

GLOBAL ENVIRONMENT FACILITY-5 (GEF-5)
National Portfolio Formulation Exercise (NPFE)

PHILIPPINES
National Portfolio Formulation Document (NPFD)

Submitted by the

GEF-Philippines Operational Focal Point
**Department of Environment and
Natural Resources**

to the

CEO and Chairperson
Global Environment Facility Secretariat

September 2011

TABLE OF CONTENTS

ABBREVIATION/ ACCRONYMS	.....	2
EXECUTIVE SUMARRY	.....	4
1. BACKGROUND	.....	6
2. GEF IN THE PHILIPPINES	.....	7
3. GEF4 - Resource Allocation Framework (RAF)	.....	8
4. GEF 5- System for Transparent Allocation of Resources (STAR)	.....	8
A. STAR Focal Areas	.....	9
1. Biodiversity	.....	9
2. Climate Change	.....	9
3. Land Degradation	.....	10
B. NON-STAR Focal Areas	.....	11
1. International Waters	.....	11
2. Chemicals	.....	11
5. GEF-5 NATIONAL PORTFOLIO FORMULATION DOCUMENT	.....	12
6. PROJECT IDENTIFICATION AND PRIORITIZATION CRITERIA	.....	13
7. IDENTIFIED PRIORITY CONCEPTS AND PROJECTS	.....	17
References	.....	22
List of Annexes	.....	23

ABBREVIATIONS/ACCRONYMS

ADB	Asian Development Bank
ASTUD	Asian Sustainable Transport and Urban Development Program
BSWM	Bureau of Soils and Water Management
BFAR	Bureau of Fisheries and Aquatic Resources
CC	Climate Change
CCC/CCO	Climate Change Commission/Climate Change Office
CHM	Clearing House Mechanism
CPB	Cartagena Protocol on Biosafety
CSO	Civil Society Organization
DA	Department of Agriculture
DAR	Department of Agricultural Reform
DENR	Department of Environment and Natural Resources
DFA	Department of Foreign Affairs
DLDD	Desertification Land Degradation and Drought
DOST	Department of Science and Technology
EMB	Environmental Management Bureau
FAO	Food and Agriculture Organization
FMB	Forest Management Bureau
FASPO	Foreign-Assisted and Special Projects Office
GEF	Global Environment Facility
EA	Executing Agency
HCFC	Hydrochlorofluorocarbon
IA	Implementing Agency
IACCC	Inter-Agency Committee on Climate Change
IFAD	International Fund for Agricultural Development
IW	International Waters
LGUs	Local Government Units
LMEs	Large Marine Ecosystems
LULUCF	Land use and Land use Change in Forestry
MEA	Multilateral Environmental Agreement
MDG	Millennium Development Goal
NAP	National Action Plan
NBSAP	National Biodiversity Strategy and Action Plan
NCCAP	National Climate Change Action Plan
NFSCC	National Framework Strategy on Climate Change
NIP	National Implementation Plan
NPFE	National Portfolio Formulation Exercise
NPFD	National Portfolio Formulation Document
ODS	Ozone Depleting Substances
OFP	Operational Focal Point
OPs	Operational Programs
PAWB	Protected Areas and Wildlife Bureau
PDP	Philippine Development Plan
PEMSEA	Partnership in Environmental Management for the Seas of East Asia
PES	Payment for Ecosystems Services
PFP	Political Focal Point
POPs	Persistent Organic Pollutants
RAF	Resource Allocation Framework
SGP	Small Grants Programme
SFM	Sustainable Forest Management
SLM	Sustainable Land Management

STAR	System for Transparent Allocation of Resources
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of the Indigenous People
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UPMSI	University of the Philippines Marine Science Institute
WB	World Bank

EXECUTIVE SUMMARY

The Philippines has been a recipient of GEF Funds since 1992. Relevant interventions through Programs/projects that address both country-specific and global environmental challenges were implemented. But it was during the 4th and 5th cycle of the GEF that the need to strengthen GEF's strategic engagement at country-level becomes imperative to sustain the efforts of conserving and protecting the biodiversity and mitigate climate change. This required a consultative process or exercise in determining the felt need of the government/country to implement its thrusts and objectives viz the GEF objectives. The subsequent conduct of the consultation process were pursued and completed through the grant assistance from the GEF-National Portfolio Formulation Exercise (NPFE) direct support facility.

The NPFE determines programs and projects that will achieve an environment that is healthy, ecologically-balanced, sustainably productive, and climate change resilient. It covered all the relevant GEF focal areas anchored with the 2011-2016 Philippine Development Plan.

In the 4th cycle of GEF, year 2006, GEF implemented the Resources Allocation Framework (RAF) as a mechanism to effectively provide funds for beneficiary countries. The RAF is based on a system that prioritizes the country's potential to generate global environmental benefits as well as the level of their capacity, policies and approaches to successfully implement GEF projects.

With the conclusion of the GEF4-RAF in June 2010, GEF 5 is now programmed for access based on the newly developed System for Transparent Allocation of Resources (STAR). The GEF STAR has three focal areas, namely: Biodiversity, Climate Change, and Land Degradation. The International Waters, persistent Organic Pollutants (POPs) and Ozone Depleting Substances (ODS) are included in the non-STAR focal areas of GEF 5.

Projects and concepts were prioritized based on a set of prioritization criteria and parameters developed by each MEA Focal Point Agency Review Committee (MEA-FPARC). The prioritization also took into considerations the development directions and thrust presented in the latest Philippine Development Plan for 2011-2016.

For the Biodiversity focal area, ten (10) projects and concepts have been identified/prioritized for GEF 5 STAR funding with an indicative total amount of USD39.4 million out of the available US\$26 million.

For the Climate Change Focal Area with an allocation of USD 8.8 million, the list is divided into two (2) major parts as follows:

- I. Priority Projects (3) and
- II. Long list Projects of 9 projects.

There is only one project proposed for GEF 5 STAR funding under the Land Degradation focal area with the funding allocation of USD 1.04 million. It is entitled "Addressing Desertification, Land Degradation and Drought in the Philippines Through Sustainable Land Management".

There were ten (10) proposals identified as priority projects by the GEF Philippines NSC for endorsement and funding under the GEF non-STAR focal areas of International Waters, Persistent Organic Pollutants (POPs), and Ozone Depleting Substances (ODS).

The Regional Programme on Marine and Coastal Invasive Species in the East Asian Seas region submitted by the COBSEA through the DENR – Environment Management Bureau, and The Establishment of Marine Protected Area Network in Southeast Asia are the two proposals noted for future consideration.

1. BACKGROUND

The Philippines has been a recipient of GEF Funds since 1992. Relevant interventions through programs/projects that address both country-specific and global environmental challenges were implemented. However, it was only during the GEF 4th and 5th cycle that the need to strengthen GEF's strategic engagement at the country-level becomes imperative to: 1) maximize the use of GEF resources and 2) sustain the efforts of conserving and protecting biodiversity and mitigate climate change. To do this, would require a consultative process to assess and determine the felt need of the government/country to implement its thrusts and objectives viz the GEF objectives.

To maximize the GEF resources in terms of sustainability and supporting the country's thrust and priorities, the DENR, through the Philippines' Operational Focal Point for the GEF initiated a multi-stakeholders consultative process in developing a list of priority activities for consideration under the GEF 5 cycle. The subsequent conduct of the consultation activities were pursued and completed through the grant assistance from the GEF NPFE direct support facility.

These exercises are expected to cover all relevant focal areas and should describe how GEF allocations will be programmed for various priority projects/programs that reflect national and regional priorities to benefit the global environment. Its purpose is to provide flexible support to countries (particularly the focal points) so that they strengthen their capacity to work with the GEF. Hence, the document resulting from the national portfolio formulation exercise is a means of ensuring greater consistency among and between GEF efforts and GEF-country strategies to that of country's priority/thrusts. The NPFE, thus serves as a priority setting tool for countries and as a guide for GEF Agencies as they assist a recipient country in particular the Philippines, in pursuing the country's Development Plan for 2011-2016.

The draft 2011-2016 Philippine Development Plan intends to achieve an environment that is healthy, ecologically-balanced, sustainably productive, climate-change resilient and provides for the present and future generations of Filipinos anchored on the principles of shared responsibility, good governance, participation, social and environmental justice, inter-generational space and gender equity. The goals and strategies that the government seeks to achieve in the medium term are shown in **Annex 1**.

2. GEF IN THE PHILIPPINES

The Philippines is eligible for GEF funding as a signatory to, and has ratified the key global treaties on the environment: Convention on Biological Diversity (1993), United Nations Framework Convention on Climate Change (1994) and the United Nations Convention to Combat Desertification (UNCCD, 2000), among others.

The Philippines had been the recipient of numerous grants from the GEF since it began operations in 1991. The three original Implementing Agencies (IAs), the World Bank (WB), United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP) have implemented various projects in the country. There are 15 operational programs (OPs) through which the GEF provides grants. Eleven of these reflect GEF's original focal areas: four in biodiversity, four in climate change, and three in international waters. The Integrated Ecosystem Management (OP 12) encompasses cross-sectoral projects that address ecosystem management that optimizes ecosystem goods and services in at least two focal areas within the, context of sustainable development. Persistent organic pollutants (OP14) and land degradation (OP15) were included as new GEF focal areas.

With regards to land degradation, there exist opportunities for projects that will address land degradation focal area (OP15), particularly in the light of acceptance of the Philippine government of the recently completed report on "The Updated Philippine National Action Plan to Combat Desertification, Land Degradation and Drought (DLDD), FY 2010-2020" (DA-BSWM, DAR, DENR, DOST, 2010). This fulfills the Philippine commitment as one of the country Parties, to align our national action plan to the UNCCD's 10-Year Strategic Plan and Framework 2008-2018

All GEF projects implemented in the Philippines by the three original implementing agencies (IAs)- WB, UNDP and UNEP- fall into four (4) out of the six (6) focal areas, and 12 out of the 15 OPs. A fourth IA, the Asian Development Bank (ADB) was granted US\$9.3M for the implementation of the Integrated Coastal Resources Management Program (ICRMP) under the biodiversity focal area. In addition, UNIDO, FAO, IFAD were also considered IAs under GEF4-RAF. The list of projects is shown in **Annex 2**.

From 1992 to 2004, the total amount of grants funds allocated for GEF projects in the Philippines is \$118.7M. Contrary to the perception that biodiversity had received a lot more attention than other focal areas, the data as of 2004 showed that climate change accounted for 58% (US\$68.9M) of all funds while biodiversity got only 37% (US\$43.9M).

3. GEF4 - Resource Allocation Framework (RAF)

In 2006, the GEF implemented the Resources Allocation Framework (RAF) as a mechanism to effectively and efficiently provide funds for beneficiary countries. The RAF is based on a system that prioritizes the country's potential to generate global environmental benefits as well as the level of their capacity, policies and approaches to successfully implement GEF projects. The total allocation for the Philippines under RAF 4 is US\$ 31.250 M. broken down into two focal areas, namely: (i) Biodiversity- US\$ 23.250M and Climate Change US\$ 8.000M. Under the Biodiversity allocation, 11 projects were cleared for implementation with overall total cost of US\$ 22.718M. For the Climate Change focal area allocation, three (3) projects were cleared with overall total cost of US\$ 8.008M. A balance of about US\$0.532M under the biodiversity focal area was realized. Please refer to **Annex 2A** and **Annex 2B** for the list of projects for Biodiversity and Climate Change.

4. GEF 5- System for Transparent Allocation of Resources (STAR)

With the conclusion of the GEF4-RAF in June 2010, the newly replenished GEF Cycle trust fund, known as GEF 5, is now programmed for access based on the newly developed System for Transparent Allocation of Resources (STAR). The GEF 5 funds will be accessed and provided based on its consistency and relevance with the STAR's strategic objectives. The GEF 5 funds will be available from July 1, 2010 to June 30, 2014.

The GEF 5 has four (4) Strategic Goals, namely.

- Strategic Goal 1: Conserve, sustainably use and manage biodiversity, ecosystems and natural resources globally taking into account the anticipated impacts of Climate Change.
- Strategic Goal 2 Reduce global climate change risks by: i) stabilizing atmospheric GHG concentration through emission reduction actions; ii) assisting countries to adapt to climate change, including variability
- Strategic Goal 3 Promote the sound management of chemicals throughout their life cycle to minimize adverse effects on human health and the global environment
- Strategic Goal 4 Build national and regional capacities and enabling conditions for global environmental protection and sustainable development.

In this NPF Document, the GEF STAR three focal areas, namely: Biodiversity, Climate Change, and Land Degradation and non-STAR focal areas are included in the discussions.

A. STAR Focal Areas:

1. Biodiversity (US\$25.96 million): The goal of the biodiversity focal area is the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services. To achieve this goal, the strategy encompasses five (5) objectives:
 - Improve sustainability of Protected Area (PA) systems through increased financing, expanded ecosystem and threatened species representation, and improved management effectiveness;
 - Mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors through strengthened policy and regulatory frameworks, implementation of invasive alien species management framework, and strengthening capacities to produce biodiversity-friendly goods and services;
 - Build capacity for the implementation of the Cartagena Protocol on Biosafety (CPB) by supporting efforts that protect biodiversity from the potential risks of living modified organisms produced through modern biotechnology;
 - Build capacity of governments and other stakeholders (i.e. indigenous peoples and local communities, scientific community) for meeting their obligations under Art. 15 of the CBD on access to genetic resources and benefit sharing; and,
 - Integrate CBD obligations into national planning processes through enabling activities such as revision of the National Biodiversity Strategy and Action Plan (NBSAP), integrating biodiversity into sectoral and national planning, and implementation of the Clearing House Mechanism (CHM).
 2. Climate Change (US\$8.83 million): The overall goal of the climate change focal area is to mitigate climate change and support developing countries and economies in transition toward a low-carbon development path. To achieve this goal, the strategy encompasses five (5) objectives:
 - Promote the demonstration, deployment and transfer of advanced low carbon technologies through enabling policy environment and mechanisms, and by avoiding GHG emissions;
 - Promote market transformation for energy efficiency in industry and the building sector through appropriate policy, legal and regulatory frameworks, sustainable financing and delivery mechanisms, and avoiding GHG emissions;
 - Promote investment in renewable energy technologies (RETs) through favorable policy and regulatory environment for RE investments, and avoiding GHG emissions;
 - Promote energy efficient, low-carbon transport and urban systems through sustainable transport and urban policy and
-

- regulatory frameworks, investments in less-GHG intensive systems, and avoiding GHG emissions; and
- Conserve and enhance carbon stocks through sustainable management of land use, land use change, and forestry, good management practices, restoration, and avoiding emissions and sequestering carbon.
3. *Land Degradation (US\$1.04 million)*: The goal of the land degradation focal area is to contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation. This can be achieved by promoting and supporting effective policies, legal and regulatory frameworks, capable institutions, knowledge sharing and monitoring mechanisms, together with good practices conducive to SLM and that are able to generate global environmental benefits while supporting local and national, social and economic development. The expected impact is sustained productivity of agro-ecosystems and forest landscapes in support of livelihoods. The strategic objectives are the following.
- Maintain and improve flows of agro-ecosystem services to sustain the livelihoods of local communities;
 - Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest-dependent communities;
 - Reduce pressures on natural resources from competing land uses in the wider landscape; and
 - Increase capacity to apply adaptive management tools in sustainable land management.

The overall goal for GEF-5 investment in Sustainable Forest Management (SFM) is to achieve multiple global environmental benefits from the management of all types of forests and strengthen sustainable livelihoods for people dependent on forest resources. The GEF-5 strategy identifies two objectives that will drive the SFM portfolio and contribute to reach that goal: (a) Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services; and, (b) Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities.

B. NON-STAR Focal Areas:

The two (2) GEF Focal Areas under the non-STAR category are the International Waters and Persistent Organic Pollutants.

1. International Waters (IW): The strategic objectives under the International Waters Focal Area are to: 1) catalyze multi-state cooperation to balance conflicting water uses in transboundary surface/groundwater basins while considering climatic variability and change; 2) catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change; 3) support foundational capacity building, portfolio learning, and targeted research for ecosystem-based, joint management of transboundary water systems; 4) promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ) directed at preventing fisheries depletion (joint with BD); and, 5) undertake pilot-scale demonstrations of pollution reduction from Persistent Toxic Substances, particularly endocrine disruptors (joint with Chemicals).
2. Chemicals: The strategic objectives under the chemical focal areas are to : 1) extend to environmentally sound disposal of POPs-containing waste; 2) support cost effective efforts to phase out ozone-depleting substances in countries with economies in transition to meet their Montreal Protocol compliance obligations and 3) assist countries to address chemicals in an integrated manner in their national planning, and help mobilize other sources of financing for projects and programs for sound chemicals management to achieve global benefits.

The goal of the GEF's chemicals program is "to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment." To achieve this, the three following objectives are proposed for Chemicals under GEF-5:

- Phase out POPs and reduce POPs releases;
- Phase out ODS and reduce ODS releases; and
- Pilot sound chemicals management and mercury reduction.

5. GEF-5 NATIONAL PORTFOLIO FORMULATION DOCUMENT

This National Portfolio Formulation Exercise provides the venue for the government and the NGOs, CSOs and academe to discuss and interact on the challenges and interventions needed to address the country's environment and natural resources management concerns thereby strengthen its sense of ownership and puts forward a greater understanding of its natural resources management and conservation thrusts and directions.

During the early consultation activities among the GEF implementing partners and stakeholders, the idea of developing a National GEF business plan was proposed and discussed. The realization of this proposal was achieved through the GEF grant assistance for the conduct of the National Portfolio Formulation Exercise (NPFE) to develop a National Portfolio Formulation Document (NPF) that will serve as a guide in utilizing the GEF resources and a road map that puts in place the necessary milestones and lamp posts for the efficient use of the limited GEF resources. Moreover, the document enables the government, and GEF to determine project outcomes and impacts vis-à-vis national interests and global strategies.

The document presents the basis and criteria for prioritizing key interventions/projects under the STAR and Non-STAR focal areas . It contains the priority projects and concepts identified for GEF-5 support.

It is important to note that the criteria and parameters for identifying and prioritizing programs, projects and concepts are strengthened and secured as the primary feature of the portfolio document.

It should be noted, however, that these projects, though having been prioritized, may still undergo further iterations and articulations based on what may be optimal and sustainable, especially as the country moves forward towards a more programmatic approach in accessing and utilizing the limited GEF resources provided. Henceforth, the list of priority projects may be adjusted and/or enhanced.

In the course of the preparation of the NPF Document two (2) major outputs were accomplished as follows:

1. Creation of the GEF-Philippines National Steering Committee (NSC). Please see **Annex 3** for the Terms of Reference (ToR) of the GEF-NSC; and
2. Inclusion/participation of the CSO representatives as member of the GEF-Philippines NSC

Prior to the conduct of the NPFE, there are four (4) project proposals ((2) national and (2) regional projects) that were already endorsed. These are as follows:

- National
 1. 5th Operational Phase for the Upgraded Philippines-GEF Small Grant Project (SGP)
 2. Pilot Mercury Waste Prevention and Management for Fluorescent Lamps and Batteries (UNIDO-EMB)
- Regional
 3. Establishment and Operation of a Regional System of Fishery Refugia in the South China Sea and Gulf of Thailand (UNEP-BFAR)
 4. Science and Innovation Networks for Coral Reef Resilience (UPMSI)

6. PROJECT IDENTIFICATION AND PRIORITIZATION CRITERIA

The proposed programs, projects and concepts for GEF 5' funding were prioritized based on a set of specific criteria and prioritization parameters developed and adopted by each Multilateral Environmental Agreement Focal Point Agency Review Committee (MEA-FPARC). Please refer to **Annex 4**. The prioritization took into careful consideration the development directions and thrust presented in the latest Philippine Development Plan (PDP) for 2011 to 2016.

In terms of the cross-cutting parameter, gender responsiveness take into consideration the following:

- Various roles and responsibilities of women and men in the productive and reproductive spheres;
- How women may be supported in their role in managing environmental resources;
- Varying needs of women and men in environmental management, resource use and conservation;
- Men and women equal access to information on proposed environmental management strategies should be ensures; and
- Women (especially those from the communities) are actively participating in the entire decision making and project management processes.

The criteria and specific parameters in identifying and prioritizing proposals per focal area are as follows:

1. Biodiversity: The eligibility parameters developed for selecting concepts and proposals to be funded under the biodiversity focal area are the following:

- Stakeholder ownership and country-drivenness. The proposal should get the endorsement of concerned government agencies and key partners. (For those with previous investments, commitments and active involvement of stakeholders should have been manifested).
- Aligned with the national biodiversity priorities or complement existing investments.
- Must be responsive to achieving the:
 - Millennium Development Goals (MDG),
 - Philippine commitments to the Convention on Biological Diversity (CBD),
 - Convention on Wetlands,
 - the Cartagena Protocol on Biosafety,
 - all other MEAs, United Nations Convention on the Law of the Sea (UNCLOS), United Nations Declaration on the Rights of Indigenous People (UNDRIP), and
 - The Coral Triangle Initiative (CTI).
- Aligned with the National Biodiversity Strategy and Action Plan (NBSAP), and the Philippine Development Plan (PDP).
- For the biological and socio-economic aspects, the following should be taken into consideration:
 - Biological Criteria
 - Adopt the ecosystem-based approach (site selection shall be based on KBAs and the PBCPP)
 - Should address resistance, ecosystem resilience, rehabilitation/restoration (e.g. in terms of climate change and disaster risk reductions)
 - Address biological connectivity such as agroforestry
 - Socio-Economic Criteria
 - Support community well being and livelihoods.
 - Protect indigenous and traditional knowledge systems
 - Incorporate rights-based approach in project development and implementation
 - Promote equitable sharing of benefits particularly for indigenous and local communities
 - Facilitate the establishment, and support existing governance structures at various levels
 - Promote good governance mechanisms for transparency and accountability
- Support new tools and technologies that will aid in integrating biodiversity in decision-making processes
- Measurable impacts and benefits at the country level, apart from the environmental benefits

- A well-defined sustainability plan (e.g financial, institutional, provision of innovative activities that would address systemic issues)
 - When tied to a loan, the loan component should not support countervailing/conflicting activity or pose potential threat to the biodiversity conservation objective of the project,
2. Climate Change: The Climate Change Commission (CCC) through its Climate Change Office (CCO) has drafted criteria for evaluation and prioritization which reflect a) Previous IACCC Criteria; b) National Framework Strategy on Climate Change c) National Climate Change Action Plan. The must criteria for evaluating and prioritizing project proposals is that it should address and contribute to the country's compliance to its commitment to the UNFCCC. Specifically, the criteria and ranking for prioritizing projects are as follows:

Criteria	Ranking
Aligned with the National Framework Strategy on Climate Change, the National Climate Change Action Plan, and the Philippine Development Plan (2011-2016).	30%
Geared towards the following strategic thrusts at the local level (ECO-towns): <ul style="list-style-type: none"> • Renewable Energy • Environmentally Sustainable Transport 	25%
Develop and improve local capacity in project implementation even after expiration or termination	20%
Preference shall be given to projects with full grant	15%
Projects with national scope or coverage shall be preferred whenever possible	10%

3. Land Degradation:

Within the context of the Philippine National Action Plan, the Land Degradation focal area intends to support programs/projects that will:

- Provide livelihood opportunities in rural areas and improve their resilience to land degradation and climate change;
- Prevent depletion and degradation of natural resources and protect biodiversity through sustainable land management practices that consider these resources as interdependent ecosystems; and
- Contribute to the global efforts to reduce poverty, protect human lives, and ensure environmental sustainability through synergy with other Conventions.

For projects, concepts and proposal intended for GEF5 funding under the Land Degradation focal area, these should be aligned relevant to the three Major Thematic Programs and seven Thematic Clusters of the Philippine National Action Plan to Combat Desertification, Land Degradation and Drought (2010-2020) as well as the Philippine Development Plan (2011-2016). These three major Thematic Programs are:

- Sustainable Agriculture and Natural Resources Based Livelihood Development;
- Sustainable Use and Management of Ecosystems; and
- UNCCD as a National Adaptation Platform “To Address Land Degradation and Food Security, and Improve Resilience to Natural Disasters”.

The Land Degradation efforts are also expected to fall into any of the seven (7) Thematic Clusters, which are:

- Sustainable Land Management Technologies (including Adaptation);
- Capacity Building and Awareness Raising;
- Knowledge Management and Decision Support;
- DLDD and SLM Monitoring and Assessment;
- Policy, Legislative, and Institutional Framework;
- Funding and Resource Mobilization; and
- Participation, Collaboration and Networking.

In addition, the program/project proposals and concepts must also meet the following key criteria.

- Geographical conformity of proposed project sites with the priority landscapes located in DLDD vulnerable areas as indicated in the Philippine NAP;
- Positive Socio-economic and environmental impacts;
 - Sustainable livelihood
 - Sustainable ecosystems
 - Sustainable financing (e.g. PES)
- Builds Institutional capacity;
 - Quantity and quality of human resources
 - Infrastructure including facilities
 - Technical support to LGUs
 - High replicability and up-scaling potential

7. IDENTIFIED PRIORITY CONCEPTS AND PROJECTS

Based on the selection and prioritization criteria developed by the respective MEA Focal Point Agency Review Committees, programs, projects and concepts that were identified and listed as possible programs and projects for GEF 5 (STAR and non-STAR) funding are enumerated below.

A. STAR Focal Area:

A total of twenty one (23) projects and concepts were identified for GEF 5 STAR funding. These projects, are still in various stages of preparation. Further follow-ups and operational and technical articulation will be required to accurately determine which projects will best make use of the limited fund resources and ultimately achieve the desired natural resources management and development objectives of both the country and GEF. It will be the responsibility of the MEA Focal Point Agency Review Committees to further and fully apply the criteria they developed in finalizing the list of projects to be presented/submitted to the GEF 5 National Steering Committee (NSC) for affirmation and endorsement to the GEF OFP. The GEF 5 NSC will ensure that the projects are consistent with the GEF and national objectives and do not overlap in terms of scope and objectives, doable, and makes effective use of the GEF resources within the prescribed limit. The GEF-OFP will subsequently endorse proposed projects approved by the NSC to the GEF Secretariat for review and approval.

The indicative project cost for the priority and long list of project proposals for funding under the STAR is US\$70.9 million.

1. Biodiversity:

For the Biodiversity focal area, with an STAR allocation of about US\$26 million, ten (10) projects and concepts have been identified/prioritized for GEF 5 STAR funding with an indicative project cost of USD37.4 million. These proposed programs/projects are:

- a. Conservation and Management of Marine Key Biodiversity Areas in the Philippines;
- b. Agricultural Biodiversity Conservation and Sustainable Use for Food Security and Ecosystem Enhancement;
- c. 5th Operational Phase for the Upgraded Philippines Small Grants Programme;
- d. Designing and Applying a Mechanism to integrate Biodiversity Values into National and Local Accounting Systems;
- e. Improve Cost Effectiveness, Mainstream Biodiversity Conservation and Increase Climate Change Resiliency of

- Vulnerable Communities in the Management of Degraded Forests, including Protected Areas;
- f. The Philippine Biodiversity Strategic Action Plan 2020: Towards Sustainable Financing and Integration into Poverty Alleviation and Development;
 - g. Strengthening Management of ASEAN Heritage Parks on Prevention and Control of Invasive Alien Species Project;
 - h. Implementing Social Marketing and Capacity Building for Community Behavior Change in support of (i) Improved protected area governance, enforcement and effectiveness and (ii) recognition of alternative protected areas governance mechanisms to strengthen the Philippine National Protected Areas System;

In addition, the WB/GEF proposal entitled “Central Philippines Rural Development Project “ is included in the list of projects under the Biodiversity and International Waters Focal areas. The proponent intends to replicate the successes of its on-going GEF-Mindanao Rural Development Project (MRPD) and improve on it through co-financing for Central Philippines. The proposed project promotes the objectives of the GEF and will contribute to the protection and sustainability of the marine resources in the covered areas. Further, both agencies agreed that the project be carried out as a convergence undertaking among DA, DENR and the Department of Agrarian Reform (DAR).

Likewise the FAO proposal entitled “Strengthening the Approaches that promotes Biodiversity Conservation through Adaptive Management of Cultural Heritage Systems” was also included in the long list for further review and evaluation of the GEF Secretariat.

The detailed description of the prioritized projects and concepts under the Biodiversity focal area are provided in **Annex 5**.

2. Climate Change:

Under the Climate Change Focal Area, the Climate Change Commission (CCC) has identified a number of projects for GEF funding based on submissions to the CCC. The brief descriptions of the proposed projects are shown in **Annex 6**. The list is categorized into two (2) major parts as follows:

- 2A. Priority Projects – These projects are regarded as projects that would be prioritized for the \$8.8 million allocated for the Philippines based on the ranking conducted by the Evaluation Committee organized by the Climate Change Office of the Climate Change Commission:
 - a. Mainstreaming Renewable Energy Technology to Local Government Units and Stakeholders

- b. Profiling of the Renewable Energy Resources Use and Potentials in Davao Region
 - c. Harnessing Marine Current for Electricity Generation for Island Communities
- 2B. Long list of projects – The Climate Change Office (CCO) of the Climate Change Commission (CCC) provided a long list of project proposals for consideration of the GEF Secretariat after the priority projects were identified. These proposed projects in the long list are:
- a. Technology Transfer and Promotion of Investments for Distributed and Off-Grid Hybrid Bioenergy to De-Carbonize Energy Plans towards a Low-Carbon Energy Path for the Philippines
 - b. Low Carbon Energy Program for MSMEs
 - c. Development and Promotion of Environmentally Sustainable Transport (PHIESTRA) / Participatory Approach in Promoting Environmentally Sustainable Transport Planning in the Philippines
 - d. Improve cost-effectiveness and mainstream biodiversity conservation in management of degraded forests, including protected watersheds (MULTI-FOCAL)
 - e. Asian Sustainable Transport and Urban Development Program (ASTUD)
 - f. Strengthening sustainable Resource Management of Bamboo for Climate Change Mitigation through Carbon Sequestration
 - g. Philippine Electric Vehicle Conversion Technology Transfer and Adaptation Support Project
 - h. Evaluation of Agricultural Land use Systems and Management Practices in Enhancing Soil Carbon Sequestration
 - i. Global Fuel Economy Initiative

3. Land Degradation:

There is only one project proposed for GEF 5 STAR funding under the Land Degradation focal area. It is entitled “Addressing Desertification, Land Degradation and Drought in the Philippines Through Sustainable Land Management”. The project aims to develop and implement a sustainable land management platform for the Philippines. The project initially comprises three (3) components, namely (a) enabling policy environment for the implementation of the Philippine National Action Plan to combat desertification, land degradation and drought and sustainable land management, (b) capacity building of Focal Point Agency (FPA) and key partners, and (c)

sustainable livelihood and farm level demonstration of SLM practices in selected areas, development and dissemination of package of technologies (POTS) for farmer organization and private sector . The project will pilot appropriate SLM strategies in key DLDD areas in the country. The snapshot of the relevant details of the project is provided in **Annex 7** of this document.

