coastal resources from a sectoral development perspective. It will also link other the regional International Waters initiatives supported by GEF such as the Partnerships for the Environmental Management of the Seas of East Asia (PEMSEA) and the Sulu-Celebes Sea Fisheries Management Project, particularly in joint efforts on advocacy, capacity-building and in promoting trans-boundary sharing of lessons.

Building upon the work being undertaken through these regional and national initiatives, the project will focus on the specific issue of **strengthening and expanding marine protected areas at the local level**; a key element which has not been the direct focus of any of these other investments. The initiatives described above focus on broader coastal and marine resource management, either at a regional level or at the broad national level. None of these initiatives focuses

on a protected areas approach to coastal and marine resource management, nor are they addressing the linkages between marine conservation work at the central and local levels. A stronger and more sustainable marine PA network will be an important underpinning for the broader ICDP-type initiatives currently being undertaken through these other GEF projects, which are all complementary elements under the Coral Triangle Initiative (CTI). In this regard, the project will also contribute to Goal 1 and Goal 3 of the CTI National Plan of Action[33]. In terns of specific coordination, the project will collaborate with PEMSEA on national and regional training activities, and will contribute to the dissemination and replication of PEMSEA tools and approaches in local sites. Where necessary the project will downscale these PEMSEA tools for use at the local level, either by LGUs or by local community groups. The project will also coordinate with the Sulu-Celebes Sea Fisheries Management Project on fish species, stock and sustainable harvesting issues, particularly in the Davao Gulf.

The Project will also build on the lessons learned from the following completed GEF and non-GEF projects in the Philippines: 1) Conservation of the Tubbataha Reef National Marine Park (Tubbataha Ecosystem); 2) Biodiversity Conservation and Management of Bohol Island Marine Triangle; 3) the EcoGov and FISH projects which espoused eco-system-based fisheries management approaches in the country, 4) Asian Conservation Company and 5) Sulu-Sulawesi Seascape Project. For example, the project will utilize and build upon support provided for strengthening coastal zone management at the LGU level, including through toolkits and guidelines that have been produced such as the "Improving the Governance of Philippine Coastal and Marine Areas: a Guide for Local Government Units" manual produced by ECOGOV.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

UNDP Philippines will bring US$1,000,000.00 in co-financing to this Project over the course of the project cycle, mobilized from the Philippines Country Programme.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The proposed project responds directly to key elements of the UN System UNDAF for 2012-2016, specifically Outcome 4 in increasing capacities of national and local government officials and communities to conserve & sustainably manage the country's environment and natural resources, including biodiversity and sustainable energy sources.". This project will specifically contribute to the whole initiative of UNDP Country Programme of maintaining the ecosystem services of the natural resources and at the same time decreasing its vulnerability to climate change by additional creation of MPAs and scaling up to resilient networks.

UNDP Philippines has an extensive track record in developing and implementing environmental management and conservation programmes, including a large portfolio of GEF-supported investments cumulatively totalling in excess of US$40 million. The UNDP Country Office has a total of 5 staff in its Environment Unit. Staff in the Operations and Financial Management unit also support project implementation, and oversight is provided by the senior management team composed of the UNDP Resident Representative, Country Director and Unit Team Leaders. UNDP Philippines delivers approximately US$15million per year in overall development assistance, derived from a variety of sources including core UNDP programme funds, bilateral donors and multilateral mechanisms such as GEF and the MDG Achievement Fund.

[33] CTI Philippines National Plan of Action: http://www.cti.pawb.gov.ph/CTI_NPOAdraft.5.5.2009.pdf

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(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Atty. Analiza Rebuelta Teh	Undersecretary	Department of Environment and Natural Resources	January 31, 2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	**Signature**	**DATE** *(MM/dd/yyyy)*	**Project Contact Person**	**Telephone**	**Email Address**
Yannick Glemarec, Executive Coordinator, UNDP/GEF		March 12, 2012	Joseph D'Cruz, Regional Environment Advisor Asia-Pacific	+6623049100 ext 2726	joseph.dcruz@undp.org