

# climate change adaptation

BEST PRACTICES  
in the  
PHILIPPINES



**MDG F**  
MDG ACHIEVEMENT FUND  
MDG 1000: Strengthening and Improving  
Institutional Capacity to Adapt to Climate Change

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**CLIMATE CHANGE ADAPTATION  
BEST PRACTICES IN THE PHILIPPINES  
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## DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (DENR) PROTECTED AREAS AND WILDLIFE BUREAU (PAWB)

“Biodiversity and Climate Change are intertwining issues: Climate change is a major driver of biodiversity loss and biodiversity conservation is an important mechanism that can significantly contribute to climate change mitigation and adaptation.”

TERESA MUNDITA S. LIM  
DIRECTOR, DENR-PROTECTED AREAS AND WILDLIFE BUREAU

### OVERALL POLICIES & STRATEGIES ON CLIMATE CHANGE

Building resiliency of ecosystems and ensuring the full stream of goods and ecological services through the establishment and effective management of a National Integrated Protected Areas System (NIPAS) serve as the cornerstone of the strategy of the Protected Areas and Wildlife Bureau (PAWB) in combating the impacts of climate change. The recently updated National Wetlands Action Plan for the Philippines, which is also being facilitated by the Bureau, prescribes concrete actions designed to maximize coastal and inland wetland's role in climate change mitigation and adaptation. Mangroves and coral reefs are important buffers against sea level rise and storm surges, while inland wetlands ensure water security and provide protection from both floods and droughts. Similarly, the following projects and programs, currently implemented, address climate change concerns:

- \* Nesting Beach and Coral Reef Monitoring and Management of Turtle Islands Wildlife Sanctuary (TIWS), Tawi-Tawi

- \* Establishment of the Biodiversity and Climate Information Center at the Ninoy Aquino Parks and Wildlife Center (NAPWC)
- \* Protection and management of climate change-vulnerable wildlife species, particularly threatened species (Philippine eagle, marine turtles, tamaraw, dugong, and freshwater crocodiles)
- \* Samar Island Biodiversity Project
- \* Protection and restoration of mangroves and denuded areas within protected areas
- \* Establishment and management of critical habitats
- \* Establishment of Community Conserved Areas
- \* Implementation of Biodiversity Partnership Programs
- \* Sustainable Use and Protection of Philippine Peatlands Project

Full documentation of the above interventions will offer a wealth of knowledge and examples of lessons learned and best practices for replication.

### CLIMATE CHANGE SUBJECTS OR ISSUES TARGETED

**ISSUES TARGETED** | Primarily, environmental and ecological stability, and knowledge and capacity development; but also including human health and security, sustainable energy, climate-smart services, disaster risks, food security, water sufficiency, and sustainable livelihoods.

**SPECIFIC RESOURCE TARGETED** | Biodiversity at all levels: ecosystems (protected areas, their buffer zones and special uses, and critical habitats), species and genetic diversity (threatened and vulnerable wildlife species), land and water (including priority wetlands: freshwater/inland waters, coastal and marine) resources.



TEA-COLORED WATER INDICATES PRESENCE OF PARTLY-DECOMPOSED PLANT MATERIALS AND SIGNIFIES THE ROLE OF PEATLANDS AS STOREHOUSE OF CARBON. CAIMPUGAN PEATLAND, AGUSAN DEL SUR (BOYET LITA)

### BEST PRACTICES

One project that directly links biodiversity conservation and climate change, currently implemented and is already showing elements of best practice management, is the Philippine Component of the ASEAN-IFAD/GEF Project on the Rehabilitation and Sustainable Use of Peatland Forests in South East Asia, also known as the ASEAN Peatland Forests Project (APFP).

#### BRIEF DESCRIPTION

Peatland ecosystems contain 20 to 35 percent of all carbon on land. Since peat is carbon-rich soil, peatlands are the planet's single largest, most efficient and most important long-term stores of carbon. Peatland conservation thus plays a critical role in the national climate change mitigation and adaptation strategy and biodiversity conservation. However, peatlands were relatively unknown in the Philippines until 2005. With the ASEAN Peatland Management Initiative and the National Action Plan on Peatlands, there is now a chance to address the issues on peatlands in the Philippines. Peatland conservation in the Philippines only



WALKING THROUGH "WONDERLAND," THE UNIQUE TIGA (*TRISTANOPSIS AFFINIS MICRANTHA*) FOREST OF CAIMPUGAN PEATLAND. (LEONARDO CO)

started in 2010, when the APFP established the Philippine Component. Expected year of completion of this component is 2012 while the whole project will last until 2013.

#### LOCATION/S COVERED |

The Caimpugan Peatland in Agusan del Sur and the Sab-a Basin in Leyte were selected as the project sites for the Philippine Component. The Caimpugan Peatland, with an area of 5,300 hectares, is currently the largest recorded peatland ecosystem in the country.