C. Non-STAR Focal Areas:

The ten (10) proposals identified as priority projects for endorsement and funding under the GEF 5 non-STAR focal areas of International Waters, Persistent Organic Pollutants (POPs), and Ozone Depleting Substances (ODS) are as follows:

1. International Waters

- a. Platform for Sustainable Development of Large Marine Ecosystems (LMEs) and Coastal Areas of East Asia Region-Scaling up through Country Partnership.
- b. Integrated Water Quality Management Project (IWQMP) for the Laguna de Bay, Pasig River and Manila Bay.
- c. Central Philippines Rural Development Project. (International Waters component), and
- d. Targeted Learning and Innovation: Capturing Coral Reef Ecosystem Services in East Asia.

The brief description of these project proposals are provided in **Annex 8**.

2. Chemicals (POPs and Mercury)

For the Chemicals focal area, five (5) projects have been identified namely,

- a. Improving the Health of Artisanal Gold Mining Communities by Reducing Mercury Emissions and Promoting Sound Chemical Management,
- b. Improving the health of vulnerable communities exposed to toxic pollution from recycling of used lead acid and cadmium batteries,
- c. Improving the environment and health of local communities by reducing active chromium pollution from tanneries in Meycauayan City,
- d. Global Mercury Project Phase II, and
- e. Environmentally Sound Management (ESM) of POPs Waste in Electronic and Electrical Equipment (WEEE) in East And South East Asia Region.

No project amount is yet specified for projects 1-4 and consultations with possible IAs are still being pursued (**Annex 9**).

3. Ozone Depleting Substance

For the ODS focal area, only one project was identified - The Philippines HCFC Project (Preparation Phase) aims to assist the Philippines to prepare a first stage HCFC Phase-out Management Plan (HPMP). The HPMP is an overarching strategy to describe the country's overall strategy in HCFC phase-out strategy from 2010-2040 with an initial cost estimate for the entire period (2010 to 2040) of about US\$25 million. The project is currently being prepared jointly with the World Bank and preparation activities will actively engage the Philippine Ozone Desk (POD) and will include the conduct of data surveys, provide inputs to document required, review consultant reports, initiate the first draft of the HPMP, and provide all logistic support.

Further, there are also two regional proposals noted for future consideration. These are:

1. Regional Programme on Marine and Coastal Invasive Species in the East Asian Seas region submitted by the COBSEA through the DENR – Environment Management Bureau, and
2. Establishment of Marine Protected Area Network in Southeast Asia.

REFERENCES

- Global Environment Facility (GEF) Strategic Planning Workshop Proceedings: Planning Document for GEF 5. DENR. January 2010.
- Environmental Science for Social Change. *Decline of the Philippine Forest*. Environmental Science for Social Change, Inc. and The Bookmark, Inc. Quezon City, Philippines.
- Philippine Development Plan: 2011-2016. Draft. National Economic Development Authority.
- Ong, P. S. L. E. Afuang and R. G. Rosell-Ambal (eds). 2002. *Philippine Biodiversity Conservation Priorities: A Second Iteration of the National Biodiversity Strategy and Action Plan*. Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau, Conservation International Philippines, Biodiversity Conservation Program-University of the Philippines Center for Integrative and Development Studies, and Foundation for the Philippine Environment, Quezon City, Philippines.
- World Bank. 2005. Overview of GEF Activities in the Philippines: Focus on Biodiversity Conservation. Rural Development and Natural Resources Management Sector Unit. East Asia and Pacific Region. Manila, Philippines.
- World Bank. 2003. *Governance of Natural Resources in the Philippines: Lessons from the Past, Directions for the Future*. Part I. Rural Development and Natural Resources Sector Unit, East Asia and Pacific Region, Manila, Philippines.
- World Bank. 2004. *Ensuring the Future: The World Bank and Biodiversity, 1988-2004*. The Environment Department, The World Bank, Washington, D. C., USA.
- World Bank. 2004. *Governance of Natural Resources in the Philippines: NRM Way Forward Action Plan for the Philippines*. Part II. Final Report. Rural Development and Natural Resources Sector Unit, East Asia and Pacific

LIST OF ANNEXES

Annex 1	Philippine Development Plan Goals And Strategies
Annex 2	List Of Approved GEF Projects
Annex 2A	List of RAF Biodiversity Projects
Annex 2B	List of RAF Climate Change Projects
Annex 3	Terms of Reference of the GEF-Philippines National Steering Committee
Annex 4	NPFE Consultation Process
Annex 5	Biodiversity Priority Projects
Annex 6	Climate Change Identified Projects
Annex 7	Land Degradation Project
Annex 8	International Waters Proposal
Annex 9	Persistent Organic Pollutants Proposals

ANNEXES

Philippine Development Plan (2011-2016)
Goals and Strategies to Rationalize MEA Priority Projects and Concepts

The specific goals and strategies of the government in which the MEA focal area committees have taken into account in further rationalizing their priority projects and concepts are the following.

Goal 1. Improved conservation, protection and rehabilitation of natural resources: In order to improve the conservation, protection and rehabilitation of the country's natural resources, sustainable use and integrated management of natural resources will be pursued. Natural resources management activities are directed to enhance the state of the different ecosystems and the natural resources within them to provide communities dependent on natural resources with sustainable livelihoods. Along this line, the implementation of national action plans on forest, biodiversity, coastal and marine resources and wetlands will be prioritized. Mechanisms and policies that would rationalize the use of the country's land and mineral resources will also be pursued. Also consistent with the National Framework Strategy on Climate Change, integrated ecosystem-based management will continue to be adopted as a major strategy for sustainable natural resource management as well as to adapt to climate change scenarios. As a safeguard for all undertaking impacting on ENR, a mechanism for third party Cost - Benefit Analysis (CBA), including environmental and social costs and benefits should be enforced. The following are the strategies to achieve this goal.

- Sustainably manage forests and watersheds
- Improve protection and conservation of biodiversity
- Enhance coastal and marine resources management
- Improve land administration and management
- Manage a more equitable utilization of mineral resources
- Develop and implement environment-friendly enterprise and livelihood opportunities.

Goal 2. Improved environmental quality for a cleaner and healthier environment: In order to provide communities with healthier environment, the quality of the air, land and water should be improved. Important to the improvement of environmental quality is the full implementation of laws and other regulatory measures. Furthermore, measures to reduce pollution and waste generation will be pursued. Promotion of green jobs and greening the industry are win-win solutions that should be vigorously pursued.

- Reduce air pollution in Metro Manila and other major urban centers
- Reduce water pollution to improve water quality in priority river and other economically and ecologically important water bodies
- Reduce wastes generated and improve waste disposal

- Establish a healthier and livable urban environment

Goal 3. Enhanced resilience of natural systems and improved adaptive capacities of human communities to cope with environmental hazards including climate-related risks

- Strengthen institutional capacities of national and local governments for climate change adaptation (CCA) and disaster risk reduction and management (DRRM)
- Enhance the resilience of natural systems
- Improve adaptive capacities of communities

In order to achieve the above three goals and to realize an environment that is healthy, ecologically-balanced, sustainably productive, climate-change resilient, the following cross-cutting strategies will be pursued:

- Effective environmental governance
- Continued institutional strengthening and capability building
- Research, Development, Extension and Knowledge Management
- Environment and Natural Resource Financing

List of Approved Projects under the GEF

I. National:

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
1	79	Conservation of Priority Protected Areas	STRM-1991	1994	Biodiversity	FSP	IBRD-WB	NGOs for Integrated Protected Areas (NIPA-DENR)	20,000	0	0	2,856	Project Closure with unsatisfactory performance due to failure to implement agreed actions.
2	432	Enabling Activity to Prepare the Philippines First National Report to the CBD and establishment of a CHM	EA	1998	Biodiversity	Enabling Activity	UNDP	PAWB-DENR	0.0363	0	0	0.02	The project has been operationally completed
3	653	Coastal and Marine Biodiversity Conservation in Mindanao	2	1999	Biodiversity	FSP	IBRD	DENR	1,250	0	0	4,800	Project Closure (2005) with satisfactory rating towards achieving its objectives and expected outcomes. Six have been proclaimed as Marine Sanctuaries in Bongo Island project site and established theParil-Sangay site as a Protected Seascape under the DENR NIPAS Act.
4	799	Conservation of the Tubbataha Reefs National Marine Park and World Heritage Site	2	1998/2000	Biodiversity	Medium Size Project	UNDP	World Wildlife Fund	749,714	146,000	25,000.00	984,7	Project Closure (2005) All Project activities have been completed
5	2	Samar Island Biodiversity Project: Conservation and Sustainable Use of the Biodiversity of a Forested Protected Area	3	1997/2000	Biodiversity	FSP	UNDP	DENR	5,759,470	610,000	350,000	7,198	Project Completed (2011) Project office was continuously maintained, developed and adopted the revised rate for Samar Island Natural Park fees and charges
6	798	Sustainable Management of Mount Isarog	3	2000	Biodiversity	Medium Size Project	UNDP	CARE Phil.	750,000	146,000		1,475	The project was operationally closed in (2005) with remaining balance used n packaging and publishing of at least 5 relevant KM on Biodiversity
7	913	Biodiversity Conservation and Management of the Bohol Islands Marine Triangle	2	1999/2001	Biodiversity	Medium Size Project	UNDP	FPE	718,270	146,000	25,000	637,6	Project Closure.
8	1089	Asian Conservation Company	2	2002/2004	Biodiversity	FSP	IBRD	IFC	1,600,000	186,000		14,80	Project Completion.

List of Approved Projects under the GEF

I. National:

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
9	1440	Assessment of Capacity Building Needs for Biodiversity Conservation and Management in the Philippines (add on)	EA	2001	Biodiversity	enabling activity	UNDP	PAWB-DENR	157,350	23,603			
10	1185	Integrated Coastal Resources Management Project	2	2000/ 2004	Biodiversity	FSP	ADB	DENR	9,000,000	872,920	335,000	54,00	Further processing approval due to fiscal constraints of the Philippine Government
11	3859	Partnerships for Biodiversity Conservation: Mainstreaming in Local Agricultural Landscapes	RAF BIO (1)	2009	Biodiversity	FSP	UNDP	PAWB-DENR, FFI, Haribon Foundation, Phil Conserve, and CI Philippines	4,500,000	459,320	93,200	9,100	CEO endorsed
12	3606	Expanding and Diversifying the National System of Terrestrial Protected Areas	RAF BIO (2)	2008	Biodiversity	FSP	UNDP	PAWB-DENR	3,500,000	350,000		3,860	Implementation on going
13	80	Leyte-Luzon Geothermal	6	1991/ 1994	Climate Change	FSP	IBRD	PNOC	30,000,000			1,303	Project Closure- Yearly Targets were completed since 1997. The grant closed in mid 2000.
14	328	Enabling the Philippines to Prepare National Communication Program in Response to its Commitments to UNFCCC	EA	1997	Climate Change	Enabling Activity	UNDP	EMB-DENR	154,500				An annual work plan was prepared. Preparatory activities were done for the various sectoral consultations and FGDs among concerned sectors
15	652	CEPALCO Distributed Generation PV Power Plant	7	1999	Climate Change	FSP	IBRD	IFC	4,000,000		25,000	3,500	The plant has been in operation since April 2004
16	785	Metro Manila Urban Transport Integration Project - Marikina Bikeways Project Component	11	1999/2000	Climate Change	FSP	IBRD	LGU- Marikina City	1,700,000	467,000	175,000	186,0	Project Closure with development rating of satisfactory. Bikelanes completed and yielded substantial benefits
17	29	Palawan New and Renewable Energy and Livelihood Support Project	6	1999/2000	Climate Change	Medium Size Project	UNDP	Center for Renewable Resources and Energy Efficiency (CRREE)	750,000	146,000		1,800	Project Closure
18	854	Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas)	EA	2000	Climate Change	Enabling Activity	UNDP	DENR	100,000	15,000			CEO approved

List of Approved Projects under the GEF

I. National:

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
19	1071	Rural Power	6	2001/ 2002	Climate Change	FSP	IBRD	DOE	10,000,000	1,200,000	350,000	26.50	Under implementation till December 2012. Project implementation progress is satisfactory.
20	1264	Capacity Building to Remove Barriers to Renewable Energy Development	6	1999/ 2001	Climate Change	FSP	UNDP	DOE	5,143,000	382,000	305,000	18.32	Project Completion. The project sponsored the RE Bill. Target activities were completed such as trainings on wind resources assessment and website development and operationalization, among others.
21	1532	Electric Cooperative System Loss Reduction Project	5	2002/ 2003	Climate Change	FSP	IBRD	NEA	12,000,000	1,202,000	350,000	50.50	Under implementation till December 2011. Project implementation progress is satisfactory in terms of regulatory and policy reforms towards strengthening of the Electric Cooperatives.
22	1103	Efficient Lighting Market Transformation Project	5	2000/ 2004	Climate Change	FSP	UNDP	DOE	3,130,655	382,000	97,800	12.02	Project Completion- approval by President GMA of the Palit Ilaw (lamp exchange) AO directing EELs use in government agencies and completion of the policy study on lamp waste management among others.
23	2108	Philippines Sustainable Energy Finance Program	5&6	2003/ 2006	Climate Change	FSP	IBRD	IFC	5,300,000	477,000		20.00	Under implementation till 2012.
24	3243	Climate Change Adaptation Project, Phase 1	SCCF	2007/ 2008	Climate Change	FSP	IBRD	DENR-DA and DOST PAGASA	4,974,000	525,700	283,000	25.43	CEO endorsed in 2010. Since the project effectivity, the project activities implemented include among others the following: (i) familiarization workshops for the staff, both at the national and local levels, to be involved in carrying out the project, and (ii) Preparation of WFP for each component, procurement packages for equipment and ToRs of Consultancy services were also underway. Opening of designated accounts (both dollar and peso) was also established.
25	3601	CF: Industrial Energy Efficiency	RAF CC (1)	2008	Climate Change	FSP	UNIDO	DOE-DTI-BPS	3,166,065	316,607	85,650	13.20	CEO Endorsed in 2011

List of Approved Projects under the GEF

I. National:

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
26	3771	Chiller Energy Efficiency Project	(OP5) RAF CC (2)	2008	Climate Change	FSP	IBRD	DENR-DBP/LBP/Chiller owners	2,600,000	260,000		51.27	CEO Endorsed in 2010.
27	2759	Manila Third Sewerage Project (MTSP) - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia	10	2005	International Waters	FSP	IBRD	DENR	5,000,000		350,000	87.81	Under Implementation. Among others the following were accomplished: (i) MOA with 10 cities and municipalities, 7 partner agencies were signed. The MOA formally shared commitment between these agencies to address existing water quality problems in the catchment areas, pollution problems and its health implications to the people, (ii) Updating of the MWSS master plan is also ongoing, (iii) Conducted workshop on the "Financial Tools and Structure Applicable to Sanitation Projects" (iv) Prepared general design of the Sewerage and Septage Treatment plan for Maynilad Water Services Inc. and (v) drafting of the AO for the designation of San Juan River System as Water Quality Management Area (WQMA).
28	2159	National Capacity Self-Assessment (NCSA) for Global Environmental Management	EA	2003	Multi Focal Area	Enabling Activity	UNDP	DENR	200,000	30,000		99.96	Project Completion
29	2761	National Program Support for Environment and Natural Resources Management Project (NPS-ENRMP)	OP 12,3,15, 2	2005/ 2006	Multi Focal Area	FSP	IBRD	DENR	7,000,000	661,500	350,000	50.00	Under implementation till December 2012.
30	2975	Mindanao Rural Development Program Phase II - Natural Resource Management Project	RAF BIO (3)	2007/ 2008	Multi Focal Area	FSP	IBRD	DA	6,486,363	662,137	135,000	123.8	CEO endorsed
31	3054	Strengthening Coordination for Effective Environmental Management (STREEM)	OP CB	2006/ 2009	Multi Focal Area	Medium Size Project	UNDP	DENR	475,000	50,000	25,000	515.0	Under implementation till 2012

List of Approved Projects under the GEF

I. National:

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
32	3887	Agusan River Basin Integrated Water Resources Management	RAF BIO (4)	2009	Multi Focal Area	FSP	ADB	DENR	2,932,000	318,000	250,000	75.00	Council approved
33	3980	CTI Integrated Natural Resources and Environmental Management Sector	RAF BIO (5) and RAF CC (3)	2009	Multi Focal Area	FSP	ADB	DENR	3,530,000	382,100	291,000	102.0	CEO endorsed targeted for completion in 2017
34	4338	Fifth Operational Phase of the GEF Small Grants Programme in the Philippines	STAR	2011	Multi Focal Area	FSP	UNDP	UNOPS	4,583,333	366,687		4,600	Council approved
35	4418	GEF National Portfolio Formulation Document	GEF 5	2010	Multi Focal Area	Enabling Activity	GEF SEC	DENR	30,000				NPF Document under finalization. Fund support is yet to release by GEF Sec.
36	1449	Initial Assistance to the Philippines to Meet its Obligations Under the Stockholm Convention on POPs	OP 14	2001	POPs	Enabling Activity	UNDP		500,000	54,000		82.00	IA approved.
37	2329	Global Programme to Demonstrate the Viability and Removal of Barriers that Impede Adoption and Successful Implementation of Available, Non-Combustion Technologies for Destroying Persistent Organic Pollutants (POPs)	OP 14	2004	POPs	FSP	UNIDO	DENR	4,565,000	382,000		7,762	At the Commissioning Stage
38	3622	Integrated POPs Management Project: Dioxins and Furans, PCB and Contaminated Sites Management	GEF 4	2008	POPs	FSP	IBRD	EMB-DENR and DOST	8,640,000	888,001	240,000	17.72	At the Procurement Stage (grant effectiveness dated June 24, 2011)

List of Approved Projects under the GEF

II. Regional

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
1	385	Asia Least-Cost Green House Gas Abatement Strategy	EA	1991	Climate Change	Enabling Activity	UNDP	ADB & UNOPS	9,500,000.00			3,500,000	Operationally completed in 1998 with the final ALGAS Review Board meeting held in July 1999 back to back with Donors Consultation Meeting. Project concepts to help reduce the growth of greenhouse gas (GHG) emissions were developed for possible funding by various Multilateral and Bilateral donor agencies.
2	1384	Biodiversity Indicators for National Use	OP 3, 2, 4	1999/2002	Biodiversity	Medium Size Project	UNEP	World Conservation Monitoring Center	823,200.00	146,000	25,000	610,001	Project Closure/completed
3	3957	Removing Barriers to Invasive species Management in Production and Protection Forests in SE Asia	RAF BIO (6)	2009/ 2010	Biodiversity	FSP	UNEP	DENR- CABI	3,081,045	331,855	237,500	3,646,850	PPG Completed.
4	3647	CTI The Coral Triangle Initiative Programme	RAF	2008	MultiFocal		ADB/UNDP/FAO/IBRD						Council endorsed
5	3524	CTI Sulu-Celebes Sea Sustainable Fisheries Management Project (SCS)	GEF 4	2007/ 2008	International Waters	FSP	UNDP	UNOPS	2,890,000	297,500	85,000	3,420,000	The project has conducted the Inception Meeting last September 2010, Clark, Pampanga, Philippines; It has drafted a the TORs of Management Bodies, such as ; (i) Project Steering Committee (PSC) , (ii) Technical Advisory Group (TAG), (iii) National Co-ordinator (NC), and (iv) Inter-ministerial Co-ordinating Committee (IMCC); It conducted the first Project Steering Committee meeting last April 14-15, 2011, Manila, Philippines. The TORs of the PMBs were reviewed and approved during the PSC meeting. Accomplishments for that period was also presented during the meeting.

II. Regional

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
6	3589	CTI Coastal and Marine Resources Management in the Coral Triangle, Southeast Asia under the CTI Programme	RAF BIO (7)	2008	MultiFocal	FSP	ADB	DENR-DA-BFAR-NGOs	10,310,000	1,080,001	500,000	76,000,000	CEO endorsed
7	3756	CF: Reducing Industry's Carbon Footprint in South East Asia Through Compliance With a Management System for Energy (ISO 50,000) (PROGRAM)	GEF 4	2008	Climate Change	FSP	UNIDO						Council endorsed
8	2751	SFM Rehabilitation and Sustainable Use of Peatland Forests in South-East Asia	RAFBIO (8)	2007	Multi Focal Area	FSP	IFAD	PAWB-DENR and ASEAN Secretariat and Global Environment Centre	4,513,144	515,914	340,000	12,577,168	Accomplishments to date are mostly focused on the preparatory activities to meet the outcomes. There was a delay in project implementation, hence, Philippines' request for extension until 2012 was already approved. Each country resubmitted a revised work and financial plan and integrated the unfinished tasks during the 1st and 2nd quarters.
9	3619	CTI Strategies for Fisheries Bycatch Management	GEF 4	2009	International Waters	FSP	FAO	BFAR and SEAFDEC	3,000,000	319,500	195,000	6,700,000	CEO endorsed
10	3523	CTI West Pacific-East Asia Oceanic Fisheries Management Project - under the Coral Initiative	GEF 4	2007	International Waters	FSP	UNDP	UNOPS/WCP FC	925,000	100,000	75,000	2,200,000	CEO approved
11	396	Prevention and Management of Marine Pollution in the East Asian Seas	OP 9	1993	International Waters	FSP	UNDP	International Maritime Organization	8,000,000		25,000	3,400,000	Project Closure
12	3025	World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia (Tranche 1, 2nd Installment)	OP10	2007	International Waters	FSP	IBRD	World Bank		900,000		80,870,000	Council approved

II. Regional

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
13	2188	East Asian Seas Region: Development and Implementation of Public Private Partnership in Environmental Investments	OP 10	2003	International Waters	Medium Size Project	UNDP	IMO	1,000,000	146,000		808,500	Various meetings, training workshops cum action planning were conducted in all the participating countries to build confidence and capabilities in public-private sector partnership (PPP) as a viable means of financing and sustaining environmental facilities and services for the protection and sustainable use of the marine and coastal resources of the East Asian Seas region.
14	885	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand	OP 8	1996/ 2000	International Waters	FSP	UNEP	BFAR-DENR - EAS/RCU	16,414,001	587,000	335,000	16,399,000	Development of proposed framework for regional cooperation in marine environment in the South China Sea was developed , among others to address transboundary environmental problems.
15	597	Building Partnerships for the Environmental Protection and Management of the East Asian Seas	OP 9	1998	International Waters	FSP	UNDP	IMO	16,224,000			12,321,000	Project Closure
16	3572	Regional Plan for Introduction of BAT/BEP Strategies to Industrial Source Categories of Stockholm Convention Annex C of Article 5 in ESEA Region	GEF 4	2009	POPs	Medium Size Project	UNIDO	Ministries of Environment in ESEA countries	950,000	100,000	50,000	1,900,290	CEO Approved
17	2700	Implementation of Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)	OP 9	2006/ 2007	International Waters	FSP	UNDP	IMO-UNOPd	10,876,336	1,041,870	700,000	33,374,400	Under implementation till 2012
18	3853	Building Capacity for Regionally Harmonized National Processes for Implementing CBD Provisions on Access to Genetic Resources and Sharing of Benefits	GEF 4	2009	Biodiversity	Medium Size Project	UNEP	ASEAN Secretariat, ACB, United Nations University Institute of Advance Studies (UNU-IAS)	750,000	75,000		750,000	CEO Approved

II. Regional

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
19	3732	Demonstration of BAT and BEP in Fossil Fuel-fired Utility and Industrial Boilers in Response to the Stockholm Convention on POPs	GEF 4	2008/ 2009	POPs	FSP	UNIDO	DENR-EMB	4,000,000	440,000	400,000	7,800,000	O- going
20	1916	Marine Aquarium Market Transformation Initiative (MAMTI)	OP 2	2003/ 2004	Biodiversity	FSP	IBRD	Marine Aquarium Council	6,620,000	1,044,000	295,000	15,365,734	IA Approved.
21	518	Emergency Response Measure to Combat Fires in Indonesia and to Prevent Regional Haze in South East Asia	STRM	1998	Multi Focal Area	Medium Size Project	UNEP	UNEP	750,000			6,000,000	Project Completed (2011) Project Closure/completed
22	3871	4th Operational Phase of the GEF Small Grants Programme (RAF2)	RAF BIO (9)	2009	Multi Focal Area	FSP	UNDP		42,714,904	1,708,598		43,000,000	CEO endorsed ; Philippines RAFContribution (US\$ 1.6M)
23	3515	4th Operational Phase of the GEF Small Grants Programme (RAF1)		2007	Multi Focal Area		UNDP		3,999,093	150,907			CEO endorsed ; Philippines RAFContribution (US\$ 0.8M)
24	1802	Demonstrating and Promoting Best Techniques and Practices for Reducing Health-care Waste to Avoid Environmental Releases of Dioxins and Mercury	OP 14, 10	2002/2005/ 2006	POPs	FSP	UNDP	DOH with HCWH and WHO	10,326,455	1,105,141	724,948	13,544,437	Philippines GEF US\$ 1.044M with co financing of US\$ 1.425M - Under implementation.
25	1685	Fuel Cells Financing Initiative for Distributed Generation Applications (Phase I)	OP 7	2003		FSP	IBRD/IFC	IFC	5,550,000	922,000	25,000	9,000,000	Under implementation till 2014
27	172	Biodiversity Country Studies - Phase I	EA	1992	Biodiversity	Enabling Activity	UNEP	National Biodiversity Institutions/ National Scientific Organizations	5,000,000			801,000	Project Completed

II. Regional

No.	GEF ID	Project Title	GEF Cycle/OP	Year Approved	Focal Area	Project Type	GEF agency	Executing Agency	GEF Grant (US\$ Million)	Agency Fee	PPG/PDF Grant	Cofinancing	Project Status
28	884	Reduction of Environmental Impact from Tropical Shrimp Trawling through Introduction of By-catch Technologies and Change of Management	OP 9	1997/ 2000	International Waters	FSP	UNEP	FAO	4,450,000	432,000.00	330,000.00	4,440,000	IA Approved.
29	1609	Renewable Energy Enterprise Development - Seed Capital Access Facility	OP 6	2005/ 2008	Climate Change	FSP	UNEP	UNEP- Division of Technology Industry and Economics	8,400,000	480,000	300,000.00	40,500,000	Under implementation till 2013
30	616	Harnessing Multi-Stakeholder Mechanisms to Promote Global Environmental Priorities	OP 1,2,3,4,5,6,7	1999	Biodiversity	Medium Size Project	UNDP	Earth Council	725,000		25,000.00		CEO Approved
31	1439	Efficient Lighting Initiative (ELI)	OP 5	1998/ 2000	Climate Change	FSP	IBRD	IFC	5,650,000			33,000,000	IA Approved.
32	2127	Conservation and Adaptive Management of Globally Important Agricultural Heritage Systems (GIAHS)	OP 13 and RAF BIO (10)	2002/ 2007/ 2008	Biodiversity	FSP	FAO	DENR-CAR	3,500,000	422,500	725,000	14,500,000	Under implementation till 2013
33	1599	Development of Strategic Market Intervention Approach for Grid-Connected Solar Energy Technologies (EM POWER)	OP 7	2002/ 2003/ 2004	Climate Change	Medium Size Project	UNEP	UNEP and KfW	975,000	146,000	25,000	986,000	Project closure

RESOURCE ALLOCATION FRAMEWORK (RAF)

As of September 30, 2011

FOCAL AREA: BIODIVERSITY

A. List of Endorsed/Approved Project

PROJECT NO.	PROJECT NAME	GEF AGENCY	PROJECT TYPE	ALLOCATION (in Million US\$)	Approved GEF Grant (GEF database)	Remarks
	Revised Total Allocation			23.250		
2975	Mindanao Rural Development Program Phase II-Coastal Marine Biodiversity Conservation II (MRDP II-CMBC II)	World Bank	Full-sized Project (national)		3,567,300.00	Council approved, April 24, 2008
2127	Conservation and Adaptive Management of Globally Important Agricultural Heritage Systems (GIAHS)	UNDP/FAO	Full-sized Project (Global)		560,357.00	Under implementation till 2013
2751	Rehabilitation and Sustainable Use of Peatlands in SouthEast Asia	IFAD	Full-sized Project (Regional)		249,000.00	Accomplishments to date are mostly focused on the preparatory activities to meet the outcomes. There was a delay in project implementation, hence, Philippines' request for extension until 2012 was already approved. Each country resubmitted a revised work and financial plan and integrated the unfinished tasks during the 1st and 2nd quarters.
3515	Strategy for the Utilization of RAF Resources (SGP)	UNDP	Full-sized Project (Global)		800,001.00	CEO endorsed
3871	Strategy for the Utilization of RAF Resources (SGP)	UNDP	full-sized Project Global)		1,600,000.00	CEO endorsed

RESOURCE ALLOCATION FRAMEWORK (RAF)

As of September 30, 2011

FOCAL AREA: BIODIVERSITY

3606	Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines	UNDP	Full-sized Project (national)		3,850,000.00	Implementation on going
3589	CTI Coastal and Marine Resources Management in the Coral Triangle: Southeast Asia under the GEF Pacific Alliance for Sustainability	ADB	Full-sized Project (Regional)		3,410,000.00	CEO endorsed targeted for completion in 2017
3859	Biodiversity Partnership Program (BPP)	UNDP	Full-sized Project (national)		5,052,520.00	CEO endorsed
3887	Agusan River Integrated Basin Management Project	ADB	Full-sized Project (national)		1,500,000.00	Council approved
3980	Integrated Natural Resources Management Project (INREMP)	ADB	Full-sized Project (national)		1,498,750.00	CEO endorsed targeted for completion in 2017
3957	Removing Barriers to Invasive Species Management in Production and Protection Humid Forests in South East Asia	UNEP - FAO	Full-sized Project (Regional)		629,750.00	PPG Completed,
11	Establishment and Operation of Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand	UNEP	Full-sized Project (Regional)			Endorser Sept 22, 2008; still awaiting approval; project cost is \$659,450.00
	Grand Total RAF			23,250,000.00	22,717,678.00	
	Balance RAF				532,322.00	RAF Balance

Annex 2B

**FOCAL AREA: CLIMATE CHANGE
as of September 30, 2011**

	PROJECT TITLE	GEF AGENCY	PROJECT TYPE	ALLOCATION (in Million US\$)	Approved GEF Grant (based on GEF website)	Remarks
	<i>Revised Total Allocation</i>			<i>8.000</i>		
3601	Industrial Energy Efficiency	UNIDO	FSP		3,576,886.00	CEO Endorsed in 2011
3771	Chiller Energy Efficiency Project	World Bank	FSP		2,860,000.00	CEO Endorsed in 2010.
3980	CTI Integrated Natural Resources Management Project (INREMP)	ADB	FSP		1,571,350.00	CEO endorsed targeted for completion in 2017
	Total			8,000,000.00	8,008,236.00	

Balance RAF

(8,236.00)

TERMS OF REFERENCE
GEF-Philippines National Steering Committee

Membership

1. A Steering Committee will be composed of the following as members:
 - a. DENR- GEF Operational Focal Point (Chair)
 - b. DFA- GEF Political Focal Point (Co-Chair)
 - c. NEDA (Vice-chair and representing the oversight agencies)
 - d. DENR-PAWB (representing the MEA Technical Committee on Biodiversity)
 - e. Climate Change Commission (representing the MEA Technical Committee on Climate Change)
 - f. DA-BSWM (representing the MEA Technical Committee on Land Degradation)
 - g. Civil Society Sector (3)¹
2. The membership of the Steering Committee may expand to additional 1-2 seats for the representatives of the MEA Technical Committees for proposals under GEF 5 non-STAR focus areas, if and when these are created².
3. The DENR - FASPO will function as the Committee's Secretariat. The Secretariat is tasked to provide administrative and logistical assistance relevant to ensuring effective coordination and information dissemination between and among the members of the NSC. The Secretariat is also responsible for documenting and keeping on file the proceedings of the NSC meetings.
4. The organizations representing the Civil Society sector will perform its tasks for a period of two (2) years.³ After which, the members of the sector may either retain the incumbent organizations or select new organizations to represent the CSO sector in NSC
5. In cases when a proposal being presented and deliberated by the NSC directly involves an organization representing the Civil Society sector, that organization will inhibit itself from

¹ The Civil Society sector is understood as constituting non-government organizations (NGOs) and the academe. Refer to Attachment 1 for the criteria for selecting the representatives of the Civil Society Sector.

² Non-STAR concerns may be presented and discussed by either the EMB or the FMB

³ The qualifications and expected tasks of the CSO representative are presented in Attachment 1

participating in the deliberation for that specific proposal. A replacement may be identified by either the civil society sector or, in cases where urgency is needed, by the DENR.⁴

6. The NSC may invite resource persons or organizations to aid the NSC in its functions and tasks. This is particularly important in clarifying and facilitating a better understanding of the recommended proposals and projects.
7. The NSC may also invite persons or organizations as observers during meetings subject to the rules and procedures agreed upon by the NSC.

Accountability and Reporting

1. The National Steering Committee shall be responsible and accountable to the Secretary of DENR.
2. The NSC will submit to the DENR Secretary a report of the NSC proceedings. Copies of the report will also be provided to the members of the NSC.
3. Representatives of the MEA Technical Committees and the Civil Society sector will ensure that results of the NSC meetings are disseminated to their respective member agencies and organizations, to the extent possible.

Meetings

1. The regular meetings of the NSC will be aligned with the requirements and meetings of the GEF Council.
2. The NSC may call for "special" meetings in instances when it is determined as urgent and absolutely necessary.

Functions

The GEF 5 National Steering Committee shall have the following functions:

1. Recommend to the GEF Operational Focal Point, policies and guidelines that will stimulate and aid in the development and

⁴ An option may be that the concerned organization will simply inhibit itself in the discussions and could leave the room during the deliberation to return once the discussion is over. It may also be that the NSC may decide that the concerned representative, after inhibiting himself/herself may be asked to be a resource person to clarify issues or points not clear to the other NSC members vis-à-vis the concerned project.

implementation of GEF supported projects consistent with the rules and principles of the GEF 5 STAR.

2. Recommend for approval to the GEF Operational Focal Point, project concepts and proposals for submission to GEF Council for GEF 5 (STAR and non-STAR) funding following the prioritization criteria and the agreed upon procedures⁵.
3. Make recommendations for capacity building interventions, which may include workshops and orientations/training relevant to the coordination, development and implementation of GEF 5 supported projects.
4. Based on the specific MEA Technical Committee's monitoring of the implementation progress and outcomes of the project, the NSC may recommend steps to either improve implementation progress or sustain the emerging outcomes or current projects, and for future interventions, provide inputs for improving project design and implementation arrangements.
5. Ensure that there is consistency, synergy and complementation with other offices and committees that are identified as having similar functions, mandates (such as the National Technical Coordinating Committee among others) and those implementing GEF-supported projects.
6. Provide the GEF Focal Point guidance, insights and recommendations on the Philippines' input and contribution to the discussions at the level of GEF Council and correspondence to the GEF Secretariat on matters pertaining to the formulation, endorsement and implementation of GEF-supported projects and programs

Term of Office

1. The GEF 5 NSC will function and perform its tasks until the end of the GEF 5 cycle.
2. A revisit and evaluation of the NSC's performance will be undertaken by the DENR at the end of the GEF 5 cycle.
3. Based on this evaluation, and in consideration of policy directions of the next GEF cycle (GEF 6), the DENR may enhance and strengthen the current GEF 5 NSC to ensure its relevance.

⁵ The technical review of submitted proposals is expected to be undertaken by the specific MEA Technical Committee. It is this committee that will approve the proposals and recommend the NSC's affirmation.

Attachment 1

NOTE ON THE CIVIL SOCIETY SECTOR AND ITS REPRESENTATION IN THE GEF 5 NSC

Civil Society Organizations

Defining civil society and civil society organizations has been a consistent area of development, debate and evolution. In many popular literature, the concept has had varied discussions particularly in the academic field. However, a universally accepted definition of civil society and the institutions built on its principles remains elusive. A useful but brief attempt may be found in the following characteristics listed by the British Library⁶.

- Civil society refers to *voluntary* participation by average citizens and thus does not include behavior imposed or even coerced by the state.
- For some observers, it only includes political activity engaged in through nonprofit organizations such as non-government organizations (NGOs) At the other end of the spectrum, some observers include all forms of voluntary participation, whether in the public or private sector, political or apolitical.
- Civil society includes not just the individuals who participate, but the institutions they participate in--sometimes called "civil society organizations" or "CSOs."

Hence, the features of voluntarism, democracy, broad based agenda, non-profit, and non-government primarily characterize CSOs.

CSO and GEF

The GEF has consistently advocated and encouraged the active participation of the civil society sector in beneficiary countries. In fact, there is a clear direction to enable active participation of country-specific CSOs in the GEF Council. In some cases, the CSOs themselves are implementers and beneficiaries of GEF assistance. In the case of the Philippines, the impact and effectiveness of CSO participation in the GEF, whether be it at the institutional or implementation levels, need to be assessed carefully. Nevertheless, it is clear that CSO in GEF activities provide constructive partnerships and strong country ownership.

⁶ "Civil Society" - An Agreed Definition (2003) available from <http://pages.britishlibrary.net/blwww3/3way/civileoc.htm>; Internet.

For the purpose of enabling positive and effective CSO participation in the GEF 5 NSC, the CSO sector is recognized to include the variety of technical and operational involvement of these organizations in the multi-disciplinary aspects of natural resources management. Hence, the CSOs in the GEF NSC are those that have been acknowledged as having had clear working relations with the governments and communities that have undertaken GEF-assisted activities.

Criteria for Selecting Representatives of the Civil Society Sector

Organizations selected by the Civil Society sector will be based on the following criteria/qualifications:

1. Willingness and able to participate in the NSC meetings and related activities.
2. Willingness and able to ensure that there is transparency in NSC decisions and in other relevant NSC activities
3. Have substantial knowledge of GEF procedures.
4. Possess the experience in developing and implementing GEF projects and programs
5. Possess substantial knowledge and skill on building and strengthening linkages between international, national and local institutions, policies, plans and programs.
6. Have experience and is articulate in the multi-disciplinary dimensions of GEF projects.
7. Able to communicate NSC decisions and agreements to other CSO members
8. Able to gather feedback and inputs from CSO members and communicate this to the NSC

Tasks of the CSO representative

Aside from the tasks expected from the CSO representative as a member of the NSC, the CSO representative is also expected to perform the following responsibilities.

1. Actively participate in NSC activities
2. Ensure that CSO interests and concerns are expressed during the NSC meetings and other related activities
3. Provide feedback to the CSO members on the decisions, agreements and other related developments discussed and taken up during the NSC meetings
4. Ensure transparency in the activities of the NSC
5. Ensure that there is constructive working relations between the CSO members and the GEF Focal Points (Political and Operational) and the MEA Focal Points (Focal Area Technical Committees)

NPFE Consultation and Identification Process

Based on the 2004 WB study on GEF in the East Asia Pacific region, the key lessons learned in terms of ensuring successful GEF implementation are the following.

- Success depends heavily on a **supportive policy framework** and a strong commitment to enforcing regulations
- Conservation and NRM activities need to be **locally owned** in order to be effective
- Thorough **project preparation** is a must

With the new GEF 5 funds now available, and in accordance with the accompanying STAR, the Philippine government is now poised to revisit its GEF project identification and prioritization criteria and list of identified projects targeted for either continued assistance or new funding. A key consideration under the GEF 5 is the significance placed in country ownership and transparency over the identification of the proposed prioritized interventions.

Already, the government, led by the DENR through the GEF Operational Focal Point, has pro-actively initiated processes and actions that are envisioned to result in a list of proposed projects intended for GEF 5 funding. Among these are GEF and STAR orientation consultations within the key agencies and offices of the DENR as well as the academe and CSOs. Also, there were multi-agency and multi-donor consultations revisiting both the established prioritization criteria and proposed projects. Specifically, the discussion below presents the major activities undertaken to concretize the government's thrust and direction in accessing GEF 5 resources.

GEF 5 Policy Dialogue and NPFE Planning (January 12-13, 2010) – A 2-day GEF Policy Dialogue and Strategic Planning for GEF-5 was organized and conducted by the Department of Environment and Natural Resources (DENR) - Foreign Assisted and Special Projects (FASPO), the GEF Operational Focal Point (OFP) for the Philippines. The objectives and expected outputs of the workshop were to (a) develop the GEF-5 Philippine thrusts and directions and update/validate GEF Country Program; (b) identify projects to be considered for funding under GEF-5 allocation and update/develop prioritization criteria; and (c) to improve GEF-OFP operations- e.g. processes, procedures. The outputs of the activity included the establishment of focal area committees and the development of an initial set of prioritization criteria. A very tentative list of potential projects and concepts were identified for GEF 5 funding. A follow-up consultation activity was conducted by the Technical Committee on Biodiversity on June 17, 2010 to further discuss the GEF 5 and Plans/Process for identifying projects under the biodiversity focal area

Prioritization Criteria Workshop (June 23, 2010) - The primary objective of the activity was to concretize strategic interventions for each of the identified focal areas targeted for GEF support and the Adaptation Fund. Specifically, the activity sought to (a) affirm the government's GEF 5's Strategic Planning list of proposed projects for the three MEAs (Biodiversity, Climate Change, and Land Degradation); (b) enhance the government's GEF proposed prioritization criteria for Biodiversity and Climate Change projects; and (c) identify the comparative advantages of each GEF Implementing Agencies. The GEF-5 prioritization exercise involved four main activities as means for achieving its objectives, namely an overview of the STAR, revisiting prioritization criteria and listing priority projects, understanding and accessing the adaptation fund, and discussion of comparative advantages of each Implementing Agencies.

The first workshop activity resulted in five major outputs. The parameters for prioritizing Biodiversity (Annex 1) and Land Degradation Projects (Annex 2) were developed. These parameters were used as basis for determining the priority projects under the biodiversity and Land Degradation \ focal areas. There was no prioritizing criteria developed for Climate Change projects but a list of proposed projects was developed. The absence of final criteria for evaluation/prioritization is due to institutional changes. The Inter-Agency Committee on Climate Change (IACCC) previously evaluates/prioritizes and endorses to the operational focal point climate change projects for GEF financing. With the creation of the Climate Change Commission, the function of the IACCC was abolished. Hence, the Commission takes the role of the IACCC. The CCC shall review the criteria formulated by the IACCC.

The second workshop activity produced two key outputs. The first output is a comprehensive and broad list of proposed parameters for identifying and prioritizing projects to be proposed for Adaptation Fund support. The second output is an indicative list of projects, in concept form, to be further developed as possible interventions seeking assistance from the Adaptation Fund. A follow-up meeting held by the Biodiversity Technical Committee was held on August 24, 2010 to further discuss the project Eligibility Guide & Priorities and firm up identified projects and concepts under their focal area. The consultation activity included the active participation of partners and stakeholders.

Project Prioritization Workshop (December 1, 2010) - The workshop activity was a follow on to the June 2010 workshop which already resulted in the development of an initial list of criteria for prioritizing projects and concepts, as well as identifying initial priority projects and concepts for GEF 5 funding. Prior to this workshop, focused focal area committees convened and met to further discuss the results of the June 2010 workshop. The results of those meetings included, among others, a more definite prioritization criteria and list of priority projects and concepts. These results were presented in a plenary to further clarify operational concerns and address challenges. Among the points of interest raised and discussed

during the activity were the MEAs need to learn more about the comparative advantages of the IAs as well as establish stronger linkage with them, the need to strengthen synergy and convergence with government priorities (Medium Term Development Plan or Philippine Development Plan) needs to be understood more fully and explore means of building convergence, and the MEAs need for more assistance in moving project concepts to technical proposal especially in accordance with GEF processes and requirements.

MEA-IA Consultation on Prioritized Projects (December 16, 2010) - The main objective of the activity was to strengthen the latest list of projects targeted for GEF-funding by seeking affirmation and guidance from the GEF Implementing Agencies. Specifically, the activity sought to (a) establish greater synergy and consistency with IAs' country strategy and evolving GEF portfolio; (b) establish linkage and complementation with national priorities and development directions; and (c) determine areas of further work with regards to accessing and optimizing specific IA "comparative advantages". Among the key discussion points during the meeting were those concerning IA priorities, country ownership, and directions towards a more programmatic approach. It was noted that IA priorities and strategies are based on the government's interests and development directions. The primary function of IAs is to assist the government in proceeding and accomplishing its development objectives. This includes supporting priorities and projects in the environment sector. As such, it is important to establish mechanisms to strengthen complementation and synergy. Clearly, further discussions are needed to identify which projects can best make use of IA capacities and ensure successful implementation and achievement of its outcomes. A key to accessing IA advantages is to ensure that there is strong country ownership and that the projects and activities are country-driven. As such, it was emphasized that GEF funds should catalyze new approaches, tools, and strategies that are key for replication, scaling-up and sustaining positive outcomes. There was a discussion on whether GEF supported efforts be consolidated under a more programmatic approach. In relation to this, concerns were raised with regards to funding modalities and scale. There was specific concern over whether GEF-supported activities should be linked with "bigger" projects funded through loans and whether local benefits and truly achieved. Given past implementation experiences, it was noted that these activities might need to be linked to and with each other to avoid fragmented impacts and ensure sustainability. This was identified as a key discussion point with the IAs.

Focused IA Consultation Series (February 14-15, 2011) - The consultation series served as venue for the MEA Focal Points to discuss with the IAs the prioritized concepts/projects/proposals to be endorsed to GEF. The consultation sought to ensure that there is consistency and complementation between the MEAs' priorities and the IAs' strategic objectives and program and sought IAs' guidance and support in moving the prioritized concepts/proposals/projects forward. The consultations were participated by key officers and representatives of World Bank (WB), Asian Development Bank (ADB), UN Development Programme (UNDP), UN

Environment Programme (UNEP), World Bank (WB), UN Food and Agriculture Organization (FAO), and the UN Industrial Development Organization (UNIDO). This activity was able to establish stronger convergence of projects at the MEA, IA and national levels.

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Titel of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
1. Conservation and Management of marine Key Biodiversity Areas in the Philippines	<p>Policy: The Philippine government has put in place various legal and policy measures to protect and conserve the remaining biodiversity in the country. The Philippine Fisheries Code of 1998 and the Local Government Code of 1991 provides for the protection and responsible use of the country's marine resources. The devolution of issues and threats, which are site specific, at levels that are more meaningful and participatory in nature. Though this system is not fault-proof, its implementation resulted to a gamut of successful environmental management models that are recognized in the realm of coastal resource management. Executive Order 578 was signed in 2006 establishing a national policy on biodiversity conservation and prescribing its implementation throughout the country especially in the Sulu Sulawest Marine Ecoregion and the Verde Island Passage Marine Biodiversity Conservation Corridor. In 2006, Executive Order 533 mandated and provided for a national strategy for integrated coastal management (ICM) and the sustainable use of the coastal and marine resources in the country. The National Integrated Protected Areas System (NIPAS) covers over 4,092,635.87 hectares of terrestrial ecosystem which are under strict protection and some 202,922.08 hectares declared as buffer zones while about 1,323 sites are declared marine protected areas under municipal ordinances covering some 19,712.86 hectares of coastal areas (DENR-PAWR, 2008; Campos & Aliño 2007). However, only 20% to 30% of these MPAs are effectively managed (Arceo et al. 2008). The Wildlife Resources Conservation and Protection Act (Republic Act 9147) further provide the conservation and protection of biological diversity against overexploitation, abuse and illegal trade.</p> <p>MPA Establishment: The Philippines has over a thousand MPAs situated all over the country. Albeit not that extensive in area, these MPAs contributed to biodiversity conservation and provides refuge for recruits and spawning populations of commercially important fisheries species. MPA targets have been established in various polices and nationwide consultations such as those embodied in the Philippines Fisheries Code (Republic Act 8550), the Philippine Marine Sanctuary Strategy, the SSME Trinational MOU, and the Coral Triangle initiative (CT) National Plan of Action (NPOA) and Regional Plan of Action (RPOA). Weeks et al 2009 reported that only</p>	<p>Policy: Local and national level improvements on policies on MPA management and advancing an ecosystems approach to fisheries and coastal resources management which will include the creation of the functional marine protected area and enforcement networks</p> <p>MPA Establishment: It is an accepted fact that the number of MPAs in the country is not enough to compensate the levels of environmental degradation. MPA design will take into consideration locations, areas and sizes, proximity to other MPAs, connectivity within and among populations, and representations of ecosystems critical to effective science-based spatial management</p>	To enhance national and local capacity in applying ecosystem approach to coastal resources and fisheries management in mKBAs ; To strengthen and enhance the protection, conservation, and management of marine KBAs in the Philippines	6 years	\$9,000	Protected Areas & Wildlife Bureau (PAWB), Bureau of Fisheries & Aquatic Resources (BFAR-NFRDI, World Wildlife Fund Phil, Conservation International-Phils, Haribon Foundation, Fishbase Information and Research Group, World Fish, UPMarine UPMSI) Science Institute, Fisheries Info. Network	PAWB, BFAR-NFRDI, WWF Phil, Conservation International-Phils, Haribon Foundation, Fishbase Information and Research Group (FIN), World Fish, UPMarine UPMSI, Fisheries Information Network

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
	<p>4.9 percent of the country's coastal municipal waters are within these MPAs and 0.5 percent are under strict "no-take" regulations. Some 124 key Biodiversity Areas (KBA) spanning some 43,695 sq km have been identified using 209 globally threatened species as indicators. The Philippine mKBA process has achieved much in relation to prioritizing it into finer targets though achieving those targets still needs to be realized. Only 6-15 percent of these mKBA are within MPAs.</p>	<p>of marine biodiversity. This work aims to provide support for the implementation of the Philippines Marine Sanctuary Strategy which aims to contribute to the improvement of MPA management effectiveness in order to achieve at least 10% full protection of coastal areas by 2020. The project would also advance further the goal of marine biodiversity conservation that will address a combination of objectives from strict protection to sustainable use of marine resources, thereby also responding to targets set forth in the Philippine Fisheries Code (Republic Act 8550), the SSME Trinational MOU, and the Coral Triangle Initiative (CTI) NPOA and RPOA.</p>					
	<p>MPA Management Effectiveness: The majority of community-based MPAs in the country are not effectively managed due to issues in the process of establishment and capacity to implement sustainable measures. The ASEAN Centre for Biodiversity's 2009 MPA Gap analysis in the Philippines show dearth in data needed for proper MPA establishment and management. Only half of identified MPAs in the Philippines are with coordinates, some have been established outside marine biodiversity conservation and fisheries objectives (compliance to R.A. 8550) and majority are without the benefit of management plans. There is still need to fill evaluation of information on management effectiveness, e.g. MPA area boundaries, management jurisdictions and complementation, and other ecological and management concerns such as social-ecosystem integration, information and policy, good governance, capacity-building of the management groups; and resource capacity.</p>	<p>MPA Management Effectiveness: Improved MPA management effectiveness in the country, that takes into consideration the rudiments of a well managed MPA and addresses short-term and long-term goals in terms of sustainability of MPA management/ governance, adaptive ecosystem-based management embedded with a social reform agenda, enabling learning environment and empowered constituency, multi-stakeholder engagement including the private sector, market/ needs based approach to livelihoods and overall improvement in human well being, climate change impacts, and financing.</p>					

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
	<p>MPA Network: A national Marine Protected Areas Support Network was organized by the Marine Science Institute in partnership with community groups, academic institutions, NGOs and government agencies as an offshoot of the Philippine Marine Sanctuary Strategy in order to support MPA actions through complementary and collaborative efforts. For the past few years the MSN has consistently provided the grounds to test MPA management effectiveness in the country. This initiative has gained support and popularity among MPA managers and communities who strive to achieve national recognition. Another initiative is the alliance of community-based MPA managers known as Pambansang Alyansa ng Mallilit na Mangingisda at Komunidad na Nangangalaga ng Santuwaryo at Karagatan sa Pilipinas (PAMANAKA). It started with 33 member-sanctuaries that have grown to 122 in 2003. PAMANAKA continues to advocate the creation and implementation of laws to protect the marine and coastal environment and is currently a member of NGOs for Fisheries Reform (NFR). In the VIP, the center of shorefish biodiversity of the world (Carpenter & Springer 2005),</p> <p>a comprehensive biodiversity conservation program was set as mandated under EO578. The principal design of an ecological network of MPAs utilized ichthyoplankton distribution, their potential sources and sinks through dispersal modeling, local knowledge on resources –their uses and threats, including scientific assessments of marine resources and their threats. The data amassed and information generated were crucial to the stakeholders' participation and the program's success. The total area protected in the VIP has increased more than 15 times since the establishment of the Seascape in 2005, and now encompasses close to 17,000ha of critical habitats, which includes 2,400ha of no-take zones, 14,000ha of fishery reserves, and 300ha of mangrove forest conservation areas.</p>	<p>MPA Network: Adequate support to the Marine Protected Area Support Network to institutionalize the improvement of MPA management in the country. The (PAMANAKA) alliance can help catalyze capacity building and advocacy activities of other MPA managers/sanctuaries and encourage membership by other MPAs into the alliance. In the VIP, the MPA network is now in a critical stage where neighboring areas are eager to join in and contribute to conservation, and deliver on large expanses of protected areas as mandated under RA8550 (15% of coastal areas under strict protection). An enforcement network with almost 1,000 Bantay Dagat volunteers is in place but needs more membership and more support in their operations to meet the demands and task at hand. Dedication of the volunteers has seen the apprehension of many violators, and fishing communities now are beginning to see improvements in their catches. All these efforts need to be sustained and even strengthened.</p> <p>GEF Strategic Objective: Improve the Sustainability of Protected Area Systems; and Mainstream Biodiversity Conservation and Sustainable Use into Production Landscape/Seascape and Sectors</p>					

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
2. Agricultural Biodiversity Conservation and Sustainable Use for Food Security and Ecosystem Enhancement	<p>SEARICE in partnership with DA-Kasakalisan implemented Farmers' Field Schools for on-farm conservation and crop improvement in 35 communities in 17 provinces involving 824 farmers, who reported developing new diverse plant populations, significantly reducing the cost of production by 30%. The partnership also developed clear pedagogical approaches in mainstreaming agricultural biodiversity conservation and sustainable use, through participatory plant breeding in research and extension systems as well as within academic system. In some of the provinces, SEARICE in partnership with local government units have developed community based protection mechanisms to prevent misappropriation of community knowledge and biological resources through the setting up of community biodiversity registries, adoption of the principles of prior informed consent at community level, development of genetically modified organisms (GMO) free zones to protect Philippine biodiversity from genetic contamination and ensure on farm conservation. In addition, SEARICE has an existing model in Bohol of integrating maintenance of rice biodiversity as part of</p> <p>farm conservation. In addition, SEARICE has an existing model in Bohol of integrating maintenance of rice biodiversity as part of local tourism industry, as an exploratory model towards payment for environmental services. The participatory plant breeding work in 17 provinces is viewed as a form of non-monetary benefit sharing from the use of local biodiversity fostering continued conservation and use of diversity for food and agriculture.</p>	<p>1) <u>In situ conservation model developed.</u> The model to be developed is replicable and addresses the implementation of legal mechanisms of adaptive management that promotes the positive and mitigates the negative impacts of agriculture on biodiversity using target species of banana, Manila hemp, indigenous vegetables, yam and taro.</p> <p>2) <u>Partnerships in conservation developed.</u> The project will develop partnerships in conservation through strengthening involvement of various sectors in the community (government institutions, non-government institutions, farmers, traders, and other stakeholders), the development of a participatory <i>in situ</i> conservation strategy, and the improvement of linkages and coordination among institutions involved in PGR activities.</p> <p>3) <u>Sustainable operation of in situ conservation activities.</u> This outcome is geared towards strengthening the capacities of local communities and other stakeholders therein to manage sustainable agricultural biodiversity using banana, Manila hemp, indigenous vegetables, yam and taro and designate local PGR conservation centers (PGR-CC) to ensure sustainable operation of <i>in situ</i> conservation.</p>	<p>GOAL: A mainstreamed participatory biodiversity conservation and sustainable use of staple food and selected indigenous crops in prime and marginal production areas of the Philippines</p> <p>OBJECTIVES:</p> <p>1. To enhance diversity in Philippine indigenous crop species through an in-situ conservation strategy which integrates biodiversity conservation in agricultural production system sectors.</p> <p>2. To strengthen the management of Philippine agricultural biodiversity thru community-based development and sustainable use of major food crops and thru development of models of community-based benefit sharing in support of farmers' agricultural biodiversity and their maintenance of ecosystem services.</p>	4 years	6,000	DA RFU 3-CLARC, DA RFU 4A & 4B, DA RFU 4B-RIARC, DA RFU 7&8 EVIARC, DENR Tawi-tawi, DA- Sulu, FIDA, Bicolandia Greenfields Development, UPLBFI, USM, VSU, FIDA-V, DA RFU 1, DA RFU 5 Sorsogon ROS, DA ILIARC, BSU, ROS Sorsogon, ISU, Development Fund Oxno, Swedbio	Bureau of Agricultural Research (BAR), Southeast Asia Regional Initiatives for Community Empowerment (SEARICE), BSWM, FAO

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
		<p>4) <u>Community-based seed supply and product development system established and its operations sustained.</u> This outcome aims at establishing a community-based seed supply and product development system to enhance productivity of target communities. Likewise, it aims to enhance their capacity to sustain livelihoods by stimulating awareness of the benefits provided by a diverse genepool, through linkage between seed supply, product development as well as a marketing system.</p> <p>5) <u>Public awareness of PGR conservation developed.</u> This outcome will develop public awareness of PGR through the development of strategies in information, education and communication (IEC) to enhance awareness and utilization of diversity and advocacy for the passing of local ordinances on sustainable conservation and utilization of PGR.</p> <p>6. <u>National and provincial level framework for on-farm biodiversity conservation, development and sustainable use of major food crops developed.</u> The proposed action will operate in 17 provinces out of 82 provinces of the country in partnership with the National Integrated Pest Management (IPM) "Kasakalikan" of the Department of Agriculture, together with the regional field units of the Department of Agriculture, local government units and local civil society organizations. Different actions from household to community to provincial level will result to development of diverse strategies and approaches which will contribute to the development of national and provincial framework for the conservation and sustainable use of Philippine food crops, an essential cornerstone of the country's food security.</p>	<p>3. To assess abundance and diversity of soil biota in various agricultural land uses in the different pedo-ecological systems and to develop a package of technology for enhanced diversity of soil biota for sustained agricultural productivity and productive soil environment.</p>				