#### PARTNERS/COOPERATING ORGANIZATIONS |

DENR Regions 8 and 13, concerned local government units in Agusan del Sur and Leyte, other government agencies and local communities in the project sites.

#### OBJECTIVES & GOALS |

Overall goal: Promote the sustainable management of peatlands in Southeast Asia, through which local livelihoods can be sustained to reduce poverty, and the risk of fire and associated haze can be reduced. Project aim: Contribute to global environmental management, particularly in biodiversity conservation and in climate change mitigation.

#### STRATEGIES & PROCESSES/METHODS |

To address the lack of inventory and knowledge on Philippine peatlands, the APFP Philippine Component conducted a nationwide assessment of reported peat areas.

The Philippine Government is actively collaborating with local stakeholders in project sites to establish protection measures and peatland management plans that will serve as cornerstones for sustainable management and conservation.

Information and education campaigns are being undertaken to raise awareness of peatlands and to enhance existing practices or introduce new ones for sustainable peatland management.

A reclassification of alienable and disposable lands into protected

areas is under review by the Regional Office of the DENR, to establish a permanent and legal basis for protecting the threatened peat areas of Caimpugan Peatland.

Local government agencies in the province have temporarily stopped land disposition to farmers as preventive measure against possible destructive human activities in the Caimpugan Peatland.

Activities aimed at building stakeholder capacity and enhancing local participation have been initiated in both project sites, including study tours to other ASEAN countries with programs in peatland conservation; training of local firefighters by the Bureau of Fire Protection; enactment of a municipal ordinance that charts the role and responsibility of the local government in the protection and sustainable management of peatlands; adoption by the barangay government unit of a peatland management plan; training and organizing of peatland forest guards by the concerned barangay government units; and preparation of community led demonstration projects on sustainable resource management and rehabilitation of peatlands.

#### RESULTS |

- 1/ Mapping out of at least 11,000 hectares of peatlands;
- 2/ Confirmed existence of peatland ecosystems in the country, including those in Naujan Lake, Oriental Mindoro; Lalaguna Marsh, Quezon; Dolongan, Basey, Samar; San Vicente, Prosperidad, Agusan del Sur; Calingayan, Bunawan, Agusan del Sur; San Teodoro, Bunawan, Agusan del Sur; Pag-asa, Sta Josefa, Agusan del Sur; and, Talacogon Lake, Talacogon, and Agusan del Sur which were confirmed in 2011 alone;
- 3/ Project stakeholders are now aware of and informed about the previously unknown peatland ecosystem. They also appreciate now the value of peatlands and have developed the commitment to protect them.



CAPACITY-BUILDING AND MULTI-STAKEHOLDER INVOLVEMENT TO FACILITATE SUPPORT FOR THE IMPLEMENTATION OF THE PEATLAND CONSERVATION PROJECT, CAIMPUGAN PEATLAND, AGUSAN DEL SUR (BOYET LITA)



#### FUNDING |

Integrated Fund for Agricultural Development - Global Environment Facility US\$262,000 with in kind co-funding of US\$370,000 from the Philippine Government.

#### PLAN & SUSTAINABILITY |

The level of participation and outcomes from the project indicate an increasing interest in and commitment to sustainable peatland management among stakeholders. A concrete manifestation of stakeholders commitment is the recently completed community based action plans to establish barangay demonstration plots for sustainable agriculture and agroforestry in degraded peatlands in both the Agusan and Leyte Sab-a peatlands. Such community-led demonstration plots will emulate best management practices for possible replication in other confirmed peatlands in the country. All these initiatives are expected to protect the remaining peatlands, rehabilitate degraded ones, conserve biodiversity, deliver direct benefits to local communities and contribute to local and global climate regulation.

#### BACKGROUND INFORMATION



DOCUMENTING THE TEA-COLORED WATER AND DIFFICULT TERRAIN IN THE PEAT AREAS OF CAIMPUGAN. (BOYET LITA)

#### TYPE OF ORGANIZATION |

Government Bureau

#### PRODUCTS & SERVICES |

1/Formulation and monitoring of the implementation of policies, plans and programs, and provision of technical assistance on matters related to the conservation of the country's biological diversity through the establishment, management and development of the National Integrated Protected Areas System; 2/ conservation of wildlife resources; and 3/ nature conservation information and education.

#### KEY BARRIERS MET, LESSONS LEARNED, REPLICABILITY/ TRANSFERABILITY |

The combination of awareness raising, capacity building, multi-stakeholders approach and community-led interventions have facilitated the implementation of the project and the support of local stakeholders. They are worth replicating in other confirmed peatlands in the country.

#### OTHER COMMENTS & ADDITIONAL INFORMATION |

With the initial positive outcome of the APFP, the European Union through the South East Asia Peat (SEAPeat) Project is providing additional funding support aimed at extending the project until 2013 and covering other confirmed peatlands in Agusan.

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