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
		<p>7. <u>Secured diverse local seed systems for major food crops.</u> This outcome will be developed through organizing and strengthening farmers' groups and local institutions to develop new and diverse varieties and populations per community, according to agro-ecological niches, farmers' needs and local preferences. Markets for local seed diversity, will likewise be developed as part of securing the supply for local seeds.</p>					
		<p>8. <u>Models of community based benefit sharing mechanisms for access to agricultural biodiversity and models for payments for environmental services (PES) from agricultural biodiversity.</u> SEARICE through the proposed actions will develop community based models for benefit sharing in relation to access to diverse agricultural biodiversity, mostly through non-monetary mechanisms such as technology transfer, capacity building and information exchange. Likewise, SEARICE shall build upon its previous experiences in developing community based PES models to support and sustain on-farm conservation work by farmers.</p> <p>9. <u>Empowered farming families with capacity to manage their agricultural biodiversity</u> will be achieved through the formation and strengthening of farmer groups and developing capacity building programs for farmers at practical field level and towards policy actions.</p> <p>10. <u>Capacities of local institutions to support through policies and technical competence farmers' innovations for conservation and sustainable use of agricultural biodiversity improved</u> by directly engaging them in project actions, developing capacity building programs and through joint policy research, advocacies and campaigns.</p>					
		<p>11. Baseline data on the population/ diversity of soil biota as influenced by agricultural land-use in different pedo-ecological systems</p>					

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
		<p>12. Impact evaluation of various agricultural inputs on soil biodiversity and productivity</p> <p>13. Recommendation on best soil management practices that enhance soil biodiversity</p> <p>14. Package of technology that enhance soil biodiversity and contributes towards sustained agricultural productivity and productive soil environment</p> <p>Strategic Objective: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscape/Seascape and Sectors</p>					
3. 5th Operational Phase for the upgraded Philippines GEF-SGP					4,900		SGP-UNDP
4. Designing and Applying a Mechanism to integrate biodiversity values into national and local accounting systems	<p>With the passage of the RA 7286, the Philippines NIPAS system provides for an effective structure to generate and allocate revenues through the Integrated Protected Areas Fund (IPAF). It operates as a trust fund and allow the PA generating the funds to allocate for itself, 75% of its earnings, while the remaining 25% is centrally managed and reallocated to other PAs. Thus, most protected areas are financed entirely out of government revenues, and systems to capitalize on alternative revenue streams such as ecotourism or ecosystem services. Several studies have been undertaken to estimate economic values and determine user charges. The use of payment for environmental services (PES) as a scheme of generating resources for PA management has been tested and implemented in a few sites. Other examples include the experience in Bukidnon, wherein a scheme has been developed called Rewarding Upland Farmers for Environmental Services (RUPES). A third dimension of financing is related to the development of business plans. One potential additional source of financing is LGUs. They are mandated under the Local</p>	<p>This is line with the target 2 of the Biodiversity Strategic Plan for 2011-2020 as adopted during the Conference of the Parties to the Convention on Biological Diversity last October 2010</p>	<p>a. To integrate biodiversity values into the national and local development and poverty reduction strategies and planning processes, and are being incorporated into the national accounting, as appropriate, and reporting systems, and influence Gross Domestic Product in the country</p>		4,350	3 years	<p>Resources, Environment and Economics Center Studies (REECS), Ateneo School of Government (ASoG), ADB</p>
	<p>Government Code to allocate some 20% of their internal revenue allotment for development, including environmental management. The private sector represents another innovative mechanism, as evidenced by the example of group of private individuals who reside in Danyugan Islands, Negros, to generate donations to conserve their areas.</p>	<p>GEF Strategic Objective: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscape, Seascape and Sector</p>	<p>b. To consider values of biodiversity in Gross Domestic Product to encourage alternative ways to sustainable consumption patterns</p>				

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
<p>5.Improve cost-effectiveness, mainstream biodiversity conservation and increase climate change resiliency of vulnerable communities in the management of degraded forests, including protected watersheds.</p>	<p>In 1989, DENR prioritize the implementation of Assisted Natural Regeneration (ANR) method through Memorandum Circular No. 17 for the rehabilitation and development of watersheds, protection and production forest. This mandates the application of the most economical method in accelerating the re-establishment of vegetative cover that approximates the natural forests, in terms of species diversity and composition. Likewise, DENR Administrative Order No. 91-31 or the Revised Guidelines for Contract Reforestation was issued for the adoption of ANR in the development of protection forests in production forestlands, e.g. riverbanks and areas with steep slopes. Since then, ANR applications were integrated in the implementation of the Community-Based Forest Management (CBFM), Timber License Area (TLA), Industrial Forest Management Agreement (IFMA), Socialized Forest Management Agreement (SIFMA), protected, mining and watershed areas.</p> <p>In 2006, with FAO assistance, DENR initiated a three-year project, which focused on imparting ANR techniques, awareness raising and testing the approach on small-scale pilot sites. Cost-effectiveness assessment of the applied techniques confirmed that ANR reduces the costs of forest restoration by 50 percent compared with conventional reforestation approaches, while successfully preventing forest fires and enhancing local biodiversity. Due to reoccurring forest fires, the actual success rate of the reforestation efforts in the Philippines is less than 30 percent, according to some assessment, therefore the fire management strategies piloted at the project bear particular importance.</p>	<p>The proposal focuses on both protected watersheds and degraded forests outside of PAs, and is consistent with BD Strategic Objectives (Objective 1: Improve the sustainability of protected area systems, and Objective 2: Mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors; specifically addressing outcome 2 "Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks". Proposed activities are also addressing SFM objectives to "Reduce pressures on forest resources and generate sustainable flows of forestry ecosystem services" and will work on increasing ecological connectivity and improving forest biodiversity values at landscape level. The project plans to work on monitoring and reducing GHG emissions from deforestation and forest degradation, thus addressing CC objective 5, specifically through supporting adoption of good management practices within the forestland and restoring and enhancing carbon stocks.</p> <p>1. Strengthened capacities of Local Government Units (LGUs) and watershed management units for informed decision making for management and restoration of degraded watershed based on piloting, documenting and monitoring the impacts of cost-effective SFM practices on conserving and enhancing globally important biodiversity.</p>	<p>Overall goal: Improve the sustainability and increase the management efficiency of large areas of degraded forests, including protected watersheds, while creating livelihood opportunities and enhancing biodiversity values at landscape level through cost-effective sustainable forest management (SFM).</p> <p>Objectives: 1. Mainstream biodiversity and climate change considerations into the policy and regulatory environment and integrate cost-effective SFM practices within long term management plans of protected watersheds. 2. Strengthen institutional capacity for documenting the biodiversity and climate change mitigation impacts of cost-effective SFM, and for creating enabling environments for up-scaling and replication.</p>	5 years	650	Food and Agriculture Organization (FAO- (Regional Technical Cooperation Programme), DENR (Upland Development Programme, National Greening Programme)	Forest Management Bureau, FAO

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
	<p>Based on the assessments conducted, the 3 pilot sites have elements of high conservation significance with presence of several threatened species classified in the IUCN Red List of Threatened Species as Vulnerable and CRITICALLY ENDANGERED. Moreover, it is noteworthy to confirm that in the span of 17-18 months, notable changes have been observed in the biodiversity of the sites, which could be attributed to the application of ANR method (i.e. faster growth of seedlings, emergence of wildlings of important forest species to advance the state of forest ecosystem).</p> <p>The positive experiences of the pilot project attracted the strong support from DENR and various stakeholders. As a result, DENR issued a national policy on October 8, 2009 wherein ANR is one of the major activities in forest restoration of tenurial instrument holders. Likewise, ANR was mainstreamed in the forestry plans and programs particularly in the Upland Development Program (UDP) of the DENR per DENR Memorandum Order Nos. 2008-04 and 2010-04. In addition, ANR was institutionalized in the mining sector through officially included ANR as one of the selection criterion for the Best Mining Forest Program Award starting in 2010. Executive Order No. 26 or the implementation of National Greening Program is a vehicle that will lead to the restoration of 1.5 million hectares of lands of public domain for a period of 6 years from CY 2011-CY 2016 wherein ANR as a restoration strategy will form</p> <p>Strong support from various stakeholders include the expansion of ANR site in Bataan in Lamao Forest Reserve through forging of a Memorandum of Agreement (MOA) between the Municipality of Limay, Bataan and DENR on October 29, 2008 for its co-management, with financial assistance from Petron Corporation as part of their Corporate Social Responsibility (CSR). The ANR site in Bohol was expanded also with support from IFGE. The Davao del Norte site received support for maintenance and expansion through the Countryside Development Assistance Fund. Within its limited scope, the project piloted some creative approaches, such as channeling portion of local ecotourism revenues to ANR activities, and creating public-private partnerships with Phillex Gold Philippines-Bulawan, Shannalyne Inc., and Petron Corporation for post-project site maintenance. In the Philippines, CSR has received increased attention by the private sector, but the country is yet to officially adopt CSR enabling legislation, and despite rising popularity of forestry credits at the VCMs, private companies are facing confusion over modalities of various offsetting schemes.</p>	<p>2. Management costs of degraded forests and protected watersheds are significantly reduced through successfully integrating cost-effective SFM practices in the long-term management plans of approximately 20,000 hectares, identified through a collaborative process that considers conservation priorities and socio-economic conditions.</p> <p>3. Participatory models for biodiversity-based payments for local communities living in and around protected watersheds are developed, and are informing the formulation of enabling policies and regulatory mechanisms.</p> <p>4. Increased awareness and demand of private sector to support cost-effective SFM practices as part of their Corporate Social Responsibility (CSR).</p>	<p>3. Develop and document incentives for community participation and private sector investment in cost effective SFM of degraded forests.</p>				

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
	<p>During the pilot work it has been recognized that considering the size of degraded forestland (e.g., some 6 million hectares of low-productivity Imperata grasslands alone) including areas within important watersheds and protected areas, there is a strong need for landscape level restoration and impacting large areas of degraded forests and watersheds. As globally important endemic species are fragmented and scattered throughout the country rehabilitation of degraded forestlands has to consider the complexity of each site, and this is difficult to achieve by applying only conventional reforestation methods or by only focusing on natural regeneration. Capacities for cost-benefit assessment have to further enhanced to fully integrate cost-effective SFM in long-term management objectives of degraded forestland and important watersheds.</p>	<p>5. Community-based models for documenting and monitoring carbon sequestration fluxes are developed and are supporting national carbon accounting efforts.</p> <p>6. Reduced occurrence and minimized risks of forest fires through community-based fire management, which is as an integrated component of cost-effective assisted natural regeneration.</p> <p>7. Livelihood opportunities for local communities living in and around protected watersheds are diversified through piloting cost-effective assisted natural regeneration that supports the growth of economically important NTFPs and increases eligibility and opportunities for income generation through no-fire bonuses.</p> <p>GEF Strategic Objective: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscape/Seascape and Sectors</p>					

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
6. The Philippine Biodiversity Strategic Action Plan 2020: Towards sustainable financing and integration into poverty alleviation and development	<p>At the 10th Conference of Parties of the Convention on Biological Diversity held in Nagoya, it was acknowledged by parties that the Convention has not been able to reach its objective of stopping the loss of biodiversity. Reviewing the 4th National Report from the Government of the Philippines, the report noted the difficulty in reporting following the guidelines set by the SCBD considering that there is no adequate baseline information, no target and corresponding indicators associated with the previous plans. Neither was there a monitoring mechanism in place for the report to base its findings. The Biodiversity Monitoring System (BMS) and BINU were available but could be further improved and more clearly linked to the Biodiversity Strategy and Action Plan. The report sections focused on 7 ecosystems and generally structured to show the status, trends and threats. But because data was aggregated from various available sources, the level of detail for each section depended on what information was gathered. The report did identify many sources of information and contribution to implementing the strategic plan from different levels of government and various players from civil society, academic sectors but little from the private sector. The report also flagged insufficient funding as an issue in enabling the implementation of the Strategy and Action Plan and mentioned innovative funding mechanisms as solution. However, very few examples on financing options were identified except for mention of user fees and information on the Integrated Protected Area Fund collection. No in-depth assessment of the IPAF was provided.</p>	<p>This proposal in addition to developing the revised Philippine Biodiversity Strategy and Action Plan for 2020, will also focus on trying to take actions to help provide some priming actions addressed at meeting the targets under strategic goals A and D.</p> <p>1. <u>Strategic goal A</u> basically focuses on <u>Addressing the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</u> with 4 targets focusing on 1) public awareness raising; 2) integrating biodiversity values into national and local development and poverty reduction strategies; promote positive incentives and remove or reform negative incentives harmful to biodiversity conservation; and steps taken for sustainable production and consumption and keep impact of use of natural resources within safe ecological limits.</p> <p>3. The proposal will address primarily the biodiversity focal area of the GEF. It addresses mainly the biodiversity objective of integrating CBD obligations into national planning processes and subsequently the objectives to improve the sustainability of protected area systems and mainstreaming biodiversity conservation and sustainable use into production landscapes/seascapes and sectors.</p>	<p>To integrate the Republic of the Philippines obligations under the Convention on Biological Diversity (CBD) into its national development and sectoral planning frameworks through a renewed and participatory biodiversity planning and strategizing process, in a manner that is in line with global guidance contained in the CBD's Strategic Plan for 2011-2020.</p>	3 years	750	PAWB, USAID, Birdlife- International /HARIBON, UNDP	PAWB UNDP

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of June 30, 2011

Titel of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
7. Strengthening Management of ASEAN Heritage Parks on Prevention and Control of Invasive Alien Species Project	<p>The ASEAN region has witnessed how the introduction of certain species into ecosystems turned into virtual nightmares. The ASEAN Biodiversity Outlook, a consolidated report and analysis of the state of biodiversity in the region based mainly on the AMS 4th National Reports submitted to the CBD, accounts that the trend in invasive alien species is increasing and at a critical stage. The status and information on these drivers of biodiversity loss are not very much known due to limited information, which all the more makes it an emerging concern. Although notable initiatives in IAS are pursued (especially in the Mekong Subregion and in some AMS), these efforts are deemed insufficient given the potential magnitude of impacts of these species. The absence of monitoring protocol adds to the seriousness of the issue. The Janitor Fish (<i>Pterygoplichthys pardalis</i> and <i>P. disjunctivus</i>) in Philippine waters, <i>Mimosa pigra</i> in the Greater Mekong Sub-Region, and the golden apple snail in Vietnam rice fields are just a few of the documented invasive species that have caused many damages amounting to billions of dollars in the regions ecosystems and biodiversity. However, there is very little documentation or study at all on the impacts of invasive alien species in the region, more</p> <p>so on its impacts in protected areas especially the ASEAN Heritage Parks. A study in 2009 by Kelvin S.-H. Peh (Invasive Species in Southeast Asia: The Knowledge so Far) shows that the 'current knowledge of the invasive species in this region is mostly based on anecdotal observations'. The Global Invasive Species Database (http://www.issg.org/database/welcome/) is a very useful information source/tool focusing on invasive alien species threatening native biodiversity and covers all taxonomic groups from micro-organisms to animals and plants in all ecosystems.</p>	<p>The proposed project is consistent with the GEF Focal Area Strategies on Biodiversity, Land Degradation, and Sustainable Forest Management/REDD-plus Framework, which maintains coherence with the GEF 5 strategy. The threats posed by invasive alien species is well recognized by the ASEAN Member States, as indicated in their 4th National Reports to the CBD. However, not all of the AMS have an established management plan in place to address these threats; although all of the AMS have their NBSAPs, they are also quick to acknowledge that the devt. of a management plan will soon be developed or in the pipeline. Yet even with these IAS mgt. plans in the pipeline, there is a need to carefully consider how these will be applied to heritage parks and protected areas. The status of invasive species are most often at the national level, but for heritage parks and</p> <p>protected areas, being special ecosystems of interest and concern, there is a need to further establish the presence of IAS in these areas, especially their specific impacts. The incremental activities requested for GEF financing and the associated benefits to be delivered by the project would include establishing the status and impacts of IAS in heritage parks and protected areas. The information that will be generated from this will be utilized in the development of the management framework, and the capacity-building needs of the park managers and other stakeholders</p>	Objective: To address the need to manage Invasive Alien Species and ensure that its negative impacts will be mitigated, especially in protecting ASEAN Heritage Parks and other protected area systems	48 months	750	KfW and GIZ	ASEAN Centre for Biodiversity (ACB), UNEP

Note: Other Proponents may also be considered during the PIF preparation.

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of July 20, 2011

Title of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
8. Central Philippines Rural Development Project	<p>The proposed GEF Component will not overlap MRDP2 GEF since the latter covers selected areas in Mindanao, while the GEF component under the CPRDP will cover key biodiversity areas in the Eastern Seaboard running from the Southern Luzon to Visayas. This will basically follow the design and approach adopted under MRDP2's NRM-GEF with some modifications/improvement such as mainstreaming adaptation and disaster risk reduction in the preparation and/or updating the LGU's coastal resource management plan following "ridge to reef" approach, among others. The Project will have four components of which Components 1,2 and 4 will be financed by a loan from the World Bank-IBRD, while for Component 3, GEF-co-financing will be sought.</p> <p>I. Major Project Components;</p> <p>Component 1: Climate-Resilient Infrastructure. This component will improve access of targeted communities and LGUs to rural infrastructure services, enhance current operations and maintenance and make these infrastructures more climate-resilient by re-designing, retrofitting and constructing them based on the predicted rainfall intensity and other to climate change. Technical Standards of these infrastructures will be improved based on the predicted impacts on climate change. It shall also include value chain infra facilities (community cold storage, transport/railways, etc. Component 2.</p> <p>Market Oriented Agri-Fishery enterprises Development. This component will support crop diversification, adoption of package of technology, use of improved livestock/fish breeding stocks and crop varieties and promotion of crop programming and scheduling. It shall include alternative livelihood for value-adding activities using project provided facilities.</p>		<p>The development objective of the project is to assist vulnerable local government units, communities and key ecosystems in the eastern seaboard of the Philippines to cope with and adapt to the impacts of climate change. This objective can be achieved through: (i) designing and constructing more climate-resilient rural infrastructure in partnership with the LGUs; (ii) diversifying livelihood opportunities through market-oriented agriculture-fishery and natural resource-based enterprise development,</p> <p>(iv) addressing gaps in value chain systems thru improvement/upgrading/construct ion of identified facilities including sustainable tourism/ecotourism to reduce the pressure on coastal and natural resources; protect biodiversity and climate proof livelihood activities; (v) upgrading and implementing integrated coastal resource management plan using the "ridge to reef" approach as well</p>	5 years	5,000	DA	DA, WB

Matrix of Biodiversity Proposals for funding under GEF-STAR
As of July 20, 2011

Titel of Proposal	Baseline	Incremental/Added Value/Outcome/GEF Strategic Objective addressed	Project Objectives	Project Duration	Proposed Budget (USD '000)	Sources of Co-Financing	Proponents/Implementing Agency
	<p>Component 3: Biodiversity Conservation and Natural Resource Management. This component, for which GEF co-financing will be sought, will support the biodiversity protection and conservation, including climate-proofing, of key coastal and upland ecosystems using the "ridge to reef" approach in natural and coastal resource management planning. Activities to be supported include preparation and/or updating of coastal resource management plans to include upland/watershed issues and interventions, disaster risk reduction, climate change adaptation, sustainable livelihoods to reduce the pressure on natural resources and protect biodiversity, and other investment priorities to conserve and protect the coastal and upland areas and key biodiversity areas.</p> <p>This Component will also help in improving the management of MPAs and/or the establishment of MPAs, including fisheries and marine resources conservation activities.</p> <p>Component 4: Capability-building and Institutional Development. This component will support institutional development activities and governance reform support to participating LGUs, extension workers, farmer and fisher beneficiaries and communities.</p>		<p>(v) upgrading and implementing integrated coastal resource management plan using the "ridge to reef" approach as well as mainstreaming of the CC adaptation into the plan; and (v) improving local governance processes, especially those involving mainstreaming CC adaptation in agribusiness and agriculture/natural resource-based enterprises development.</p> <p>To provide alternative livelihood opportunities to small farmers/fisherfolk depended on natural resources and who are also considered highly vulnerable to climate change impacts by developing the agriculture and fisheries enterprise in the Tourist Strategic areas of the Department of Tourism. This will also involve promotion of value adding activities for produce among project beneficiaries.</p>				

Note: Other Proponents may also be considered during the PIF preparation.

5,000

Other/Additional Biodiversity Proposals
As of July 20, 2011

<p>1. Implementing social marketing and capacity building for community behavior change in support of (1) improved protected area governance, enforcement and effectiveness; and (2) recognition of alternative protected areas governance mechanisms to strengthen the Philippine national protected areas system</p>	<p>Through a series of legislative Acts and Executive Orders, an extensive network National and Municipal Protected Areas has been created in the Philippines, with formal responsibility for their management being a combination of national management overseen by the Protected Areas and Wildlife Bureau of the Department of Environment, and Local Governments at the Municipal level. Local towns, villages and communities are also involved in the management of protected areas and their surrounding buffer zones and productive lands/waters, through a range of formal and informal management & governance arrangements. The ineffective management of the countries Protected Areas is hindering their ability to achieve their potential for securing Philippine biodiversity and the related ecosystem services in support of the country's economic and social development.</p> <p>Various investments have been made to explore the range of alternative governance arrangements that can support the success of protected areas, or which warrant recognition as affording protection under IUCN protection categories. Among these investments is the project "Expanding and Diversifying Terrestrial Protected Areas in the Philippines Project", or the NewCAPP (New Conservation Areas of the Philippines Project), which is partially funded by the GEF. It explores ways to recognize various other forms of governance for key biodiversity areas. This project will use Rare's PRIDE approach to social marketing to support the objectives of NEWCAPP by embedding alternative governance arrangements at a selection of priority terrestrial sites while also extending the reach of NEWCAPP to the marine realm by supporting improved governance at a range of communities living near priority Marine Protected Areas.</p>	<p>(1) <u>Greater Public awareness, community participation and incentives</u> for collaboration between local communities, LGUs and where applicable NIPAS site management to support alternative governance mechanisms in and around marine and terrestrial Protected Areas,</p> <p>(2) more effective networking of Protected Areas, including improved alignment of supporting institutions and reinforcing governance mechanisms from local through provincial and national levels,</p> <p>(3) embedding of increased capacity at the local level and increased partnerships, and</p> <p>(4) stronger monitoring of social, climate, biological and management conditions and use of data to inform more effective management decisions and actions.</p>	<p><u>Goal 1:</u> Build knowledge of protected area benefits and support for protected areas in communities living in and around terrestrial and marine protected area sites using the Rare PRIDE model</p> <p><u>Goal 2:</u> Improve site management, and neighboring community & LGU capacity to implement the management of a variety of alternative governance and enforcement mechanisms.</p> <p><u>Goal 3:</u> Achieve, adapt and comprehensively monitor conservation and social outcomes</p> <p><u>Goal 4:</u> Engage supporting institutions to build project sustainability and broaden awareness of project lessons in the context of the national development agenda</p>	<p>5 years</p>	<p>3,000</p>	<p>Rare, YTL corporation,</p>	<p>DENR, DA-BFAR, Rare, Asian Institute of Journalism and Communication, League of Municipalities Mayors Development Center, Marine and Environment Resources Foundation</p>
<p>2. Strengthening the Approaches that promotes the Biodiversity conservation and adaptive management of agricultural heritage systems</p>	<p>With the loss of biodiversity occurring at an unprecedented rate, up to 1000 times the natural rate of extinction, and climate change a global reality, business as usual is no longer an option. As human societies globally explore solutions to reverse the loss of biodiversity and build resilience to the negative impacts of climate change, integration of traditional knowledge, ancient and evolving agricultural systems are being sought as practical solutions to environmental sustainability. While agriculture played a crucial role to conservation and sustainable use of biodiversity, much of the world's land is subject to human management for production of food, fiber and timber. Contrary to the commonly held perspective that agriculture is a threat to biodiversity, a large number of agricultural systems can enhance biodiversity at genetic, species and landscape levels. This can benefit food production (diversity and sovereignty), livelihood resources, and ecosystem services and can help cope with environmental changes.</p>	<p>Strategic Objective: Mainstream biodiversity conservation and sustainable use into production landscapes, seascapes, and sectors</p>	<p>Overall Goal- To conserve globally important agricultural biodiversity, indigenous knowledge systems and outstanding landscapes, also to manage and use them in a sustainable way, with sufficient income generation to ensure food security and reduce poverty for the small holder farmers and indigenous peoples.</p>	<p>4 years</p>	<p>3,000</p>		<p>FAO</p>

	<p>Agricultural heritage systems integrate biological, social, and institutional components as a result of co-adaptation between humans and nature over thousand generations. The role of agro-biodiversity heritage sites in identification of model cases for better management and in situ conservation of genetic resources for food and agriculture, adapted to the local/national stakeholder/communities is well recognized. Identification and assessment agro-biodiversity heritage sites can contribute to protection of useful systems and the ingenious innovation or interventions of farming communities, leading to protection of farmers' rights, and their wider use in development of sustainable agriculture, with integration of good products (e.g. traditional varieties) and practices (e.g. crop production, such as mixed and crop rotation systems for conservation of soil fertility or natural resources and crop protection using local resources) to modern agriculture, to mitigate the adverse effects of climate and economic changes, and globalization. Hence, their continued evolution is a critical need to develop and upscale those agricultural practices that sustain and increase yields, to meet demands for increased agricultural production for current and future populations. These practices must be based on the key ecosystem services provided by biodiversity, such as nutrient cycling, pest regulation and pollination that enable the healthy functioning of the agricultural ecosystem, ensuring the sustainability of agriculture as it intensifies to meet growing demands for food production.</p> <p>However, these agricultural systems, along with their agricultural diversity, are at risk of being lost due to lack of recognition and support. Likewise, among the factors that have progressively generated this situation, it is worth mentioning: i) the models of agricultural development inspired by the Green Revolution which have reduced the variety of cultivations used in agriculture and impoverished the quality of food diets, whereby several local varieties have been crowded-out and have consequently been exposed to extinction; ii) the industrialisation of the agricultural process and the drive to maximise productivity and intensification which has fostered the selection and dissemination of monocropping and standardised crops and agricultural practices. For example, FAO (www.fao.org/nr/biodiversity) reports there are 7,000 vegetable species that mankind uses for food use, however, today only 150 species are being cultivated. This biodiversity crisis must be seen not only as the loss of species and habitats, but also as the loss of unique and diverse traditionally agro ecological management practices that has formed patchy landscapes.</p>		<p>General Objective: To strengthen the approaches which promote conservation of biodiversity -friendly goods and services through adaptive management of agricultural heritage systems so as to create economic stake and scale up these systems in productive landscapes. The local use of agricultural biodiversity constitutes the backbone of the rich cultural background and of the resilience of the poor people's agricultural systems of national and local importance and timely, in an era of the climate change</p>				
--	--	--	--	--	--	--	--

Note: Other Proponents may also be considered during the PIF preparation.

6,000

IDENTIFIED CLIMATE CHANGE PROJECTS

Priority Project 1

Project Title:	Mainstreaming Renewable Energy Technology to Local Government Units and Stakeholders
Project Description:	<p>The Renewable Energy Act of 2008 has provided the direction moving towards accelerated development. At the onset of the law, the DOE have been expecting that it will spur private sector interest and the activities of RE development will accelerate. The CBRED Project has successfully triggered the development of renewable energy in the country by eliminating barriers i.e policy, market, technical, financial, information and training. The mainstreaming project will further develop the involvement of stakeholders in renewable energy to sustain the renewable energy initiatives.</p> <p>The Department of Energy through the mainstreaming project would like to work on the following areas:</p> <ol style="list-style-type: none"> 1. Capacitate the LGU, NGOs and Civil Societies on the benefits of renewable energy to increase technology appreciation and develop potential renewable energy resources in the country; 2. Educate the LGUs and Civil Societies to expedite issuance of permits and licenses in relation to commercial application of renewable energy resources 3. Conduct trainings on planning, and infrastructure development to incorporate renewable energy development in the Provincial and Municipal Development Plans for economic prosperity; 4. Enhancement of rural electrification by implementing sustainable electrification

	models suited for cultural acceptability
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	<p>GEF 5 Strategic Objective no. 6: Enabling activities and capacity building</p> <p>The project aims to capacitate LGUs, NGOs and civil society to develop and sustain renewable energy projects within the enabling atmosphere created by the RE law and through the application of affordable technologies using best practices and culturally acceptable modes of delivery in rural electrification</p>
GEF Financing (amount in \$)	\$5,000,000
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	<p>Philippine Government (in kind): \$1.194M</p> <ul style="list-style-type: none"> • Department of Energy: \$1.045M • LGUs: \$0.149M <p>Private and NGO Sector (in kind): \$0.84M</p>
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following: <ul style="list-style-type: none"> • Status • Major 	<p>The Mainstreaming Project is a follow through of the UNDP/GEF/DOE "Capacity Building to Remove Barriers to Renewable Energy Development (CBRED) Project". The overall goal of the CBRED Project is to contribute to the reduction of growth rate of GHG emissions by removing key policy, market, technical, information, and financial barriers to and reducing the cost of development of renewable energy to replace fossil fuel use in the Philippines. The project components include:</p> <ol style="list-style-type: none"> 1. Strengthening the capacity of relevant Government of the Philippines (GOP) agencies to formulate, enact and implement sound RE policies; 2. Enhancing RE data banking and provisions of information on RE for targeted audiences to build markets; 3. Enhancing coordination among organizations concerning with RE 4. Assisting the market penetration of RE in remote off-grid communities through the

<p>achievements</p> <ul style="list-style-type: none"> • Barriers and gaps 	<p>provision of incentives and innovative financing and delivery mechanisms</p> <p>5. Improving the quality of and knowledge and skills on RE technologies and systems</p> <p>The total budget of the project is US\$ 23,764,048 of which US\$5,143,048 is provided by GEF, while US\$18,621,000 comes from the government and private stakeholders in the form of activities and/or projects. The CBRED Project will end in June 30, 2011.</p> <p>The project has substantially succeeded in addressing barriers to the development of renewable energy resources in the country. Moreover, it renewed the interest of the private sector to invest in RE projects. To date, there are 205 contracts signed by DOE for the development of solar, hydro, wind, ocean wave/current and biomass resources. Another tangible impact of the project is the move of more private commercial and government banks to open financing windows for RE projects. Banks are now setting up their own RE Financing Units and have been keen on marketing RE projects. To a certain extent, the project was also able to create community awareness of RE technology through the microfinance fund by providing small RE technologies to grassroots communities.</p> <p>The national government has implemented RE projects as part of the overarching goals of energy self-sufficiency and poverty alleviation. However, the approach has resulted in RE projects that failed to deliver long-term benefits. The RE systems mostly located in remote areas were not adequately maintained due to a lack of ownership by the project beneficiaries. These gaps may be addressed by making local governments the primary stakeholders of these RE systems.</p> <p>Capacitating local governments by addressing the difficulties they face in developing RE resources will lead to a broader and base pyramid implementation of RE systems.</p>
---	--

Priority Project 2

Project Title:	Profiling of the Renewable Energy Resources Use and Potentials in Davao Region
Project Description:	<p>The Mindanao Grid of the National Grid Corporation of the Philippines transmits all the power requirements of the entire Island including Davao Region from power generating plants from all over Mindanao. At present the Mindanao Grid is experiencing deficiency in the supply of power. Fifty-five percent of the total power generated in Mindanao comes from hydro-power generation and is vulnerable to a prolonged dry spell which lowers the water inflow that runs the turbines of hydroelectric plants.</p> <p>In the immediate future, Davao Region is anticipating increasing demand for power as the overall environment becomes more conducive for more investments for commercial and industrial activities given the expected economic rebound.</p> <p>At present, there is no guarantee that the overall supply of power of the Mindanao Grid can meet the future demand of Southern Mindanao particularly Davao Region, the highest consumer of power in Mindanao.</p> <p>On the other hand, Davao Region is endowed with potential sources of renewable power. The more common form, that is hydro, are available particularly the Maragusan River in Compostela Valley Province and Aliwagwag Falls and Odiongan River in Davao Oriental, thereby making it imperative to consider the development of alternative sources of power/energy available in Davao Region. If renewable sources of power in the region are developed these will be more than enough to supply the increasing demand in the immediate future.</p> <p>On 2 March 2010, the Regional Development Council (RDC) XI through RDC Res.</p>

	<p>No. 07 (s, 2010), enjoined the Department of Energy to profile the potential sources of renewable power in Davao Region in coordination with the local government units of the region.</p> <p>The primary objectives of the profiling activity are as follows:</p> <ul style="list-style-type: none"> • Identify available or potential renewable energy resources in Davao Region, and gather other relevant information that will help determine their potential operating capacity including factors that hinder and facilitate the implementation and operation of such systems/installation • Conduct a survey of existing renewable energy systems or installations and come up with an updated and complete list of users in Davao Region • Identify and profile pipeline or proposed projects that will develop and utilize renewable energy resource in Davao Region <p>Scope and Coverage of the Profiling Activity</p> <ul style="list-style-type: none"> • Biomass Energy Resource/System/Installation <ul style="list-style-type: none"> ○ Biomass-fired boilers ○ Biomass-fired dryers ○ Biomass-fired ovens/kilns/furnaces ○ Gasifiers ○ Biogas systems ○ Biomass derived liquid fuel systems • Micro-Hydro Resource/System/Installation • Solar Energy Resource/System/Installation <ul style="list-style-type: none"> ○ Solar water heaters ○ Photovoltaic systems ○ Solar dryer • Wind Energy Resource/System/Installation
--	---

	<ul style="list-style-type: none"> ○ Wind turbine generation systems ○ Wind pumping systems • Other Renewable Energy Resource such as Power Generation from Municipal Waste <p>Planned Activities to Achieve Outcomes</p> <ul style="list-style-type: none"> • Stage 1: Inception Activities • Stage 2: Orientation and Consultation Meeting between the CTWG and the LGU • Stage 3: Gathering by the LGU of Existing and Field Data • Stage 4: Analysis by the CTWG of Existing and Field Data submitted by the LGUs • Stage 5: Technical Field Measurement by the CTWG • Stage 5: Writing of the Reports by the CTWG <p>The main output shall be a Profile on the Renewable Energy Resources Use and Potentials of Davao Region. The Profile is targeted to be completed on or before the third week of the final month the whole activity is due to be complete.</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	Objective no. 3: Promote investment in renewable energy technologies
GEF Financing (amount in \$)	\$ 11,890
Co-financing (provide breakdown amount per	

financing source in \$ and please state type whether loan, grant, cash or in kind)	
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following: <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>The project is in line with the national priorities, action plan, and programs, such as the Philippine Energy Plan, Clean Technology Fund- Country Investment Plan, the Comprehensive Integrated Infrastructure Program, the National Framework Strategy on Climate Change and the National Climate Change Action Plan, the Clean Air Act, and the Renewable Energy Act. The above action plans and programs highlights among others the following national priorities;</p> <ul style="list-style-type: none"> - Accelerate the exploration and development of renewable energy resources to achieve energy self-reliance, - Encourage the development and utilization of renewable energy resources, and - Increase the utilization of renewable energy.

Priority Project 3

Project Title:	Harnessing of Marine Current for Electricity Generation for Island Communities
Project Description:	In the Philippines, harnessing and utilization of renewable energy are one of the strategies of the government to provide sustainable energy supply for the country. Thus, current initiatives are directed towards creating a market-based environment that is conducive to private sector investment , encourages technology transfer, and research and development along this field.

Believing that energy security and independence from costly oil imports are hinged on the development of renewable energy, the government has enacted the Philippine Renewable Energy Act of 2008 (Republic Act 9513). The passage of this law expects to pave the way for the quick development of alternative energy sources, such as biomass, solar, wind and ocean resources.

Among renewables, the ocean current energy has been recognized that can contribute to the energy self-reliance program of the government because of the country's huge potential of the said energy resource. Attributed by its archipelagic nature, the country's ocean energy resource is about 1,000 square kilometer and the potential theoretical capacity for this resource is estimated to be about 170,000 Megawatt power.

Moreover, increasing the local market of this renewable could contribute to the achievement of the national objectives of increasing energy self-sufficiency. In addition, its adoption will help improve local air quality and obviously improving the environment at a global level. Further, this initiative is also in support of the Republic Act 8749, otherwise known as the Philippine Clean Air Act of 1999 and the Presidential Decree No.1586 also known as Philippine Environmental Impact Statement System, which section 2 states "to attain and maintain a rational and orderly balance between socio-economic growth and environmental protection".

There are however, several obstacles, which among others include technology, technical, and financial that exhibits in developing countries like the Philippines, in particular. External support is very much needed in order to increase penetration of renewable energy technologies. Lastly, developed countries have limited expertise in transferring their technology to interested and potential sites in the developing countries.

The key objective of the project is to increased penetration of renewable energies

	<p>on island communities through technology transfer of marine current technology for electricity generation. The project is composed of three components with the following major outcome and outputs.</p> <p>Component 1: Marine Current Resource Assessment of Selected Sites</p> <ul style="list-style-type: none"> • Expected Outcome: Improved RE investment opportunities with the availability of reliable data • Expected Output: GIS-based marine current resource map of selected sites with high business potential <p>Component 2: Technology Demonstration of Marine Current Technology</p> <ul style="list-style-type: none"> • Expected Outcome: Increased penetration and market acceptance of marine current technology as a renewable energy resource • Expected Output: Demonstrated the feasibility of harnessing marine current for electricity generation for island communities <p>Component 3: Capacity Building</p> <ul style="list-style-type: none"> • Expected Outcome: Increased deployment of marine current technology for power generation <p>Expected Output: Trained local experts, established technology focal points and local forum activities</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the	<p>The proposed project conforms with GEF strategic objectives in the climate change focal area and in particular with strategic objective No.4 on promoting on-grid renewable energy and objective No.5 on promoting the use of renewable energy for the provision of rural energy services (off-grid)"</p>

<p>project addresses it):</p>	<p>Relative with GEF strategic objective No.4, the introduction of marine current technology (MCT) in the Philippines, which will be demonstrated in a selected island community will open the doors for energy policy makers and energy developers for the eventual commercialization of the technology considering the country's marine current energy potential. Thus, the penetration of MCT will lead to increasing the share of renewable energy resource in the energy mix. Increasing the share of domestic renewable energy like the MCT system in the energy mix, will obviously improving the environment in global scale and addressing the issue on security on energy supply in the Philippines. In addition, the data acquired from the proposed system will provide useful and decisive technical data regarding the feasibility of the said system.</p> <p>In line with GEF strategic objective No. 5, the project supports for the increase use of MCT systems in the Philippines, which is ideal on island communities because of their limited access to the national electricity grid. The project will also provide significant data regarding the viability of off-grid MCT system (e.g. energy flows exchanged, its targeted size, load conditions, etc). This aspect, especially in marginalized islands with limited energy demand, and power sources that are dependent with diesel generators, can represent a significant value-added for its transition towards energy independence and reductions of GHG emissions. Thus, substitution of renewable energy sources for conventional system like diesel generators will lead to zero impact of energy production on the environment.</p> <p>Finally, the successful implementation of the project will support government efforts in the promotion and development of renewable energy technologies. The project also supports human resource development in the Philippines and through technology transfer, it will fast track the development of the MCT system</p>
--------------------------------------	--

	in the country.
GEF Financing (amount in \$)	\$2,300,000
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	<p>National Government</p> <ul style="list-style-type: none"> • DOST-PCIEERD: \$500,000 • National Power Corporation: \$100,000 • Department of Energy: \$200,000 <p>Local Government (Region 6,7 and 8): \$300,000</p> <p>Total co-financing: \$1,100,000</p>
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following: <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>The Project strongly supports and complements current government programs/initiatives on the promotion and development of RE in the Philippines. The Philippine Department of Energy has established the framework for the development and advancement of RE resources and also the development of strategic program. One of the strategies and mechanisms is to improve local capability by not only limiting to manufacturing but also in RE assessment, maintenance and operation of renewable energy technologies.</p> <p>The PCIEERD-DOST for its part, as a premier science and technological body, currently developed a road maps for all the renewables. For ocean energy development, its current initiatives were focused on marine current resource assessment, technology demonstration, development of local expertise in the design and manufacture of system components and localization of system</p>

	<p>Furthermore, this project also compliments to our on-going activities for marine current resource mapping on potential areas in the country. To date, several potential sites were investigated using Accoustic Doppler Current Profiler. Among the sites investigated are the following: a) Hinatuan Passage b) Basiao Channel c) Tanon Strait, and d) San Bernardino Strait. The key objective of these initiatives is to establish GIS-based marine current map of the Philippines to marine current resource exploitation in the country.</p>
--	--

Long list project no. 1

Project Title:	Technology Transfer and Promotion of Investments for Distributed and Off-Grid Hybrid Bioenergy to De-Carbonize Energy Plans towards a Low-Carbon Energy Path for the Philippines
Project Description:	<p>Main Objective: To formulate and initiate strategies that will contribute to de-carbonizing Philippine energy plans and help lead the country to a low-carbon energy path by:</p> <ul style="list-style-type: none"> • Deployment and promotion of investments for stand-alone and hybrid bioenergy systems based on cultivated biomass; and • Transformation of markets for efficient use of electrical and mechanical power from bioenergy <p>Lead Executing Agency: Philippine Forest Corporation (Philforest)</p> <p>Cooperating Executing Agencies</p> <ul style="list-style-type: none"> • Department of Energy • Solarlite GmbH (Solarlite) • Toyota Tsusho • Dole Philippines • DBP or LBP • Local Distribution Utility/REC • Farmers' Cooperatives

GEF Implementing Agency: UN Environmental Programme

Rationale:

Technology transfer and deployment towards commercialization of such low-carbon energy systems- hybrid bioenergy-concentrating solar power plants- appear to be the most appropriate strategy for making productive and profitable, at the same time environmentally sustainable the development of hundreds of thousands of hectares of marginal lands under the jurisdiction of Philforest.

The foremost contribution is increasing the country's sustainable low-carbon energy supply. Another major contribution is the development of local economies including employment generation not only from bioenergy production but also from the other productive economic activities – such as modernization an intensification of agriculture and development of rural industries – that will be spawned by the availability of sustainable and affordable energy source.

In addition, and in parallel with the development and deployment of hybrid bioenergy- CSP plants towards commercialization, adjust programs on energy conservation and promotion and commercialization of energy efficient technologies can also be undertaken to really help the Philippines achieve a low-carbon energy path and further reduce GHG emissions from energy production and use – increasing Philippine contribution in mitigating global warming and climate change.

Preliminary Project LOG Framework Analysis

Project components/expected outcomes	Expected outputs	Activities / Implementation Period	Responsible Agencies
<u>Component I</u> Market prognosis for promoting investments in distributed	1) Status of technology development of the following types of bioenergy	<u>Implementation: Year 1</u> a) Desk and field technolo-economic assessments of	Main: - Philforest Support:

	<p>bioenergy systems as strategy for de-carbonizing conventional energy plans</p> <p><u>Expected Outcomes:</u></p> <p>A) Distributed bioenergy technologies are well understood and proven to be available for commercial applications but may still be more costly than the established technologies even taking into account a price for GHG emissions or equivalent policy</p> <p>B) Assessments of market demand for bioenergy technologies and their sensitivity to</p>	<p>technologies fueled with biomass from multi-crop and agroforestry systems</p> <ol style="list-style-type: none"> a. Stand-alone bioenergy power plants b. Hybrid bioenergy power plants (with CSP, PV, small hydro and/or wind) c. Bioenergy for stationary mechanical power applications <ol style="list-style-type: none"> 2) Validation of sustainability of biomass production systems 3) GHG emissions reduction potential and other positive environmental impacts 4) Potential for local manufacturing of environment/devices to reduce hardware 	<p>bioenergy production and conversion projects in the Philippines</p> <ol style="list-style-type: none"> b) Literature research/desk techno-economic assessments of bioenergy projects in other countries, particularly Thailand and India to gather data and information on: <ol style="list-style-type: none"> a. Engineering design and other technical variables b. Techno-economic analysis of competitiveness with fossil fuels c. Analysis of sustainability of biomass production from multi-crop and agroforestry systems 	<ul style="list-style-type: none"> - DOE - Utilities/RECs
--	--	--	--	---

	carbon prices conducted	<p>costs</p> <p>5) Market information on improved cost and performance that will make these bioenergy technologies attractive to government and energy investors</p> <p>6) Bioenergy strategies at national and local levels:</p> <ul style="list-style-type: none"> a. Technology transfer and deployment strategies b. Proposed financial and economic incentives including attractive feed-in tariff rate for biopower generation c. Policy analysis – constraints and needs for strengthening, 	<p>d. Environmental analysis of GHG emission reduction potentials</p> <p>c) Country-specific LCA (life-cycle analysis)</p> <p>d) Review of Philippine energy policy, strategies & plans focusing on renewable energy sector, particularly the production and use of bioenergy</p> <p>e) Assessment of Philippine experiences in distributed and off-grid Low-Carbon Energy (LCE) supply systems focusing on bioenergy systems</p> <p>f) Technical visits to Thailand and/or India</p>	
--	-------------------------	---	---	--

		<p>fine=tuning and effective implementation</p> <p>d. Training modules and other capacity building/institutional strengthening activities</p>		
--	--	---	--	--

	<p><u>Component II</u> Technology transfer and deployment of stand-alone bioenergy systems for grid-connected operations</p> <p><u>Expected Outcomes:</u> A) Technologies become competitive with established technologies if a price for greenhouse gases (GHG) emissions or equivalent policy is taken into account B) Barriers relating to the economic environment, social acceptance, cultural issues, or institutional arrangements, such as access to the grid for the sale of electricity generated removed</p>	<p>Commercialization road map and investment plans for stand-alone bioenergy plants for grid-connected operations:</p> <ol style="list-style-type: none"> 1) Local expertise in all areas of project development, engineering design, installation, operation and maintenance 2) Investment plans for technology diffusion including detailed feasibility studies for follow-up projects 3) Strengthening and fine-tuning of relevant policies and implementing guidelines to accelerate installation and facilitate efficient operation of 	<p><u>Implementation: Years 2-5</u> Design, installation, operation and monitoring of at least one installation, this will involve the ff:</p> <ol style="list-style-type: none"> a) Pre-feasibility and detailed project feasibility studies including engineering design and financial analysis b) Environmental analysis: GHG emission reduction potential c) Field validation of sustainability of biomass production systems d) LCA analysis of bioenergy system e) Validation of feed-in tariff and 	<p>Main: - Philforest</p> <p>Support: - DOE - Utilities/RECs</p>
--	---	--	--	--

	<p>C) Project financing and other incentives are defined including a more attractive feed-in tariff for grid-connected biopower</p> <p>D) Investors become financially committed leading to more planned installations</p> <p>E) Cost of technology is projected to go down due to additional installations leading to expansion of market demand</p>	<p>technologies</p> <p>4) Financing and other incentives</p> <p>5) Expanded training and other activities for building local capacities and strengthening institutions</p> <p>6) Investment plans for local manufacturing</p> <p>7) Identification of socio-economic benefits, particularly for the local communities</p>	<p>project impacts of additional incentives</p> <p>f) Identification of needs for capacity-building and institutional strengthening</p> <p>g) Assessment of potential for local manufacturing</p> <p>h) Analysis of socio-economic impacts (rural economy, employment, gender equity)</p>	
--	---	---	---	--

GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic

Objective no. 3: Promote investment in renewable energy technologies

Objective and how the project addresses it):

GEF Financing (amount in \$)

\$5,000,000

Co-financing (provide

\$20M

breakdown

amount per

financing

source in \$ and

please state

type whether

loan, grant,

cash or in kind)

Baseline

information

Please describe

whether the

project is a

follow through

of a previous

project. Please

provide brief

Philippine Forest Corporation (Philforest), a government-owned corporation under the DENR has been mandated with the development and making productive areas that are declared as marginal lands. A major strategy initiated by the corporation is to promote large-scale cultivation of jatropha, a bioenergy crop that produce a liquid biofuel that can either be used as additive or substitute to diesel. The Philforest program was however aimed at underpinning the country's liquid biofuels program, which aimed at converting jatropha into biodiesel and substituting as much as 10% of the total diesel fuel used in the country's transport sector.

During the last few years when such programs were initiated in many countries, the expected benefits

<p>description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>of jatropha to biodiesel are slowly being shown to be over optimistic. Furthermore, many concerns and problems have emerged with regards to large-scale jatropha production, among them the negative environmental impacts of large-scale mono-culture plantations for a species that civilization has not prior experience with such as with other crops (e.g rice, sugar, corn). Also, although Philforest is focusing on marginal lands and therefore, the supposed conflict between land use for bioenergy vs food production should not be a concern, still there are competition for other resources needed in food crop and other non-energy crop production. There are competition on water, soil nutrients, farm inputs, investments, even labor and other agricultural resource inputs. As a result, there is increasing concerns leading to moratorium of production activities for large-scale jatropha cultivation and production of jatropha biodiesel.</p> <p>As a result of these concerns, there are emerging strategies for more sustainable production of jatropha and use of jatropha oil. There have also been other responses such as the cultivation of other raw materials for biodiesel such as palm oil, castor, rapeseed among others that are more appropriate to the existing agro-ecological conditions of the targeted production areas.</p> <p>However, aside from exploring other bioenergy crop materials there have also been developments and emerging production systems that are proving to be more sustainable and environmental friendly compared to large-scale mono-culture systems. These include integrating jatropha and/or other bioenergy crops into multi-crop systems and agroforestry systems.</p> <p>Of course, the expected total yield will be much lower than that of large-monoculture farms, but this concern has led to the exploration and development of the use jatropha and other bioenergy crop for other types of energy applications other than as liquid transport.</p> <p>Particularly in the case of Jatropha, and also for palm oil, it is not only the oil from the plants that are being utilized as energy source, but also other parts of the plants that can be sustainability harvested or collected, other non-energy products are also being developed and commercialized to increase the economic viability and profitability of Jatropha production and utilization.</p>
--	---

Thailand and India has led the development in this area. Through research, development and commercialization projects initiated by Thailand's Kasetsart University, jatropha and palm trees are cultivated as part of agroforestry systems or as multi-crop farmlands. Jatropha is planted with other crops, including food crops and commercial tree species. Such integrated production systems can be found in Nan and Krabi provinces of Thailand. Vegetable oil is still produced but the oil is aimed for local use in engines and other on-site farm machineries.

The Jatropha plants are regularly trimmed and pruned and the prunings/trimmings are used as solid biomass fuel for a steam turbine power plant. Note that it is also feasible to use the jatropha oil to fuel diesel engine for power generation but there are technical difficulties and problems. Engines running on straight vegetable oil, such as oil just pressed out from jatropha nuts, are available (from Germany) but they are expensive since they are not popular and are not mass produced. Such engines can run also on any type of vegetable oil such as coconut and palm oil.

The use of both trimmings/prunings and oil from jatropha plants for energy applications – for power generation and for running of machineries and engines particularly for farm and rural industrial uses, respectively, has opened up new opportunities for bioenergy.

Bioenergy crop production need not be in large-scale mono-culture farms as the volume of energy required is not as much as needed by the transport sector, bioenergy production is to satisfy demand for local power generation and fuel for mechanical energy needs of the local economy, thus providing fuel for local (mostly rural) economic growth and development.

Depending on the bioenergy production potential and local energy demand, there can be excess electrical energy and liquid fuel production that can then be exported out of the local communities to add up more to the country's total energy supply, and this would be carbon neutral energy supply, thereby reducing GHG emissions from energy production.

A number of such small-scale (5-10MW) bioenergy systems can be developed and established. These are called distributed generation because they are small-scale and dispersed. They can be (1) connected to the grid or (2) operated off-grid for a dedicated user (a large agro-industrial complex) or (3) form part of a mini-grid serving local isolated communities.

In Thailand, Kasetsart University demonstration projects indicate that – the annual jatropha plant trimmings/prunings from a 1 hectare of jatropha plants can produce 1 MW of electrical power (to be re-checked with the university). Of course, there is the additional jatropha oil produced, that are utilized as fuel for local engines and machineries or even possibly local mass public transport (for which demand may not be substantial).

The capacity and amount of power generated from distributed bioenergy power plants (or biopower plants) can however be expanded through hybrid systems. Depending on available other renewable energy resource – such as small hydro and wind, or land for solar energy hybrid biopower plants that produced more power can be established. Aside from the availability of resource and needed inputs (such as land and amount of insulation for solar), there are other site-specific factors that have to be considered in choosing which technology to hybrid with bioenergy.

As for solar energy, two types of solar technology are feasible – photovoltaic systems and concentrating solar power (CSP) plants. The most interesting hybrid combination and one which shows generally viable techno-economic viability, as they can be feasible almost anywhere, is hybrid bioenergy-CSP plants. The two systems operate both on the principle of steam turbine power plants and as such, much more technologically compatible than the other hybrid combinations.

Again, Thailand provides a good example of hybrid bioenergy-concentrating solar power plant. Thailand under the School of Renewable Energy Technology – Naresuan University has a successful pilot demonstration project of such a system. There is now a Thai-German joint-commercial venture, with technical support from the university that will invest in commercial-sale energy projects for such a low carbon energy technology.

	The German partner (Solarlite) has also expressed interest in the Philippines as they are fully aware of the techno-economic potential of such a low-carbon energy system in the country.
--	---

Long list project no. 2

Project Title:	Low Carbon Energy Program for MSMEs
Project Description:	<p>The Project aims to create conducive environment for the Micro-Small & Medium Enterprises (MSMEs) in pursuing the use of low carbon energy technology options as part of the climate change mitigation strategy. Specifically, the project intends to: (a) develop consciousness and create awareness on the cleaner and productive use of energy in relation to climate change mitigation; (b) develop the capacity and capability of MSMEs on energy conservation and management as well as the alternative use of cleaner energy technologies such as renewable energy systems and energy efficient technologies; (c) provide technical information and support systems in the assessment and selection of the different energy conservation practices and low carbon technology options for MSMEs application; (d) determine various financing incentives and funding investment options in introducing low carbon energy technologies.</p> <p>With Philippine GHG contribution GHG and the extent of its vulnerable condition to the impact of climate change as emphasized in item A.1.1., the Project will initially gather the baseline GHG inventory from the MSME sector, in particular the manufacturing industry, and create conducive environment opportunities as well as provide technical support mechanisms for the sector to adopt low-carbon technologies in line with climate change mitigation strategies. Relevant to the GHG emission inventory, the energy consumption and productivity of the sector</p>

as well as the sociol-economic indicators level can also be derived from the inventory as baseline reference in assessing the impact of the project.

The MSMEs play a critical role in the growth of the Philippine economy. Although, the Philippine government have embarked on a comprehensive and integrated strategy for the sustainable growth and development of MSMEs, which focuses on critical factors, such as technology, product development, finance, training, marketing, etc. Further, while the MSMEs are recognized as major contributor for the country's economic growth despite the threats of local market and global competition, the overall financial resource of the country prevents it in providing utmost financial support. Development programs have laid out but resources are not readily available due to competing demands for other government programs.

With the limited technical and financial resources available for MSMEs, studies have shown that MSMEs are one of the major GHG contributors due to inefficient use of energy and poor raw materials handling, processing and waste management practices. Instead of investing in more efficient and cleaner processing systems as well as environmentally-friendly technologies, MSMEs would rather invest in increasing their production capacity and short-term recovery investments.

More or less, there are about 800,000 business enterprises operating in the Philippines. Of these, 99% are micro, small, and medium enterprises (MSMEs) and the remaining 1% are large enterprises. Of the total number of MSMEs, 92% are micro enterprises, 7.3% are small enterprises, and 0.4% are medium enterprises. In addition, SME account for 32% of the country's gross domestic product (GDP).

MSMEs are defined as any business activity or enterprise engaged in industry, commerce, agribusiness and/or services, whether single proprietorship, partnership, cooperative or corporation, whose total assets, inclusive of those arising from loans but exclusive of the land on which the particular business entity's office, plant and equipment are situated must have value falling under the following categories:

Size of Enterprise	Number of Employees	Assets
Micro	1-9	<P1.5M
Small	10-99	P1.5-15M
Medium	100-199	>P15M-P100M
Large	200 above	>P100M

Majority of the 780,469 MSMEs in operation in 2006 are in the wholesale and retail trade industries with 391,215 business establishments; followed by manufacturing with 116,361; hotels and restaurants with 97,926; real estate, renting, and business activities with 45,293; and other community, social, and personal services with 44,658. These industries accounted for about 89.1% of the total number of SME establishments.

Top 5 sub-industries in the manufacturing sector in terms of MSME establishments in 2006:

1. manufacture of food products and beverages, 55,007 establishments
2. manufacture of wearing apparel, 15,623
3. manufacture of fabricated metal products except machinery and equipment, 12,986

	<p>4. manufacture and repair of furniture, 7,188</p> <p>5. manufacture of other non-metallic mineral products, 5,143.</p> <p>These sub-industries accounted for 82.4% of the total number of MSMEs in the manufacturing sector.</p>
<p>GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):</p>	<p>Objective No. 2: Promote market transformation for energy efficiency in industry and the building sector.</p> <p>Since the Philippines is not a major greenhouse gases emitter and considering that the country is one of the vulnerable pacific island-based countries to the impact of climate change, like extreme weather events, sea level rise and more, the country's resources in addressing climate change are inclined more towards developing its climate change resiliency and emphasis is much given to the adaptation strategies. Recognizing as well its GHG contribution to the global emission, external resources have to be generated to supplement the limited local resources to address climate change mitigation strategy. The country's program on climate change mitigation are focus on the large contributors of GHG like large companies/industries and increasing energy self-sufficiency using renewable energy for the power generation utilities.</p> <p>Thus, in this Project other sectors that also contribute to the GHG will be given support in particular the MSMEs from the manufacturing sector. This sector is also identified as major GHG contributors as well as has less awareness on the issues of climate change. Even if aware of, most of all these MSMEs have limited technical and financial resources to implement GHG mitigation strategies.</p> <p>UNIDO focuses its resources and expertise to support developing countries and economies in transition in their efforts to achieve sustainable industrial development. As a technical cooperation agency, UNIDO design and implement programmes focused on major thematic priorities, one of which is the Environment and Energy that directly respond to global development priorities as</p>

well.

Energy is a prerequisite for poverty reduction. Still, fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development. UNIDO therefore promotes sustainable patterns of industrial consumption and production. As a leading provider of services for improved industrial energy efficiency and sustainability, UNIDO assists developing countries and transition economies in implementing multilateral environmental agreements and in simultaneously reaching their economic and environmental goals. Through this thematic priority, UNIDO mainly addresses the Millennium Development Goals (MDG). UNIDO recognizes the MDGs as the overarching framework for collective action and believes that a competitive and environmentally sustainable industry plays a crucial role in accelerating economic growth, thereby reducing poverty and helping to achieve the MDGs.

UNIDO supports developing countries in reducing poverty through productive activities, improving their capacity to trade and gain access to international markets, and through energy access for the poor as well as promoting energy efficiency and renewable energy to fight climate change.

Energy is closely linked with key contemporary global challenges the world faces – social development and poverty alleviation, environmental degradation and climate change and food security – and is therefore a defining issue of our time. UNIDO, as one of the lead agencies in the field of energy, is taking up the challenge, through its integrated energy-related services which include: Providing access to modern energy services for the poor through rural energy for productive use with emphasis on renewable energy projects; Increasing productivity and competitiveness through improving industrial energy efficiency projects; and Reducing GHG emissions through capacity building projects for climate change in general and Kyoto Protocol mechanisms in particular.

The responsibility of UNIDO's Energy and Climate Change Branch is to promote access to energy for productive uses while at the same time supporting patterns

	<p>of energy use by industry that mitigate climate change and are environmentally sustainable.</p> <p>This involves promoting energy efficiency and the adoption of renewable energy sources in the formal industrial sector, enhancing energy access primarily in rural areas as the fundamental means to reduce rural poverty, and championing industrial energy perspectives in the global debates about climate change and other energy-related global trends. In addition, the Branch acts as the focal point within UNIDO for UN-Energy and the United Nations Framework Convention on Climate Change (UNFCCC).</p>			
GEF Financing (amount in \$)	\$3,250,000			
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	Sources of Co-financing	Type of Co-financing	Project	
	Project Government Contribution	In-kind&Grant	1,750,000	
	Private Sector	Unknown at this stage	5,050,000	
	Others (Financing Institution)	Unknown at this stage	3,000,000	
	Total Co-financing		US \$9,800,000	
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the	<p>The country's government support and promotional program for the efficient use of energy and renewable energy utilization are focus primarily to cater for large industry energy users and investment portfolio incentives to increase share in the utilization of indigenous energy for power development sector. These large business and industry sectors to a certain extent also have the technical and financial resources to support the utilization of efficient energy systems and</p>			

<p>previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>invest in renewable energy systems in support of their corporate social responsibility and commitment to address climate change mitigation.</p> <p>With minimal resources extended by the national government to small business and industry sectors, like the MSMEs, the project would extend the assistance towards to the MSMEs sector, which shall likewise contribute to the national development effort at the same time address the concern on climate change.</p> <p>Moreover, this project will complement with our previous energy efficiency and conservation initiative with the following industry a) Food Industry b) Steel and Manufacturing Industry, c) Metal Casting Industry, d) Cement Industry, e) Brewing Industry and f) Chemical Industry. Among the major achievements of these efforts are the development of Energy Conservation Guidebook for the industry, increased awareness of the above said industry on the significance of energy efficiency and conservation and reduction of GHG emissions at the local setting.</p>
---	--

Long list project no. 3

Project Title:	Development and Promotion of Environmentally Sustainable Transport/Participatory Approach in Promoting Environmentally Sustainable Transport Planning in the Philippines*
Project Description:	The overall goal of the project is the reduction of the annual growth rate of energy consumption and associated GHG emissions from the transport sector in urban areas of the country. The project purpose is enhance sustainable mobility through the development of a viable market for environmentally sustainable transport (EST) goods and services, which involves, among others, the promotion of transportation systems of low carbon intensity and shift towards the use of more sustainable transport modes.

The project will strategically support market transformation by improving the capacity of key stakeholders in the transport sector in developing a market for sustainable mobility through:

1. Establishing an enabling policy environment for the implementation of EST
2. Increasing local government investment on environmentally sustainable transport
3. Improving the performance of in use and locally manufactured vehicles
4. Enhancing the capacity and awareness of key stakeholders on EST

The project will demonstrate and extend the concept of EST in the country through a combination of increasing the awareness of the relevant stakeholders in the national and local governments, strengthening local capacities in designing and implementing application projects, adopting supportive regulatory frameworks and facilitating investments in promising applications. The successful implementation of this proposed project will induce market transformation for sustainable mobility. It is recognized that the local government units (LGU) assumes pivotal roles in improving air quality and urban quality of life, in general due to devolution of planning responsibilities to the LGUs. The project is aimed at enhancing the capacity of LGUs in promoting sustainable urban transport. The project shall adopt the priority strategies and action plan identified under the National EST Strategy study that covers 12 thematic areas defined by the Aichi Statement of 2005 that includes

- Public health,
- Strengthening roadside air quality monitoring and assessment,
- Traffic noise management,
- Vehicle emission control, standards, and inspection and maintenance,
- Cleaner fuels,
- Public transport planning and travel demand management (TDM),

	<ul style="list-style-type: none"> ⤴ Non-motorized transport (NMT), ⤴ Environment and people friendly infrastructure development, ⤴ Social equity and gender perspectives, ⤴ Road safety and maintenance, ⤴ Knowledge base, awareness and public participation, and ⤴ Land-use planning <p>GEF Implementing Agency: Department of Transportation and Communications (DOTC) and the University of the Philippines National Center for Transportation Studies (UP-NCTS)</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	Objective no. 4: Promote energy efficient, low carbon transport and urban systems
GEF Financing (amount in \$)	\$2,630,000
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	\$7.504M
Baseline information Please describe whether the project is a follow	

<p>through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	
--	--

Long list project no. 4

Project Title:	Improve cost-effectiveness and mainstream biodiversity conservation in management of degraded forests, including protected watersheds (MULTI-FOCAL)
Project Description:	The project aims to support the overarching efforts of the Philippine's Government for Sustainable Forest Management, as decreed by Executive Order No. 318, 2004. This will be done by ensuring convergence and following an ecotown concept, working on degraded forests, including protected watersheds. The project will have a strong focus on including poorest and most vulnerable communities within Key Biodiversity Areas (KBAs) and protected watersheds, such as those located within Siargao, Eastern Samar, Palawan, Batanes, and Marikina Watershed, in order to pilot and demonstrate how sustainable and cost-effective forest practices can ensure poverty alleviation and can protect

	<p>communities from the adverse effects of climate change.</p> <p>The project will contribute to improving the sustainability and increasing the efficiency of managing and restoring large areas of degraded forests, and enhancing carbon stocks while creating livelihood opportunities. By focusing on the ecotown concept, the project will work on protecting and enhancing biodiversity values at landscape level through cost-effective sustainable forest management (SFM) within the poorest communities living in and around KBAs and protected watershed areas.</p> <p>As such, the project will work on piloting approaches and supporting mechanisms that will directly feed into holistic, science-based, rights-based, technology-based and community-based management of watersheds and will ensure active and informed participation of Local Government Units (LGUs), Non-Government Organizations (NGOs) and other concerned stakeholders in the management of forest resources within the poorest communities of KBAs and protected watershed areas. In particular, the project is designed to support the Upland Development Program (UDP) of the DENR (Memorandum Order Nos. 2008-04 and 2010-04), the National Greening Program (EO No. 26), and the National PA Strategy Development Plan. The project is also in line with Philippine National REDD-Plus Strategy (PNRPS).</p> <p>The project is considering earlier FAO estimation that restoring degraded forests can augment forest carbon pool by more than 100 tonnes per hectare, and at the same time it is recognizing the need to promote SFM techniques that ensure biodiversity and livelihood benefits and build capacity and resiliency of the poorest communities within KBAs and protected watershed areas.</p>
--	--

	<p>The project will be implemented through five main components:</p> <ol style="list-style-type: none"> 1. Demonstrating SFM techniques/good forest management practices that consider the specific ecotown characteristics, both in terms of biodiversity and socio-economic characteristics of selected poorest communities and ensuring convergence with long-term management plans of large areas of degraded forests. 2. Strengthening the policy and regulatory framework for promoting forestry-based CSR activities and creating public-private partnerships. 3. Capacity building and institutional strengthening, in particular for cost-benefit assessment, monitoring changes in forest carbon stocks, and for increase resiliency of the poorest and vulnerable communities in adopting approaches that promote generation of revenues from the voluntary carbon market. 4. Developing and scaling up community-based incentives and supporting sustainable income generation for poorest and vulnerable local communities involved in management and restoration of degraded forests. <p>Project management, monitoring and evaluation, and dissemination of best practices</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	<p>The proposed project will contribute to the GEF-5 Climate Change Objective 5, and will specifically support achievement of: 1) Good management practices in LULUCF adopted both within the forestland and in the wider landscape, and 2) Restoration and enhancement of carbon stocks in forests lands. Earlier efforts (see baseline information) in the Philippines have demonstrated the opportunities for restoring degraded forests and sourcing carbon credits that encompass biodiversity and livelihoods benefits for the VCMs, but have also identified the need to scale up the adoption of cost-effective SFM, document the impacts of different techniques on the carbon stocks and strengthen capacities to access VCMs. The proposed project is designed as a response to these identified gaps.</p>

GEF Financing (amount in \$)	<p>GEF financing requested from the CC focal area: \$1,150,000</p> <p>GEF financing requested from other focal areas:</p> <p>Biodiversity: \$650,000</p> <p>SFM: 600,000</p>
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	<p>DENR (UDP + National Greening Programme) - \$ 1,200,000 (program funds)</p> <p>FAO (Technical Cooperation Programme on forestry-related VCMs) - \$ 470,000 (project funds)</p> <p>The Integrated Natural Resources and Environmental Management and Investment Program (INREM-SP) of Asian Development Bank (ADB) - \$ 450,00 (program funds)</p> <p>Bagong Pagasa through Japan Fund for Global Environment - \$ 80,000 (project funds)</p> <p>In-kind support (DENR, LGU, Bagong Pagasa) - \$ 1,500,000</p>
<p>Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status 	<p>The proposed project is based on DENR efforts for promoting the application of Assisted Natural Regeneration (ANR), initiated as early as 1989 with the issuing of Memorandum Circular No. 17 for rehabilitation and development of watersheds, and in particular on the successes of the small-scale ANR pilot project implemented by DENR with FAO assistance, from 2006-2009, through which three small pilot sites were established.</p> <p>Cost-effectiveness assessment of the pilot project confirmed that ANR reduces the costs of forest restoration by 50 percent compared with conventional reforestation approaches, while successfully preventing forest fires and enhancing local biodiversity. Notable changes were observed in the biodiversity of the sites, i.e.</p>

<ul style="list-style-type: none"> • Major achievements • Barriers and gaps 	<p>faster growth of seedlings, emergence of wildlings of important, threatened, vulnerable and critically endangered forest species to advance the state of forest ecosystem.</p> <p>The pilot project significantly reduced the fire occurrence at the pilot sites. Considering, that due to reoccurring forest fires, the actual success rate of the reforestation efforts in the Philippines is less than 30 percent, community-based fire management strategies piloted at the project have particular importance and potential for successful scaling up.</p> <p>Lessons from the pilot project, demonstrate that if applied properly, ANR is well accepted by the local communities and LGUs and can raise significant interest from the private sector. Encouraged by the evident decline of forest fires incidents, participating municipalities included forest restoration plans through ANR in their local development strategies. Within its limited scope, the project piloted some creative approaches, such as channeling portion of local ecotourism revenues to ANR activities, and creating public-private partnerships with <i>Philex Gold Philippines-Bulawan</i>, and <i>Petron Corporation</i> for post-project site maintenance. The project also initiated a process for developing a carbon offsetting scheme for the Makati Municipality through supporting ANR activities in Bohol.</p> <p>Building on previous achievements, the proposed project will aim at addressing some of the key barriers to date, namely:</p> <ol style="list-style-type: none"> 1. Considering the size of degraded forestland (e.g., some 6 million hectares of low-productivity <i>Imperata</i> grasslands alone) including important watersheds and protected areas, there is a strong need for cost-effective landscape level restoration and impacting large areas of degraded forests including KBAs and
---	---

	<p>protected watersheds.</p> <p>2. Globally important endemic species are fragmented and scattered throughout the country rehabilitation of degraded forestlands has to consider the ecotown approach and the complexity of each site. This is difficult to achieve by applying only conventional reforestation or by only focusing on natural regeneration. To date there is a lack of detailed and verified documentation on the impacts of different SFM practice on important forest ecosystem services and livelihood security. In order to further promote and advocate application of cost-effective SFM practices on large areas there is an urgent need for demonstrating and documenting the cost effectiveness of the specific approach vis-à-vis the positive changes in local biodiversity and carbon fluxes, and on providing livelihood opportunities for the most poor and vulnerable communities. This is particularly important in the view of obtaining carbon standards and accessing the VSMs.</p> <p>3. Despite the fact that LGUs are increasingly engaged in co-sharing the responsibilities for watershed management and making decisions that affect natural resource management. Often, LGUs lack the capacity to integrate sustainability into their development planning, and to recognize the benefits from successful forest rehabilitation and promoting biodiversity conservation.</p> <p>4. The private sector has little economic incentive to focus on sustainability, and in addition lacks access to simple and verifiable proposals for investing in forest restoration. Despite rising popularity of forestry credits at the VCMs, private companies are facing confusion over modalities of various offsetting schemes. In the Philippines, Corporate Social Responsibility (CSR) has received increased attention by the private sector, but the country is yet to officially adopt CSR enabling legislation.</p>
--	---

Long list project no. 5

Project Title:	Asian Sustainable Transport and Urban Development Program (ASTUD)
Project Description:	<p>The objective of the ASTUD program is to support Asian cities in realizing greenhouse gas (GHG) reductions and local co- benefits through the integration of low-carbon and climate resilient transit infrastructure and transport services with transit-supportive, low-carbon urban development.</p> <p>ASTUD is structured as a Multi-Country Program that supports primarily city-level project activities related to urban development and sustainable transport. National-level activities are supported when they encourage or facilitate city-level activities on urban development and sustainable transport, including the replication and scaling up of successful city-level approaches. The program has a small regional component to facilitate exchange of experiences and joint learning among the participating countries, with a focus on south-south learning exchange.</p> <p>Consistency with National Priorities, Plans and Policies:</p> <p>The Republic of the Philippines formulated a national environmentally sustainable transport strategy the results of which were included explicitly in the Philippines' National Framework Strategy on Climate Change 2010-2022. The proposed activities under the ASTUD program: BRT development sustainable transport technology and support for national urban transport strategy directly contribute to the main transport objective of the National Framework Strategy on Climate Change 2010-2022: "to improve the efficiency of the transport sector through increased uptake of alternative fuels and expansion of mass transport systems." Environmentally Sustainable Transport has also been identified as one</p>

of the priorities in the current draft of the Philippines National Portfolio formulation Exercise.

Specific Program Activities within the Philippines:

Within the proposed Program Framework, it is proposed that the Philippines would have 1-2 city level project transit project as well as support at the national level on sustainable transport policy implementation and investment facilitation to assist in replication to other cities. Approximately \$4 million of the Philippines' GE STAR allocation for climate change mitigation could be used for such activities.

Project Name and No.	Project Location	Baseline Outputs	ADB Financing	Potential Project-Specific GEF Activities
Low-Carbon Electronic Public Transport Vehicles	TBD	Electric 3-wheeler Development and Dissemination	30	Financial mechanisms for market barrier removal, Expansion of Program for National or Regional Pilot
Davao Mass Rapid Transit	Davao	BRT System	20	NMT facilities, low-carbon vehicle technology,

					transit-supportive land-use planning, operations and efficiency capacity building
	National Transport Policy Development	National	-	-	Development of National Policy/ Strategy for Integrated Urban Transportation & Development, Strategy for Resource Mobilization for Sustainable Urban Transport (SUT), Policy Support for Adoption of Low-Carbon Transport and Urban Technologies

GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	Objective no.	Outcome	Output
	Objective no. 4: Promote energy efficient low carbon transport and urban development	Outcome 4.1: Sustainable transport and urban policy and regulatory frameworks adopted and implemented Outcome 4.2: Increased investment in less-GHG intensive transport and urban systems Outcome 4.3 GHG emissions avoided	Output 4.1: 10 cities in 7 countries adopting in low-carbon programs (Bangladesh, India, Indonesia, Mongolia, PRC, Philippines, Sri Lanka) Output 4.2: 1.5 billion investment mobilized for low carbon transport and urban development from both ADB and other sources Output 4.3: 2.5 million tons of GHG savings per year achieved
	Objective no 1: Promote the demonstration deployment and transfer of innovative low carbon technologies	Outcome 1.1: Technologies successfully demonstrated, deployed, and transferred	Output 1.1: Innovative low carbon technologies for paratransit and transit demonstrated and deployed on the ground in 3-5 cities

		Outcome 1.2: Enabling policy environment and mechanisms created for technology transfer	Output 1.2: National strategies for the deployment and commercialization of innovative low-carbon technologies adopted in 3 countries
		Outcome 1.3: GHG emissions avoided	Output 1.3: 1 million tons of GHG savings per year achieved
GEF Financing (amount in \$)	\$4,000,000 for the Philippines		
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	ADB Investment: \$50M for the Philippines		
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following:	Despite advances in recent decades, many developing countries in the Asia region have enormous unmet transport needs and face great challenges in making transport sustainable. Transport improvements have not kept pace with the growth in demand and there are gaps in terms of accessibility, geographical coverage and interconnectivity, particularly in poor regions. Also given the pace of urbanization, Asian cities face associated problems such as increased traffic congestion, lost productivity, air pollution, and rising levels of GHG emissions. Through the Sustainable Transit Initiative (STI), ADB is supporting the Asia-Pacific region to address these issues by developing sustainable transportation that is accessible, safe, environmentally and climate friendly, and affordable.		

<ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>Supported by the STI, ADB has a large portfolio of sustainable urban transport and urban development projects within its 2011-2013. This includes planned investments of more than \$2 billion in the 7 countries proposed to participate in the ASTUD program. With a primary focus on infrastructure investments, the baseline program will support investments in MRTs, BRTs, electric vehicles, non-motorized transport, energy efficient buildings and other interventions.</p> <p>While the baseline program will provide considerable GHG emissions reductions in the participating countries, there is considerable scope for further increasing the overall catalytic potential of the baseline program through support from the GEF. This would allow the program to:</p> <ul style="list-style-type: none"> a) Provide greater integration between capital investments in mass transit and broader urban development b) Provide greater integration between national/local policy efforts and city-level infrastructure schemes c) Go beyond ad-hoc approaches to capacity building that are separated from investments or limited to single dis-connected investments d) Build regional knowledge networks and south-south cooperation through joint learning on common problems that affect multiple cities and countries in the region e) Increase the overall level of GHG emissions from the program, by increasing the overall efficiency of urban transport through multi-modal approaches. <p>The ASTUD program addresses the rapid growth in GHG emissions, which results from rapid urbanization and motorization in Asian cities and which is aggravated by the limited coordination between urban development and</p>
--	--

	associated transport infrastructure and services. The investments under the ASTUD program will help participating cities keep pace with the demand for urban infrastructure for the near term, while simultaneously strengthen national policy, local planning, and multi-sectoral integration.
--	---

Long list project no. 6

Project Title:	Strengthening Sustainable Resource Management of Bamboo for Climate Change Mitigation through Carbon Sequestration
Project Description:	<p>The project is aimed to strengthen sustainable resource management of bamboo and/or leverage the bamboo forest ecosystems in the Philippines to help mitigate climate change through carbon sequestration, while simultaneously providing other important services for human adaptation and economic development.</p> <p>Specifically, the project aims to achieve the following:</p> <ol style="list-style-type: none"> 1. Contribute to the attainment of the objectives of Climate Change Focal Area and GEF 5 Strategic Goals: <ol style="list-style-type: none"> a. Conserve and enhance carbon stocks through sustainable management of land use, land use change, and forestry, good management practices, restoration and avoiding emissions and carbon sequestration b. Reduce climate change risks by stabilizing atmospheric GHG concentration through emission reduction actions c. Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities 2. A sustainable bamboo supply based on propagation and establishment of nurseries and plantations <ol style="list-style-type: none"> a. Re-establish forestry and support bamboo's sustainable propagation

	<p>for a continuous mitigation of climate change through a more efficient capture of carbon emission and replacement of materials that are produced with high carbon credit/emission and/or conserve, restore, enhance and manage carbon stocks in bamboo forest lands and prevent emissions of the carbon stocks to the atmosphere</p> <ul style="list-style-type: none"> b. Help attain the country's commitment to reforest at least 24% of the 500,000 hectares new or additional bamboo forest areas as the Philippines' contribution to the ASEAN commitment of 10 million hectares of new forest by 2020 as part of its initiatives to improve the environment c. Generate renewable crops, jobs, and income while thriving on carbon and nitrogen and, thus, help to stabilize climate, soils and economies d. Maximize the utilization of the environmental contribution of bamboo as the green alternative through a sound business scheme that will highlight its economic significance and will involve the widest participation of the citizenry <p>3. An adaptation to climate change and disaster risk management</p> <ul style="list-style-type: none"> a. Propagate the planting of bamboo as a means to fend off soil erosion b. Assist Local Government Units (LGUs) in promoting and establishing bamboo plantations, crafts and bamboo-centered businesses in flood- and landslide- prone areas thereby providing income generating opportunities and livelihood alternatives to Community-Based Forest Management groups, to settlers relocated from their unsafe and risky home areas, and to poor families in need of means to earn more c. Contribute to community efforts for disaster mitigation; given the natural resilience and strength of bamboo it can withstand strong typhoons and fire d. Contribute to community efforts for climate change mitigation; bamboo has carbon sequestration properties <p>4. An economically feasible and market-oriented bamboo-based business development towards the creation of rural and urban employment</p> <ul style="list-style-type: none"> a. Develop technologically advanced and innovative bamboo products to efficiently promote the use of bamboo; b. Create the need for bamboo products through successful product development and support business development by providing entrepreneurial and livelihood opportunities
--	---

- c. Service the P10 billion desk requirements of DepEd and similar purchases of other government agencies
- d. Secure the overall sustainability of the country's bamboo industry

Geographical Focus:

This proposed project will contribute to the overall Bamboo Industry Development Project but will focus on the following six (6) pilot regions as these geographical areas in the country are considered extremely poor, are threatened by natural disasters, have existing natural bamboo stands/bamboo forests, and are good potential sites for establishment of new bamboo plantations.

Luzon Region	-	CAR, Southern Luzon & Bicol
Visayas	-	Western Visayas
Mindanao	-	Davao & CARAGA Regions

An estimate of twenty thousand (20,000) new hectares per region will be targeted to be planted to bamboo with a total of 120,000 hectares covering the pilot regions. Proposed areas to be reforested or planted to bamboo are as follows:

1. Areas under the jurisdiction of the DENR designated for reforestation. These include those under the supervision of the DENR-Field Operations Office, Forest Management Bureau, the Mines and Geosciences Bureau, the Laguna Lake Development Authority and other offices under the Department
2. In particular, DENR-Field Operations Offices and the Forest Management Bureau shall give the following areas preferential attention in using bamboo for reforestation:
 - a. Areas covered by Community-Based Forest Management

	<p>Agreements and other land tenure instruments such as IFMA, SIFMA, PACBRMA, CADT, etc.</p> <p>b. Degraded watersheds that are of critical importance in water production for industrial and domestic consumption, power generation and irrigation</p> <p>c. Areas adjacent to river/creeks and other waterways</p> <p>d. Areas prone to erosion and landslides, particularly those along roadsides and those close to populated areas</p> <p>3. Idle, marginalized or unproductive agricultural areas suitable for bamboo plantation development or farming except those that are primarily used for food production</p> <p>4. Lands suitable for bamboo plantation development under the jurisdiction of government-owned corporations, LGUs and private land holders</p>		
	Project components	Expected Outcomes	Expected Outputs/ Outcome Indicators
	1. Policy Support Mechanisms	<p>Assessment of existing related mechanism</p> <p>Recommendations for a supportive policy mechanism</p>	<p>National Forestry and land use policies adjustments</p> <p>Strengthened related policies</p> <p>Supportive policies and regulations on a local and regional scope that advocate carbon sequestration in forest ecosystems and advocate sustainable bamboo management</p>
	2. Institutional and	Capacity Development	Appropriate

	Technical Capacity Building to Implement Strategies and Policies	Programs identified and conducted	<p>strategies and policies</p> <p>Measures to alleviate carbon dioxide emission (i.e. soil erosion mgt, land use change and resume; production bio-fuel to reduce the amount of fossil utilization; and intensive arable land management)</p>
	3. Developing Capacity for the Sustainable Management and Supply of Bamboo	Technology transfer/ technical capacity for bamboo resource management and supply developed (i.e. management practices on carbon sequestration capacity, ecosystems & carbon distribution patterns of bamboo forest techniques, etc)	<p>Capacity in management of nurseries and plantations developed and enhanced</p> <p>Good management techniques/ practices/ model/ option for carbon sequestration researched and established</p> <p>Bamboo villages established and strengthened (nodes and hubs)</p>
	4.	Plantation	Nurseries and

	Propagation/ Establishment Nurseries and Plantations	<p>sites/areas/ lands identified</p> <p>Appropriate bamboo specie identified for propagation/ planting</p> <p>Micro and large-scale bamboo propagation/ production technology transfer adopted</p>	<p>plantations established / restored/ enhanced. Indicator: 120,000 hectares planted (24% of the targeted 500,000 hectares)</p> <p>Number of propagules produced</p> <p>Number of seedlings planted</p> <p>10,000 farmers assisted</p> <p>60,000+ jobs created (1 laborer per 1 hectare-plantation)</p>
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	<p>Geographical Information systems (GIS) and Remote Sensing adopted</p> <p>Carbon Sequestration Methodologies employed, Area Estimation and Culm Estimation</p> <p>Restoration and enhancement of</p>	<p>Carbon sequestration analyzed/ carbon stocks estimated on the following:</p> <ul style="list-style-type: none"> • Bamboo forest ecosystems • Bamboo forest biomass • Bamboo soil • Bamboo stands • Bamboo litters

		carbon stocks	<ul style="list-style-type: none">Bamboo products <p>Bamboo Forest Ecosystem Carbon Storage distribution (rhizomes, roots & soil carbon)/ above-ground and below-ground carbon storage</p> <p>GHG emissions (tons of CO2) avoided measured</p>								
	6. Financing Mechanisms and Investment Programs										
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	Objective no. 5: Promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry										
GEF Financing (amount in \$)	\$3,000,000										
	<table><tr><th>Project Components</th><th>Indicative GEF Financing</th></tr><tr><td>1. Policy Support Mechanisms</td><td>\$80,000</td></tr><tr><td>2. Institutional and Technical Capacity Building to Implement Strategies and Policies</td><td>\$120,000</td></tr><tr><td>3. Developing Capacity for the Sustainable Management and Supply</td><td>\$200,000</td></tr></table>			Project Components	Indicative GEF Financing	1. Policy Support Mechanisms	\$80,000	2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$120,000	3. Developing Capacity for the Sustainable Management and Supply	\$200,000
Project Components	Indicative GEF Financing										
1. Policy Support Mechanisms	\$80,000										
2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$120,000										
3. Developing Capacity for the Sustainable Management and Supply	\$200,000										

	of Bamboo	
	4. Propagation/ Establishment Nurseries and Plantations	\$1,100,000
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	\$1,000,000
	6. Financing Mechanisms and Investment Programs	\$500,000
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	\$6Million	
	Project Components	Indicative GEF Financing
	1. Policy Support Mechanisms	\$200,000
	2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$350,000
	3. Developing Capacity for the Sustainable Management and Supply of Bamboo	\$400,000
	4. Propagation/ Establishment Nurseries and Plantations	\$3,000,000
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	\$2,000,000
	6. Financing Mechanisms and Investment Programs	\$1,050,000
Baseline information Please describe whether the project is a follow through of a previous	The proposed project is aligned with the National Framework Strategy on Climate Change and National REDD (Reduce Emissions from Deforestation and Degradation). This will contribute to a large extent the attainment of the objectives of the EO 879 which directed the promotion of the bamboo industry	

<p>project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>development in the Philippines. Furthermore, this will help reduce the gap in the country's wood supply in view of the moratorium on the cutting and harvesting of timber in the national forest pursuant to EO 23.</p> <p>This is strongly pursued for implementation considering the renewed interest in the use of bamboo and its impact to climate change mitigation and adaptation</p>
--	--

Long list project no. 7

Project Title:	Philippine Electric Vehicle Conversion Technology Transfer and Adaptation Support Project
Project Description:	Urban transport has also chronically posed serious health and environmental threats, with the high level of air pollution being a part of daily life in many cities congested by motorized vehicles. With the increasing urbanization and

	<p>motorization trends, which generate these problems, it is clear that the Philippines needs to lessen its dependence on fossil fueled transport and catalyze the entry and widespread development and use of more “climate friendly” transport technologies. Lack of environmentally sound technology options is a major concern of the indigenous public utility transport sub-sector and the government. At the moment, the public transport utility sub-sector is dominated by jeepneys and tricycles, which are petroleum fueled and, therefore, generate significant amounts of GHG emissions.</p> <p>The Project aims to address the severe lack of environmentally sustainable technology alternatives to diesel/gasoline run vehicles (jeepneys and tricycles) by demonstrating the use of an appropriate electric vehicle (EV) conversion technology and determining the most optimum technology transfer and adaptation process and requirements to make this happen. In the process, it will identify and facilitate the development of the required policy environment, mechanisms/institutional arrangements and the requisite competencies of the concerned policymakers, practitioners, including raising awareness and securing the buy-in of the technology users. Specifically, the Project will strategically support key stakeholders in the Philippines to: 1.) establish an enabling policy environment for the implementation of the selected electric vehicle conversion technology for public utility vehicles (PUVs); 2.) establish mechanism(s) and systems & procedures to enable fossil-fueled PUVs to be transformed into electric run vehicles; 3.) develop innovative financing approaches for EV conversion of PUVs and ensure sustainability with the availability of support infrastructure; 4.) develop the competencies of key stakeholders (policymakers, practitioners & technicians, technology users, etc..) on EV conversion technologies; and 5.) enhance the awareness of the general public on sustainable transport and clean vehicle technology options (especially EVs) to secure support and buy in.</p>
--	---

	<p>While this technology transfer and adaptation process will be developed and showcased for a specific technology in the transport sector, the results of the Project will produce a template for technology transfer, diffusion and development that can be applicable to the other sectors, including those employing climate change adaptation technologies.</p> <p>At the global level, the Project will contribute to the stabilization of GHG concentrations in the atmosphere by reducing the amount of GHGs generated by the public transport utility sub-sector (especially jeepneys and tricycles) by 2,700 kilotons per year of CO2 equivalent. It will contribute to modifying long term trends in GHG emissions by promoting a shift towards the use of more sustainable forms of urban mobility and reducing the growth of energy consumption in the transport sector. It will also contribute to the growing body of knowledge and experience on how climate change technologies (both for mitigation and adaptation) can be systematically shared, taken up and adapted among developed and developing countries.</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	<p>The Project conforms to the basic GEF climate change focal area strategy and addresses objective 1 on promoting the demonstration, deployment and transfer of advanced low carbon technologies and objective 4 on promoting efficient, low carbon transport and urban systems. Since it will attempt to identify the processes and requirements for the transfer and fast take up of a specific technology (electric vehicle conversion technology), such as an enabling policy environment, capacity development and financing, among others, the Project is expected to catalyze the entry and adaptation of environmentally sound technologies by providing a model or template for addressing these needs.</p> <p>The Project is fully aligned with the relevant objectives and priorities of the current Medium Term Philippine Development Plan (MTPDP), especially on the</p>

	<p>for a continuous mitigation of climate change through a more efficient capture of carbon emission and replacement of materials that are produced with high carbon credit/emission and/or conserve, restore, enhance and manage carbon stocks in bamboo forest lands and prevent emissions of the carbon stocks to the atmosphere</p> <ul style="list-style-type: none"> b. Help attain the country's commitment to reforest at least 24% of the 500,000 hectares new or additional bamboo forest areas as the Philippines' contribution to the ASEAN commitment of 10 million hectares of new forest by 2020 as part of its initiatives to improve the environment c. Generate renewable crops, jobs, and income while thriving on carbon and nitrogen and, thus, help to stabilize climate, soils and economies d. Maximize the utilization of the environmental contribution of bamboo as the green alternative through a sound business scheme that will highlight its economic significance and will involve the widest participation of the citizenry <p>3. An adaptation to climate change and disaster risk management</p> <ul style="list-style-type: none"> a. Propagate the planting of bamboo as a means to fend off soil erosion b. Assist Local Government Units (LGUs) in promoting and establishing bamboo plantations, crafts and bamboo-centered businesses in flood- and landslide- prone areas thereby providing income generating opportunities and livelihood alternatives to Community-Based Forest Management groups, to settlers relocated from their unsafe and risky home areas, and to poor families in need of means to earn more c. Contribute to community efforts for disaster mitigation; given the natural resilience and strength of bamboo it can withstand strong typhoons and fire d. Contribute to community efforts for climate change mitigation; bamboo has carbon sequestration properties <p>4. An economically feasible and market-oriented bamboo-based business development towards the creation of rural and urban employment</p> <ul style="list-style-type: none"> a. Develop technologically advanced and innovative bamboo products to efficiently promote the use of bamboo; b. Create the need for bamboo products through successful product development and support business development by providing entrepreneurial and livelihood opportunities
--	---

- c. Service the P10 billion desk requirements of DepEd and similar purchases of other government agencies
- d. Secure the overall sustainability of the country's bamboo industry

Geographical Focus:

This proposed project will contribute to the overall Bamboo Industry Development Project but will focus on the following six (6) pilot regions as these geographical areas in the country are considered extremely poor, are threatened by natural disasters, have existing natural bamboo stands/bamboo forests, and are good potential sites for establishment of new bamboo plantations.

Luzon	-	CAR, Southern Luzon & Bicol
Region	-	
Visayas	-	Western Visayas
Mindanao	-	Davao & CARAGA Regions

An estimate of twenty thousand (20,000) new hectares per region will be targeted to be planted to bamboo with a total of 120,000 hectares covering the pilot regions. Proposed areas to be reforested or planted to bamboo are as follows:

1. Areas under the jurisdiction of the DENR designated for reforestation. These include those under the supervision of the DENR-Field Operations Office, Forest Management Bureau, the Mines and Geosciences Bureau, the Laguna Lake Development Authority and other offices under the Department
2. In particular, DENR-Field Operations Offices and the Forest Management Bureau shall give the following areas preferential attention in using bamboo for reforestation:
 - a. Areas covered by Community-Based Forest Management

	<p>Agreements and other land tenure instruments such as IFMA, SIFMA, PACBRMA, CADT, etc.</p> <p>b. Degraded watersheds that are of critical importance in water production for industrial and domestic consumption, power generation and irrigation</p> <p>c. Areas adjacent to river/creeks and other waterways</p> <p>d. Areas prone to erosion and landslides, particularly those along roadsides and those close to populated areas</p> <p>3. Idle, marginalized or unproductive agricultural areas suitable for bamboo plantation development or farming except those that are primarily used for food production</p> <p>4. Lands suitable for bamboo plantation development under the jurisdiction of government-owned corporations, LGUs and private land holders</p>		
	Project components	Expected Outcomes	Expected Outputs/ Outcome Indicators
	1. Policy Support Mechanisms	<p>Assessment of existing related mechanism</p> <p>Recommendations for a supportive policy mechanism</p>	<p>National Forestry and land use policies adjustments</p> <p>Strengthened related policies</p> <p>Supportive policies and regulations on a local and regional scope that advocate carbon sequestration in forest ecosystems and advocate sustainable bamboo management</p>
	2. Institutional and	Capacity Development	Appropriate

	Technical Capacity Building to Implement Strategies and Policies	Programs identified and conducted	<p>strategies and policies</p> <p>Measures to alleviate carbon dioxide emission (i.e. soil erosion mgt, land use change and resume; production bio-fuel to reduce the amount of fossil utilization; and intensive arable land management)</p>
	3. Developing Capacity for the Sustainable Management and Supply of Bamboo	Technology transfer/ technical capacity for bamboo resource management and supply developed (i.e. management practices on carbon sequestration capacity, ecosystems & carbon distribution patterns of bamboo forest techniques, etc)	<p>Capacity in management of nurseries and plantations developed and enhanced</p> <p>Good management techniques/ practices/ model/ option for carbon sequestration researched and established</p> <p>Bamboo villages established and strengthened (nodes and hubs)</p>
	4.	Plantation	Nurseries and

	Propagation/ Establishment Nurseries and Plantations	<p>sites/areas/ lands identified</p> <p>Appropriate bamboo specie identified for propagation/ planting</p> <p>Micro and large-scale bamboo propagation/ production technology transfer adopted</p>	<p>plantations established / restored/ enhanced. Indicator: 120,000 hectares planted (24% of the targeted 500,000 hectares)</p> <p>Number of propagules produced</p> <p>Number of seedlings planted</p> <p>10,000 farmers assisted</p> <p>60,000+ jobs created (1 laborer per 1 hectare-plantation)</p>
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	<p>Geographical Information systems (GIS) and Remote Sensing adopted</p> <p>Carbon Sequestration Methodologies employed, Area Estimation and Culm Estimation</p> <p>Restoration and enhancement of</p>	<p>Carbon sequestration analyzed/ carbon stocks estimated on the following:</p> <ul style="list-style-type: none"> • Bamboo forest ecosystems • Bamboo forest biomass • Bamboo soil • Bamboo stands • Bamboo litters

		carbon stocks	<ul style="list-style-type: none">Bamboo products <p>Bamboo Forest Ecosystem Carbon Storage distribution (rhizomes, roots & soil carbon)/ above-ground and below-ground carbon storage</p> <p>GHG emissions (tons of CO2) avoided measured</p>								
	6. Financing Mechanisms and Investment Programs										
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	Objective no. 5: Promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry										
GEF Financing (amount in \$)	\$3,000,000										
	<table><tr><th>Project Components</th><th>Indicative GEF Financing</th></tr><tr><td>1. Policy Support Mechanisms</td><td>\$80,000</td></tr><tr><td>2. Institutional and Technical Capacity Building to Implement Strategies and Policies</td><td>\$120,000</td></tr><tr><td>3. Developing Capacity for the Sustainable Management and Supply</td><td>\$200,000</td></tr></table>			Project Components	Indicative GEF Financing	1. Policy Support Mechanisms	\$80,000	2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$120,000	3. Developing Capacity for the Sustainable Management and Supply	\$200,000
Project Components	Indicative GEF Financing										
1. Policy Support Mechanisms	\$80,000										
2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$120,000										
3. Developing Capacity for the Sustainable Management and Supply	\$200,000										

	of Bamboo	
	4. Propagation/ Establishment Nurseries and Plantations	\$1,100,000
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	\$1,000,000
	6. Financing Mechanisms and Investment Programs	\$500,000
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	\$6Million	
	Project Components	Indicative GEF Financing
	1. Policy Support Mechanisms	\$200,000
	2. Institutional and Technical Capacity Building to Implement Strategies and Policies	\$350,000
	3. Developing Capacity for the Sustainable Management and Supply of Bamboo	\$400,000
	4. Propagation/ Establishment Nurseries and Plantations	\$3,000,000
	5. Monitoring and Measurement of the Carbon Stocks and Emissions	\$2,000,000
	6. Financing Mechanisms and Investment Programs	\$1,050,000
Baseline information Please describe whether the project is a follow through of a previous	The proposed project is aligned with the National Framework Strategy on Climate Change and National REDD (Reduce Emissions from Deforestation and Degradation). This will contribute to a large extent the attainment of the objectives of the EO 879 which directed the promotion of the bamboo industry	

<p>project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>development in the Philippines. Furthermore, this will help reduce the gap in the country's wood supply in view of the moratorium on the cutting and harvesting of timber in the national forest pursuant to EO 23.</p> <p>This is strongly pursued for implementation considering the renewed interest in the use of bamboo and its impact to climate change mitigation and adaptation</p>
--	--

Long list project no. 7

Project Title:	Philippine Electric Vehicle Conversion Technology Transfer and Adaptation Support Project
Project Description:	Urban transport has also chronically posed serious health and environmental threats, with the high level of air pollution being a part of daily life in many cities congested by motorized vehicles. With the increasing urbanization and

	<p>motorization trends, which generate these problems, it is clear that the Philippines needs to lessen its dependence on fossil fueled transport and catalyze the entry and widespread development and use of more “climate friendly” transport technologies. Lack of environmentally sound technology options is a major concern of the indigenous public utility transport sub-sector and the government. At the moment, the public transport utility sub-sector is dominated by jeepneys and tricycles, which are petroleum fueled and, therefore, generate significant amounts of GHG emissions.</p> <p>The Project aims to address the severe lack of environmentally sustainable technology alternatives to diesel/gasoline run vehicles (jeepneys and tricycles) by demonstrating the use of an appropriate electric vehicle (EV) conversion technology and determining the most optimum technology transfer and adaptation process and requirements to make this happen. In the process, it will identify and facilitate the development of the required policy environment, mechanisms/institutional arrangements and the requisite competencies of the concerned policymakers, practitioners, including raising awareness and securing the buy-in of the technology users. Specifically, the Project will strategically support key stakeholders in the Philippines to: 1.) establish an enabling policy environment for the implementation of the selected electric vehicle conversion technology for public utility vehicles (PUVs); 2.) establish mechanism(s) and systems & procedures to enable fossil-fueled PUVs to be transformed into electric run vehicles; 3.) develop innovative financing approaches for EV conversion of PUVs and ensure sustainability with the availability of support infrastructure; 4.) develop the competencies of key stakeholders (policymakers, practitioners & technicians, technology users, etc..) on EV conversion technologies; and 5.) enhance the awareness of the general public on sustainable transport and clean vehicle technology options (especially EVs) to secure support and buy in.</p>
--	---

	<p>While this technology transfer and adaptation process will be developed and showcased for a specific technology in the transport sector, the results of the Project will produce a template for technology transfer, diffusion and development that can be applicable to the other sectors, including those employing climate change adaptation technologies.</p> <p>At the global level, the Project will contribute to the stabilization of GHG concentrations in the atmosphere by reducing the amount of GHGs generated by the public transport utility sub-sector (especially jeepneys and tricycles) by 2,700 kilotons per year of CO2 equivalent. It will contribute to modifying long term trends in GHG emissions by promoting a shift towards the use of more sustainable forms of urban mobility and reducing the growth of energy consumption in the transport sector. It will also contribute to the growing body of knowledge and experience on how climate change technologies (both for mitigation and adaptation) can be systematically shared, taken up and adapted among developed and developing countries.</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	<p>The Project conforms to the basic GEF climate change focal area strategy and addresses objective 1 on promoting the demonstration, deployment and transfer of advanced low carbon technologies and objective 4 on promoting efficient, low carbon transport and urban systems. Since it will attempt to identify the processes and requirements for the transfer and fast take up of a specific technology (electric vehicle conversion technology), such as an enabling policy environment, capacity development and financing, among others, the Project is expected to catalyze the entry and adaptation of environmentally sound technologies by providing a model or template for addressing these needs.</p> <p>The Project is fully aligned with the relevant objectives and priorities of the current Medium Term Philippine Development Plan (MTPDP), especially on the</p>

provision of “coherence among networks of institutions, resources, interactions, relationships, political mechanisms and instruments and scientific and technological activities that define, promote, articulate and encourage technological innovation and diffusion (generation, importation, adaptation and dissemination of technologies) processes.” Corollarily, the Land Transport Action Plan under the MTPDP provides the basis for an environmentally sustainable land transportation system. The action plan identifies four (4) key program areas in attaining environmentally sustainable land transport, namely: 1.) Clean emissions, clean air program, 2.) PUV modernization, 3.) Motor Vehicle Inspection System (MVIS), and 4.) transport inter-connectivity or inter-modal terminal program. The project will be pursued under program areas 1 and 2.

The Project is also pursuant to the objectives and Action Agenda of the Philippine Agenda 21 (PA 21), the primary document that guides the Philippine government in fulfilling its commitments under the historic Earth Summit of 1992. The PA 21 contains the necessary operational framework and action agenda that seeks to provide a better quality of life for all through sustainable development. It also details the initiatives needed to shift to sustainable development, including the creation of enabling conditions for SD. It subscribes to the basic principle of generating, adopting, promoting and mainstreaming environment-friendly and cleaner technologies suited to Philippine conditions. Specifically under its urban ecosystem agenda, Strategy 6 addresses air pollution from transport and industry through environmentally sustainable technology options.

The Project will also implement proposed actions in the National Action Plan on Climate Change for the transport sector, such as emission control schemes focusing on improved fuel and vehicle efficiency. It addresses the technology transfer and development needs for mitigation cited in the Philippines’ Initial National Communication on Climate Change. It is also in consonance with the national Environmentally Sustainable Transport (EST) Strategy for the

	<p>Philippines, produced under the leadership of the Department of Transportation and Communications (DOTC), which seeks to address the national interest on urban transport development issues. It puts primary emphasis on the need to increase efficiency of road space usage by favoring public transport and traffic management and the use of alternative clean fuels and environmentally-friendly vehicles.</p> <ol style="list-style-type: none"> 1. As discussed, the current situation is such that there is a dearth of cleaner and more environmentally sustainable technologies adaptable to Philippine conditions which could address the pollutive situation of the country's urban and rapidly urbanizing centers brought about by a highly pollutive and greenhouse gas emitting transport sector. The entry of these technologies is hampered by a non-conducive policy environment, weak institutional capacities, including technical competencies of key agencies of the government, the concerned entities of the private sector and the academe, as well as, weak/absence of appropriate coordinative and financial mechanisms. Specifically, there is not enough scientific and technical capacities, at the moment, to identify and facilitate the entry of and adjust/modify technologies to suit local needs. These are the gaps which the Philippine government cannot easily address currently because of technical and financial constraints. This is particularly true for emergent technologies like EV conversion technology. Without external assistance such as through this GEF project, the country will find difficulty in fast tracking the transformation of its polluting transport sector into an environment friendly one. This Business as Usual (BAU) scenario will most likely continue into the future without external intervention. Under the BAU scenario, the following are anticipated to happen: a.) GHG emissions from the country's transport sector will continue to grow rapidly and mostly unabated; b.) increased local air pollution from the transport sector;
--	--

	<p>c.) transport sector development will be carried out without a clear sense of guidance in terms of its being made “climate-friendly”; d.) inappropriate urban transport investments and management policy will continue; e.) the private sector will continue to play a marginal role as investor and providers of environment-friendly and efficient transport services; f.) funding of sustainable transport initiatives will remain in the purview of government and outside the established local financial systems; and g.) a generally non-responsive transport R & D agenda and capacity development programmes which do not catalyze local adaptation and development of environmentally sustainable transport technologies, including automotive products and components, as well as, appropriate automotive repair and maintenance services.</p> <p>2. Through the Project, the barriers to the smooth entry and adaptation of a preferred environmentally sustainable transport technology (EV conversion) can be systematically eliminated, catalyzing the improvement of the transport sector (Alternative Scenario). The efforts and costs of doing this are additional to the core business of the Government of the Philippines (GoP) in the areas of transport and technology transfer and development in general. The GEF project will be able to provide incremental funding and technical assistance which have not been factored in existing or forthcoming plans and programmes of the concerned government agencies. The use of this particular technology has also not been incorporated nor considered in the existing investment programs of the private sector and capacity development programs of the academe. Aside from the direct GHG mitigation in the estimated amount of 2,700 kilo tons per year through the implementation of the demonstration EV conversion project(s), the revised transport plans and programmes of the government and the complementary investment programmes of the private sector, catalyzed by a conducive policy and institutional environment and enabled by a pool of</p>
--	--

	<p>technically competent government, private sector and academic individuals will also potentially avoid GHG emissions in the amount of 5,730.5 kilo tons per year (31.6% reduction relative to the BAU because of adoption of the EV conversion technology).</p> <p>3. This Alternative scenario is expected to bring about significant GHG emissions reduction in the country's transport sector, which, according to a recent study for MetroManila, can be about 30% of the CO2 emissions relative to BAU by 2015 (i.e. 15,170 tons per day).</p> <p>4. With the proposed GEF supported project, a desirable alternative scenario is envisioned to happen. This scenario is characterized by the following:</p> <ul style="list-style-type: none"> • Reduced annual growth rate of GHG emissions from the country's transport sector by as much as 30% and MetroManila's transport sector by 12%; • Significant reduction in local air pollution from the transport sector of MetroManila by 30% from baseline; • Integration of climate concerns in the urban transport planning and policymaking processes; • Energy efficient modes of transport extensively employed in MetroManila and selected urban areas; • Reduced level of private transport utilization (in terms of vehicle kilometers) of about 12% in MetroManila and other cities; • Reduced level of traffic congestion and air pollution in MetroManila and other cities; • Improved public transportation services and increased level of utilization of public transport; • Better urban transport facilities and infra-structures financed by private sector investors; • Environmentally sustainable transport policies (especially for EV
--	--

	<p>conversion technology) formulated;</p> <ul style="list-style-type: none">• Improved local capability to identify appropriate foreign environmentally sustainable transport technologies and adapt such to local situations and needs, including manufacture of energy efficient automotive products and components; and• Enhanced local capacity to provide automotive repair and maintenance services for new technologies like EV conversion.															
GEF Financing (amount in \$)	US \$ 3,000,000															
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	<table><tr><th>Sources of Co-financing</th><th>Type of Co-financing</th><th>Project</th></tr><tr><td>Project Government Contribution</td><td>In-kind&Grant</td><td>2,500,000</td></tr><tr><td>Private Sector</td><td>Unknown at this stage</td><td>3,000,000</td></tr><tr><td>Others (Financing Institution)</td><td>Unknown at this stage</td><td>3,500,000</td></tr><tr><td>Total Co-financing</td><td></td><td>US \$ 9,000,000</td></tr></table>	Sources of Co-financing	Type of Co-financing	Project	Project Government Contribution	In-kind&Grant	2,500,000	Private Sector	Unknown at this stage	3,000,000	Others (Financing Institution)	Unknown at this stage	3,500,000	Total Co-financing		US \$ 9,000,000
Sources of Co-financing	Type of Co-financing	Project														
Project Government Contribution	In-kind&Grant	2,500,000														
Private Sector	Unknown at this stage	3,000,000														
Others (Financing Institution)	Unknown at this stage	3,500,000														
Total Co-financing		US \$ 9,000,000														
Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This	The Project will coordinate with other related and complementary initiatives, as follows: 1.) with the national Environmentally Sustainable Transport Program (NESTP) which could provide policy guidance to the Project and serve as a complementary venue for working out the policy recommendations of the Project, as well as, support capacity development on EV technology conversion. The NESTP's coordination mechanism for the many different agencies of government involved in urban transport will be accessed by the Project to produce consistent															

<p>would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>and harmonized outcomes; 2.) with the Research and Development Grants in Aid program of the DOST which can support demonstration activities under this Project since it funds research and development efforts on alternative energy and the environment, among others ; 3.) with the national alternative energy initiatives as the Natural Gas Vehicle Program for Public Transport (NGVPPT), Coco-biodiesel Programme, Bio-ethanol Program, which promote the development and use of alternative transport fuels such as natural gas, coco-methyl esters (CMEs), ethanol, fuel cells, electric vehicles and others; and 4.) the activities and related on-going projects of the PCIERD, DOST and the Department of Energy (DOE) such as the jointly funded Vehicle Emissions Laboratory for the assessment of vehicles and fuel technologies</p>
--	--

Long list project no. 8

Project Title:	Evaluation of Agricultural land Use Systems and Management Practices in Enhancing Soil Carbon Sequestration
Project Description:	<p>Evaluation of Agricultural Land use Systems and Management Practices in Enhancing Soil Carbon Sequestration</p> <p>This project will focus on the estimation of carbon sequestration in soils resulting from changes in land-use systems in different pedo-agro-ecological zones. Various agricultural management systems will be evaluated and best management practices will be identified that can enhance carbon storage in soils.</p> <p>The project is a (3) year study with two (2) component studies:</p> <p>Study 1. Assessment of carbon stocks in various landuse and agricultural management systems in the different pedo-ecological zones</p> <p>Study 2. Development of package of technology to enhance carbon sequestration in agricultural soils</p>

	<p>The objectives of the study are as follows:</p> <ol style="list-style-type: none"> 1. To estimate soil C stocks that result from changes in land use and agricultural management practices, and correlate soil carbon with soil quality; 2. To evaluate various agricultural management practices in improving soil carbon stocks in different agro-pedo-ecological systems over time; 3. To recommend package of technology for adoption of farmers for soil carbon storage. <p>The project has national significance as it will be implemented in areas representative of different land uses within the four (4) agro-pedo-ecological zones of the country, namely: lowland/ upland, hillyland and highlands, specifically at Bulacan, Rizal and Bukidnon, respectively. It shall be implemented by the Bureau of Soils and Water Management (BSWM) of the Department of Agriculture (DA). Implementation shall be spearheaded by the Soil and Water Resources Research Division (SWRRD) in partnership with the three (3) National Soil and Water Resources Research and Development Centers of the BSWM, representative of lowland/upland (Bulacan), hillyland (Rizal) and highland (Bukidnon) pedo-ecological zones. Even after project completion, the three NSWRRDC would be instrumental in the promotion, advocacy and transfer of recommended package of technology at the local units to improve their capacities to enhance soil carbon sequestration within their respective domain.</p> <p>The expected output from the study are:</p> <ol style="list-style-type: none"> 1. Evaluation on the effects of land use change on SOC pool at different depths 2. Developed a map- key land-use/cover types at different sites 3. Best management practices that will enhance soil organic carbon in
--	---

	<p>agricultural soils</p> <p>The bio-physical-chemical characterization and field inventory of the different sites will be done. A key output of the proposed project is the identification of the best management practices that will enhance the carbon sequestration in agricultural soils. The project is also envisioned to establish a long-term database on soil carbon stocks in soils as affected by land-use and agricultural management practices considering the the Bureau is the repository of soil and water resources database for agriculture which is linked to the DA's Information Technology Center for Agriculture and Fisheries (ITCAF).</p>
GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):	<p>The proposed project is supportive of Objective 5 - Promote Conservation and Enhancement of Carbon Stocks Through Sustainable management of Land-Use, Land-use Change and Forestry.</p> <p>The proposed project intends to enhance carbon stocks in non-forest lands, to measure and monitor carbon stocks and fluxes from non-forest lands and undertake good management practices to reduce emissions and sequester carbon. This study is expected to result to a) carbon stock monitoring system established based on representative sites, b) package of technology developed for non-forest lands to adopt good management practices.</p>
GEF Financing (amount in \$)	US\$ 350,000 – full grant
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	

<p>Baseline information Please describe whether the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>This proposal is a new project. It is a response to the gap for science-based knowledge on adaptation approaches, best practices and technologies. The proposed project supports the Philippine Strategy on Climate Change Adaptation 2010-2022 in terms of contribution on the development of ecosystem-based management approaches and appropriate technologies that would result to reduce climate change risks.</p> <p>So far, the only study in the Philippines on soil carbon sequestration in the agricultural ecosystem, as cited by Ilao, Salang and Floresca, was the pioneering work of Salang (2010) undertaken in the Faraon and Adtuyon soil series of Zamboanga Peninsula. The study found that soil carbon sequestration in agricultural system is dependent on soil type, pH, tillage system and type of vegetation. Specifically, the study found that no tillage and conservation tillage systems are better alternatives compared to conventional tillage in conserving sequestered soil organic carbon. Given the limited study, this proposal intends to cover various land uses in the different pedo-ecological zones of the country through the assessment and development of technology package for wider applications on the improvement of soil carbon sequestration in the agriculture sector.</p> <p>Foreign literature cited a number of related works on the importance of soil carbon sequestration for agriculture, forestry and related sectors, as follows::</p> <ol style="list-style-type: none"> 1. In February 2002, the White House announced a plan to reduce the growth of U.S. greenhouse gas emissions, in part by developing incentives for farm and forestland owners and operators to adopt land uses and management practices that extract carbon from the air and sequester it in soils and vegetation (Lewandrowski, et al 2004).
---	--

	<ol style="list-style-type: none"> 2. Carbon sequestration projects present mutual benefits for environmental conservation and economic development opportunities in poor countries (UNEP 2004, Rosa et al 2003). Through improved management of degraded lands, there appeared to be a high potential for enhancing the C sequestration in the vegetation and soils (Upadhyay, 2005). 3. Soil aggregation is an important process of C sequestration and hence a useful strategy to mitigate the increase in concentration of atmospheric CO₂ (Shrestha, 2007). 4. The SOC pool was quantified by evaluating two predominant soil types to a depth of 30cm. Cultivation resulted in an overall decreased of 37% in SOC pool for the soil analyzed (Lantz, et al 1999). 5. According to the IPCC (2000), potential increases in C storage may occur in agricultural and forest lands via (1) improved management within land use, (2) conversion to a land use with higher C stocks, or (3) increased C storage in harvested products. 6. When natural vegetation is converted to cultivated crops, rapid declines in soil organic matter are partly due to a lower fraction of non-soluble material in the more readily decomposed crop residues. Tillage, in addition to mixing and stirring of soil, breaks up aggregates and exposes organo-mineral surfaces otherwise inaccessible to decomposers. This results in a reduction in the amounts of intra-aggregate LF-OC and some organomineral SOC. Losses of SOC of as much as 50% in surface soils (20 cm) have been observed after cultivation for 30 to 50 years. Reductions average around 30% of the original amount in the top 100-cm. The large and relatively rapid changes in SOC with cultivation indicates that there is
--	--

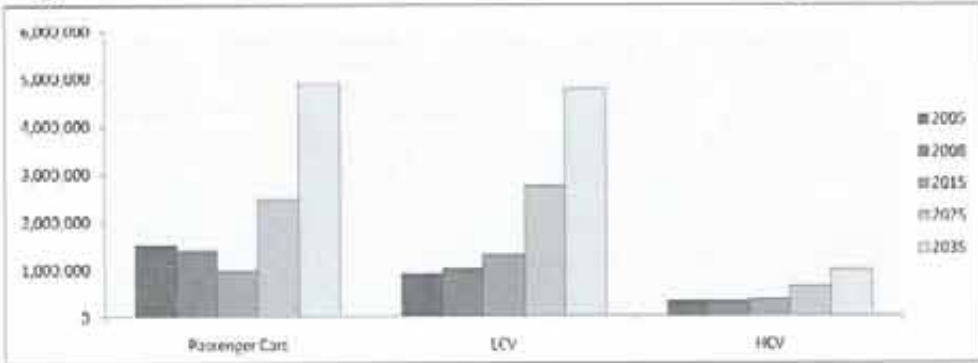
	<p>considerable potential to enhance the rate of carbon sequestration in soil with management activities that reverse the effects of cultivation on SOC pools (Post and Kwon, 2000).</p> <p>7. Change in land use typically results in differing rates of erosion, aggregate formation, biological activity, and drainage which have a significant impact on SOC accumulation and CO₂ evolution. Agricultural forested and pastured land make up the most land area and have a potential to sequester large amounts of carbon.</p> <p>8. The effect of different land-use regimes on C sequestration in the terrestrial ecosystems found that the surface soil (0-10cm) C storage increased when cropland was converted to grassland (Xudong Li, et al 2008).</p> <p>9. Different land uses such as fallow, annual crops or perennial crops have different equilibrium levels of soil carbon due to management practices and climate (Hager, H.).</p> <p>10. The LUCS model estimates the amount of carbon sequestered by approximating land-use and relative biomass changes in the landscape overtime to be 6.937 billion tones. The carbon sequestered in aboveground vegetation of India will be more double by the year 2050 (Bhadwal, et al 2002) .</p> <p>11. For below-ground carbon stocks and changes, the root data in particular were not useful in making comparisons between land-use systems. The soil data were also variable, partially because of the textural differences in the soils of the chronosequence sampled at each site, despite attempts to sample similar soils (Noorrdwijk et al, 1997).</p>
--	---

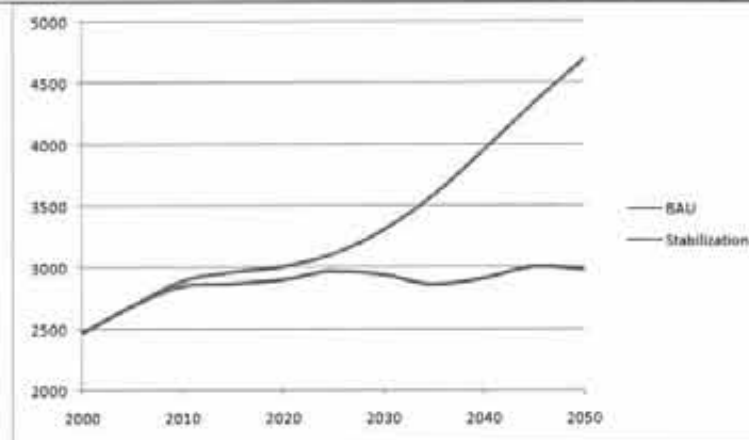
12. Agricultural management approaches that sequester carbon from atmosphere to biosphere should focus on maximizing carbon input and minimizing carbon loss from the soil. A diversity of agricultural management practices can be employed to sequester more carbon in plants and in soil. Some management practices are conservation-tillage cropping, animal manure application, green-manure cropping system, improved grassland management, optimal fertilization, among others (Franzluebbers and Doraiswamy, USDA). In conservation-tillage cropping, minimal disturbance of the soil surface is critical in avoiding soil organic matter loss from soil erosion and microbial decomposition. In the USA and Canada, no tillage cropping can sequester an average of 0.33 Mg C/ha/yr. Animal manure application likewise promotes soil organic C sequestration, improves the fertility of the soil and increases the yield of crops. In an 18-year field experiment in Kenya, Kapkiyai et al (1999) showed that an increase of 0.17 Mg C/ha/yr with 10 Mg manure application/ha/yr was obtained compared to the soil without manure application. Likewise, crop yield increased from 3.3 Mg/ha to 5.3 Md/ha. In a 30-year field experiment in India, Manna et al. (2006) showed the following results: soil organic C with FYM (3.9 g kg⁻¹) > without FYM (3.3 g kg⁻¹); total soil N with FYM (422 mg kg⁻¹) > without FYM (361 mg kg⁻¹) but soybean and wheat yields were not affected by FYM. Again in India, Singh et al.(2006) showed that in a 12-year experiment on Sesbania green-manure cropping, soil organic C was 0.09 Mg C/ha/year.
13. In the USA, it has been estimated that full adoption of best management practices could restore SOC levels to about 75-90% of their pre-cultivation levels (Donigian et al, 1994).

	<p>14. Organic agriculture will play a critical role in carbon sequestration and will help meet the challenge of climate change. Sustainable land practices such as organic farming has provided proven, immediate carbon sequestration. Rodale Institute research showed that organically managed soils can store (sequester) more than 1,000 pounds of carbon per acre, while non-organic systems can cause carbon loss. Since 1981, The Rodale Institute has monitored soil carbon and nitrogen levels in scientifically controlled test fields using organic as well as a wide range of other farming methods. In the organic systems, soil carbon increased 15 to 28 percent (www.californiagreensolutions.com/cgi-bin/gt/tpl.h,content=1979).</p> <p>15. Many long-term experiments in the world support the cognition that organic fertilization (animal manure, green manure, catch and cover crops) rebuild soil organic matter Well-managed organic agriculture leads to more favourable conditions at all environmental levels. Organic agriculture counteracts resource depletion (soil, water, energy, nutrients), contributes positively to the problems associated with climate change and desertification and can help to maintain and enhance biodiversity at a global scale (Miller, Engel, and Bricklemyer, 2004). Many field trials worldwide (FAO, 2011) showed that organic fertilization compared to mineral fertilization is increasing soil organic carbon and thus, sequestering large amounts of CO₂ from the atmosphere to the soil. Lower greenhouse gas emissions for crop production and enhanced carbon sequestration, coupled with additional benefits of biodiversity and other environmental services, makes organic agriculture a farming method with many advantages and considerable potential for mitigating and adapting to climate change.</p> <p>16. Carbon sequestration through afforestation and reforestation can</p>
--	--

	<p>often generate other locally-valued ecosystem services such as improved water quality and reduced soil erosion and sedimentation (Scherr, et al 2004). In afforestation/reforestation of marginal cropland and pasture, planting trees on land previously used for other purposes could result in substantial gains in C storage in biomass and soils (Birdsey, 1996).</p> <p>17. The extent of C sequestered in any agroforestry system will depend on a number of site-specific biological, climatic, soil and management factors (Ramachandran, et al 2009.) Specifically, the time dynamics of soil C responses to land use changes, the diversity of soil types, soil-plant interactions, and the availability of accurate soil C inventories, should be considered (Oliva, et al 2004).</p> <p>18. Forests are very good at pulling carbon out of the air and storing it. Tropical homegardens will prove highly effective and have a great potential in sequestering carbon in the soil (Saha). Mature agroforests (130 t C ha^{-1}) contained significant greater total system carbon (TSC) than croplands, pastures and grasslands but significantly less than secondary forests of similar age. Carbon sequestration rates for natural fallows were $8.4 \text{ t C ha}^{-1} \text{ yr}^{-1}$ following land abandonment. Landuse systems where trees were planted and managed had greater potential to sequester C than did field crops or pastures (Palm et al 1999). Forest and agricultural lands have received considerable attention as potential C sinks. Land use, land-use change and forestry activities comprise a net sequestration of 883.7 million tons (mmt) of CO_2 (EPA 2008).</p> <p>19. Improving pastures either through management or planting legumes does not increase the carbon storage or time-averaged C stocks above that of the traditional pastures (Feamside and Guimaraes, 1996).</p>
--	--

Long list project no. 9

Project Title:	Global Fuel Economy Initiative (GFEI for the Philippines)																								
Project Description:	<p>VEHICLE GROWTH: The world's light duty vehicle fleet is expected to more than triple by 2050 and vehicle emissions will more than double. In the Philippines, the total number of vehicles is projected to increase 5 times between 2005 and 2035, as shown in Figure 1. Under a Business As Usual scenario, this growth will lead to an increase in both CO2 and non-CO2 emissions.</p> <p>Figure 1: Predicted Vehicle Growth in the Philippines (CAI-Asia, 2009)</p>  <table><caption>Estimated data for Figure 1: Predicted Vehicle Growth in the Philippines (in thousands)</caption><thead><tr><th>Vehicle Type</th><th>2005</th><th>2008</th><th>2015</th><th>2025</th><th>2035</th></tr></thead><tbody><tr><td>Passenger Cars</td><td>1,500,000</td><td>1,500,000</td><td>2,500,000</td><td>3,500,000</td><td>4,800,000</td></tr><tr><td>LCV</td><td>1,000,000</td><td>1,000,000</td><td>1,500,000</td><td>2,800,000</td><td>4,800,000</td></tr><tr><td>HCV</td><td>500,000</td><td>500,000</td><td>500,000</td><td>800,000</td><td>1,500,000</td></tr></tbody></table> <p>CLIMATE CHANGE: IEA predicts that by 2050, the world will spend US\$150 trillion on motor vehicles and US\$150 trillion in fuels. Without a global initiative to address the CO2 emissions of a growing global vehicle fleet, there is a risk that CO2 emissions will rise significantly, leading to the "business as usual - BAU" scenario (blue line) in Figure 2. Road transport accounts for 33% of the Philippine's CO2 emissions.</p> <p>Figure 2: CO2 emission scenarios (IEA, 2008)</p>	Vehicle Type	2005	2008	2015	2025	2035	Passenger Cars	1,500,000	1,500,000	2,500,000	3,500,000	4,800,000	LCV	1,000,000	1,000,000	1,500,000	2,800,000	4,800,000	HCV	500,000	500,000	500,000	800,000	1,500,000
Vehicle Type	2005	2008	2015	2025	2035																				
Passenger Cars	1,500,000	1,500,000	2,500,000	3,500,000	4,800,000																				
LCV	1,000,000	1,000,000	1,500,000	2,800,000	4,800,000																				
HCV	500,000	500,000	500,000	800,000	1,500,000																				

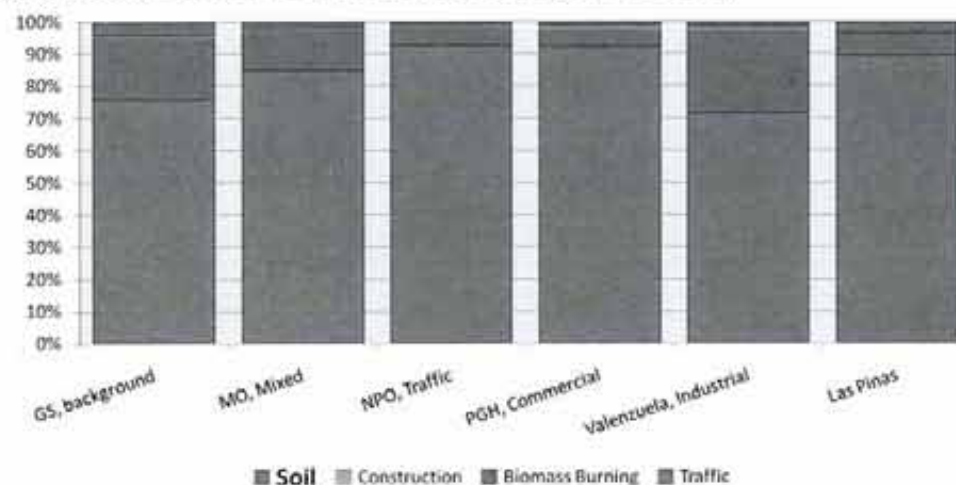


With the development of clean and efficient vehicle policies, new vehicles (including imported second hand vehicles) will be more efficient and cleaner; as the vehicle fleet is renewed over time, global CO₂ emissions will shift from the blue "BAU" line to the red "Stabilization" line. This red line in Figure 2 shows CO₂ emission that result from a 50% improvement in fuel economy worldwide by 2050, the ultimate goal of the Global Fuel Economy Initiative.

There are a couple of very important local and national co-benefits generated from a fuel economy project:

POLLUTION: Vehicle growth will lead to a dramatic increase in pollution. Currently, about 10% of the urban population in Metro Manila is exposed every year to hazardous levels of Particulate Matter (PM), with significant cardiovascular and respiratory health impacts. As shown in Figure 3, road transport is by far the largest source of PM.

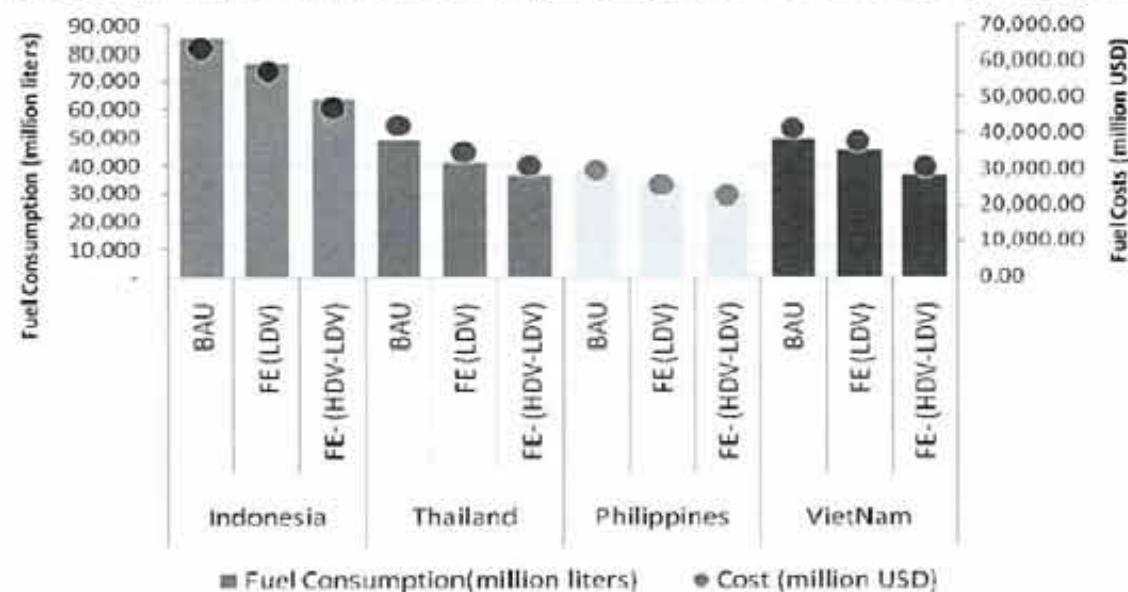
Figure 3: % Contribution by source type to Particulate Matter Pollution in Metro Manila (Public Health Monitoring of the Metro Manila Air Quality Improvement Sector Development Program, 2003)



Globally, road transport is responsible for an estimated 70-90% of local air pollution in urban areas, causing health problems, premature deaths and estimated reductions in GDP of up to 5%, due to lost work days. More efficient vehicles tend to be cleaner, smaller and use more modern engine design and emission control technologies, helping to reduce pollutant emissions overall. Improving vehicle standards serve to bolster support for cleaner fuel standards, in order to match the fuel quality with the vehicle technology. The result is improving urban air quality through use of cleaner, more modern vehicles and cleaner fuels, leading to reductions in vehicle emissions such as nitrogen oxides, hydrocarbons, particulate matter (PM) and Black Carbon (BC).

ENERGY: A considerable amount of the world's energy is directed towards transport. Currently, the transportation sector as a whole accounts for a quarter of the world's energy usage and half of global oil consumption. Figure 4 gives the projected fuel consumption and costs in 4 ASEAN countries, including the Philippines, under three scenarios: business-as-usual, BAU; fuel economy improvements for light duty vehicles, FE(LDV); fuel economy improvements for light and heavy duty vehicles, FE(HDV). It shows that a comprehensive clean and efficient vehicle policy can save the Philippines up to 25% on fuel cost and consumption.

Figure 4: Projected fuel consumption & fuel cost in 2035 (CAI-Asia, 2010)



To date, global climate change programmes and initiatives in general have not

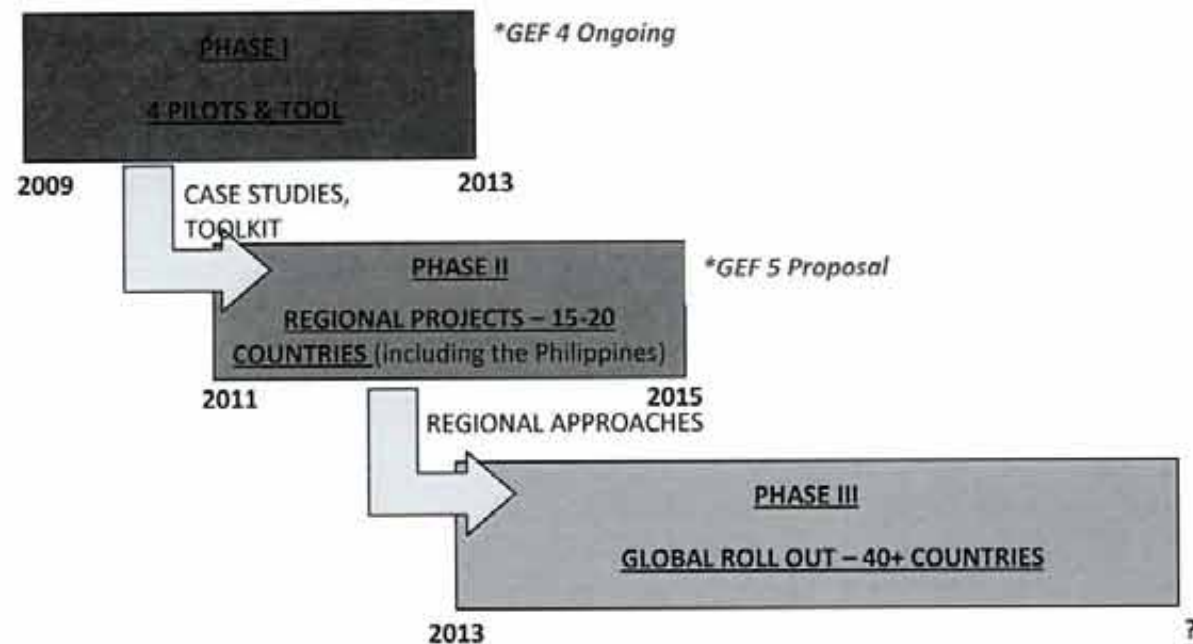
paid much attention to the role of transport. Given the significant contribution of road transport to local and global CO₂ and non-CO₂ emissions, addressing road transport and vehicle fuel efficiency must form an integral part of the solution to tackle both global climate emissions and local / national pollution. Research shows that there is a real opportunity to significantly improve new vehicles fuel economy by 2020 through the use of currently available options.

THE GFEI PROJECT: The United Nations Environment Programme (UNEP), with its partners - the International Energy Agency (IEA), the International Transport Forum (ITF) and FIA Foundation - have developed a global initiative to catalyze and help harmonize significant reductions of transport-related CO₂ emissions through improvements in vehicle fuel economy. Additional benefits include reduction of other pollutants, including Black Carbon and Particulate Matter, and lower oil use, leading to improved air quality and energy security. The Global Fuel Economy Initiative (GFEI - www.globalfueleconomy.org) aims to stabilise CO₂ levels through improving the global fuel economy average from its current 8L/100km to an average of 4L/100km (25km/L). GFEI is the only global project addressing vehicle fuel economy at the country level.

The GFEI is supporting countries worldwide in developing national clean and efficient vehicle policies. Activities in the Philippines will include:

- o Involvement in regional workshops and training on fuel economy and the GFEI tool;
- o Updated information tools for consumers and decision makers;
- o Access to sub-regional knowledge sharing hubs;
- o Support for setting the baseline data on vehicle fleet;
- o Based on baselines and projections, support for developing policy packages that will raise vehicle standards with regards to fuel efficiency and pollution control.

<p>GEF 5 Strategic Objective Being Addressed (please state the GEF 5 strategic objective and how the project addresses it):</p>	<p>The Global Fuel Economy Initiative (GFEI) fits into the GEF Focal Area Objective 4 “Climate Change Mitigation: Transport/ Urban – Promote energy efficient, low-carbon transport and urban systems”.</p> <p>The GFEI contributes to this objective by assisting countries to develop, adopt and implement a ‘Cleaner, more efficient vehicles’ policy. Such a policy would result in lower carbon emissions from the vehicle stock.</p> <p>A GFEI project would support:</p> <ul style="list-style-type: none"> ○ GEF 5 Focal Area Outcome 4.1 (“Sustainable transport policy and regulatory framework adopted and implemented”); and ○ GEF 5 Focal Area Outcome 4.2 (“Increased investment in less GHG intensive transport systems”). <p>The GFEI is being conducted in phases, as shown in Figure 5.</p> <p>Figure 5: Phased approach to cleaner, more efficient vehicle policies (UNEP, 2010)</p>
--	--



Phase I: In 2010, the GEF, EU and UNEP supported 4 GFEI pilot projects which resulted in: a global data base on fuel and vehicle characteristics; an on-line toolkit; case studies; informational materials; and a methodology for baseline data setting, from which progress and policy impacts can be measured.

Currently, Phase II is being launched and will use elements developed in Phase I to assist 15 - 20 countries, including 5 - 7 GEF supported countries, to develop a clean and efficient vehicle policy, with the ultimate result of decreasing fuel

	consumption and pollution in those countries. These national projects will receive technical and financial support to develop and implement policies that will result in measurable reductions in average fuel consumption and emissions. It is proposed that the Philippines be one of 4 countries in the Asia region.																																	
GEF Financing (amount in \$)	\$3,300,000 total, including 5 – 7 country allocations of between US\$200,000 to \$400,000.																																	
Co-financing (provide breakdown amount per financing source in \$ and please state type whether loan, grant, cash or in kind)	<p>Country projects typically cost between US\$300,000 to \$500,000. The total global budget for Phase II is around US\$7 million, including \$4 million of co-financing from UNEP and its partners. Sources and amounts of co-financing are indicated in the below table.</p> <table><tr><th>Source of Co-financing</th><th>Type</th><th>Amount (US\$)</th></tr><tr><td>National governments</td><td>In kind</td><td></td></tr><tr><td>UNEP</td><td>In kind</td><td>300,000</td></tr><tr><td>UNEP</td><td>Grant</td><td>300,000</td></tr><tr><td>Bilateral aid agencies</td><td>Grant</td><td>600,000</td></tr><tr><td>Multilateral agencies</td><td>Grant</td><td>1,400,000</td></tr><tr><td>Multilateral agencies</td><td>In Kind</td><td>400,000</td></tr><tr><td>Foundations</td><td>In kind</td><td>700,000</td></tr><tr><td>Foundations</td><td>Grant</td><td>400,000</td></tr><tr><td>Private sector</td><td>Grant</td><td>200,000</td></tr><tr><td>Total Co-financing</td><td></td><td>\$4,300,000</td></tr></table>	Source of Co-financing	Type	Amount (US\$)	National governments	In kind		UNEP	In kind	300,000	UNEP	Grant	300,000	Bilateral aid agencies	Grant	600,000	Multilateral agencies	Grant	1,400,000	Multilateral agencies	In Kind	400,000	Foundations	In kind	700,000	Foundations	Grant	400,000	Private sector	Grant	200,000	Total Co-financing		\$4,300,000
Source of Co-financing	Type	Amount (US\$)																																
National governments	In kind																																	
UNEP	In kind	300,000																																
UNEP	Grant	300,000																																
Bilateral aid agencies	Grant	600,000																																
Multilateral agencies	Grant	1,400,000																																
Multilateral agencies	In Kind	400,000																																
Foundations	In kind	700,000																																
Foundations	Grant	400,000																																
Private sector	Grant	200,000																																
Total Co-financing		\$4,300,000																																
Baseline information Please describe whether	The proposed fuel economy project in the Philippines is part of Phase II of GFEI. Phase I of GFEI has resulted in: a global database on fuel and vehicle																																	

<p>the project is a follow through of a previous project. Please provide brief description of the previous project. This would include but not limited to the following:</p> <ul style="list-style-type: none"> • Status • Major achievements • Barriers and gaps 	<p>characteristics (coming on-line soon); an on-line toolkit (www.unep.org/transport/gfei/autotool); case studies in 4 pilot countries (Chile, Ethiopia, Kenya and Indonesia) to generate best practices in developing a fuel economy policy (these are ongoing); a Secretariat; informational and awareness raising materials; a network of strategic transport-related partnerships; and a methodology for baseline data setting, from which policy impacts can be measured.</p> <p>The knowledge, the partner network and the tools are ready to be used for Phase II projects. As such, a GEF-funded GFEI project in the Philippines can roll out quickly, as the support structure is already in place, including a well-positioned local partner CAI-Asia (based in Manila).</p> <p>UNEP, through its strategic regional partner CAI-Asia, has worked in the Philippines to promote cleaner fuels and vehicles. A national stakeholders' workshop to discuss the "Roadmap for Clean Fuels and Vehicles in the Philippines" was held in Manila in November 2009. A pre-workshop consultation meeting was held in October 2009 with the oil and auto manufacturing industries as well as various national government agencies. While Euro 4 standards had been discussed many times by stakeholders prior to 2009, no clear roadmap had been developed. The consultation meeting and national workshop organized by UNEP and CAI-Asia led to the signing of the regulation mandating Euro 4 vehicle emission standards for new vehicles starting January 2016. The GFEI project will be a natural extension and consolidation of this accomplishment.</p>
--	---

LAND DEGRADATION PRIORITY PROJECT

Project Title	Project Objectives	Baseline	Incremental Value/GEF Strategic Objective	Indicative GEF Resources (US\$)	Implementing Agencies and Project Proponents
Addressing Desertification, Land Degradation and Drought in the Philippines Through Strengthening Capacities in the Implementation of Sustainable Land Management (SLM)	<p>General: To remove barriers impeding the adoption of sustainable land management at the national level and improve local level capacity to implement SLM.</p> <p>Specific: 1. To create an enabling policy environment for the implementation of the Updated Philippine National</p>	<ul style="list-style-type: none"> As an integral step in the GEF programming exercise and strategic planning, the UNCCD Philippines Focal Point in consultation with stakeholders formulated the prioritization criteria for land degradation based on the GEF 5 focal area strategic objectives on January and June 2010. As the Philippine expression of support to the UNCCD's 10-year Strategic Plan and Framework (The Strategy), the Updated Philippine National Action Plan to combat desertification, land 	<ul style="list-style-type: none"> The project supports the GEF goal for land degradation focal area by promoting and supporting effective policies, capable institutions, knowledge sharing and monitoring mechanisms, and SLM good practices. It is also aligned to the Strategic Objective: Increase capacity to apply adaptive management tools in sustainable land management 	1.04 million	UNDP, DA-BSWM, DENR, DAR, DOST, LGU, Academe & Research Institution, Farmers Association, concerned CSOs

	<p>Action Plan to combat desertification land degradation and drought (DLDD);</p> <p>2. To capacitate focal point agency, partner agencies, and local communities on SLM;</p> <p>3. To establish sustainable livelihoods and farm level demonstration of SLM practices in pilot areas; and</p> <p>4. To upscale and replicate SLM best practices in identified/mapped land degradation hotspots.</p>	<p>degradation and drought (DLDD) 2010-2020 was formulated in October 31, 2010; it was launched and gained support from partner agencies (DAR, DENR and DOST) in December 10, 2010.</p> <ul style="list-style-type: none"> • The proposed project was presented in the island-wide launching and workshop in March and April 2011 as one national program for the implementation of the Philippine NAP and gained support from regional and local stakeholders. • The big challenge that the NAP 2010-2020 intends to address is the approximately 5.2 million hectares (17% of the country's total land area) of severely eroded area; the 8.2 million hectares (27.3%) of vulnerable area to drought, alternating with floods and typhoons; and the continuous decline in forest cover (i.e. around 7.2 million ha or 29% of the original forest cover remains) 	<ul style="list-style-type: none"> • In the absence of the proposed project, the resiliency of the ecosystem will remain threatened and poverty will increase. Without the project, the undertaking of SLM programs would be slower and fragmented due to the limited budget available from concerned agencies, inadequate technical competence and institutional capacity, and weak modes of coordination. SLM modalities and tools developed at the national level would not reach local people in an efficient manner. Without the synergies created by the project between government and the private sector, SLM would remain under-funded at the local level. 		
--	--	---	--	--	--

		<ul style="list-style-type: none"> • A project "National Capacity Building for Land Degradation Assessment" is being implemented by FAO and BSWM in partnership with various national agencies; the Philippine Overview on Conservation Approaches and Technologies (PHILCAT) was organized to document and promote SLM practices and ensure their broader adoption to contribute in preventing land degradation • Research and development projects are also being conducted in collaboration with international funding institutions (e.g. ACIAR, JIRCAS) 			
--	--	---	--	--	--

IDENTIFIED PROJECT FOR INTERNATIONAL WATERS

PROJECT TITLE	DEVELOPMENT OBJECTIVE	INDICATIVE GEF RESOURCE	IMPLEMENTING AGENCY AND PROPONENTS
1.Platform for Sustainable Development of Large Marine Ecosystems (LMEs) and Coastal Areas of East Asia Region-Scaling up through Country Partnership.	<ul style="list-style-type: none"> • The rationale for this proposal stems from the commitments made by the countries to implement Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), and by institutionalization of the PEMSEA mandated to implement the SDS-SEA, • Revive marine fisheries and reduce pollution of coastal and marine ecosystems, while enhancing the delivery of impacts and supporting capacity building through portfolio learning and targeted research. • It will support investment on knowledge sharing and research with focus on the six (6) LMEs of the region namely: the Yellow Sea, East China Sea, South China Sea, Gulf of Thailand, Sulu Sulawesi Sea and the Indonesian Seas. 		World Bank-PEMSEA

	<ul style="list-style-type: none"> The program will focus on three complementary pillars identified by stakeholders. These are: (i) the Brown Agenda (Pillar I), (ii) the Blue Agenda (Pillar II) and (iii) targeted research and knowledge management (Pillar III). It's a five-year program with US\$45-50 million of GEF funding catalyzing up to US\$500 million of co-financing. The emphasis for this proposal will be on parallel national actions in ICM scaling up and investments, building on abilities to carry out technically sound interventions as well as institutional capacity for collective action. 		
2. Manila Bay Integrated Water Quality Management	<ul style="list-style-type: none"> The Project seeks to establish an effective management system and inter-instructional operational framework for improving the water quality of the Laguna de Bay, Pasig River and Manila Bay and restoring its intrinsic value to society. 	US\$10 million	World Bank(IA); DENR (Proponent) Partners: LLDA, PRRC,MBRBMC
3. Targeted Learning and Innovation: Capturing Coral Reef Ecosystem Services in East Asia	<ul style="list-style-type: none"> To introduce innovation in valuing and conserving coral reef ecosystem services through demonstration pilots and market incentives in East Asia/Pacific. 	US\$ 5.5 million	World Bank- UPMSI

4. Central Philippines Rural Development Project	<ul style="list-style-type: none"> • Component 3: Biodiversity Conservation and Natural Resource Management. This component, for which GEF co-financing will be sought, will support the biodiversity protection and conservation, including climate-proofing, of key coastal and upland ecosystems using the "ridge to reef" approach in natural and coastal resource management planning. Activities to be supported include preparation and/or updating of coastal resource management plans to include upland/watershed issues and interventions, disaster risk reduction, climate change adaptation, sustainable livelihoods to reduce the pressure on natural resources and protect biodiversity, and other investment priorities to conserve and protect the coastal and upland areas and key biodiversity areas. This Component will also help in improving the management of MPAs and/or the establishment of MPAs, including fisheries and marine resources conservation activities. 	US\$ 2.0 million	World Bank-DA
--	---	------------------	---------------

Annex 9

IDENTIFIED POPs PROJECTS AND CONCEPTS

Proponent	Project Title	Indicative GEF Resource (\$)
UNIDO	Improving the Health of Artisanal Gold Mining Communities by Reducing Mercury Emissions and Promoting Sound Chemical Management	908,383
UNIDO-MGB	Global Mercury Project Phase II	PIF is under preparation
Information not available	Improve the health of vulnerable communities exposed to toxic pollution from recycling of used lead acid and cadmium batteries	Information not available
Information not available	Improve the environment and health of local communities by reducing active chromium pollution from tanneries in Meycauayan City	Information not available
UNIDO-EMB	Environmentally Sound Management of POPs Waste in Electronic and Electrical Equipment (WEEE) in East And South East Asia Region	1,218,133