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Sustainable Use and Protection
of
Philippine
PEATLANDS



NATIONAL ACTION PLAN FOR THE SUSTAINABLE USE AND PROTECTION OF PHILIPPINE PEATLANDS

UNDER THE FRAMEWORK OF THE
ASEAN PEATLAND MANAGEMENT
STRATEGY (APMS)

Prepared by:



Department of Environment and Natural Resources
Protected Areas and Wildlife Bureau

With support from:



Australian Government
AusAID



**Cardno
ACIL**



Global Environment
Centre



PREFACE

The development of the National Action Plan for the Sustainable Use and Protection of Peatlands in the Philippines is initiated by the Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources (PAWB-DENR) in collaboration with other concerned government agencies, local government units, academe and non-government organizations.

Within the framework of the ASEAN Peatland Management Initiative (APMI) and consistent with the operational focal areas of the ASEAN Peatland Management Strategy (APMS), the National Action Plan focuses on multi-stakeholder partnership and collaborative approaches to attain the following objectives :

- (1) awareness raising and capacity building;
- (2) protecting peatlands with high conservation values;
- (3) setting up of appropriate institutional structure; and
- (4) developing sustainable peatlands management strategies.

The National Action Plan spells out specific operational objectives and serves as the guide for the implementing agencies and collaborating partners on specific actions that must be undertaken to ensure the protection and sustainable use of peatlands in the Philippines.

The PAWB-DENR will facilitate the implementation of the Action Plan at the national level to ensure that the goals and operational objectives are met on time. It shall likewise prepare and follow-up the issuance of an Executive Order from the Office of the President to ensure the integration of the NAP activities in the sectoral plans and programs of the various agencies and local government units involved in the NAP implementation.

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Government Agencies:

DENR through the Protected Areas and Wildlife Bureau, Forest Management Bureau, Ecosystems Research and Development Bureau, Environmental Management Bureau, Foreign Assisted and Special Project Office, Public Affairs Office, Human Resources Development Service, Policy and Planning Office, the National Mapping and Resource Information Authority, National Water Resources Board and Regions 8, 12 and 13.

Department of Agriculture through the Bureau of Soils and Water Management, National Irrigation Administration, Agricultural Training Institute, **Department of Agrarian Reform**, **Department of Interior and Local Government** – Bureau of Fire Protection, **Department of Education**, **National Economic Development Authority**, **National Commission on Indigenous People**, **National Museum of the Philippines**

Local Government Units

Provincial Government of Agusan del Sur

Municipality of San Francisco, Agusan del Sur

Municipality of Alang-Alang, Leyte

Municipality of Sta Fe, Leyte

Barangay Caimpugan, San Francisco, ADS

Academe

University of the Philippines Diliman

University of the Philippines College of Forestry and Natural Resources

Non-Government Organizations (Local)

Conservation International-Philippines

Laksam Buhay Foundation Inc

KLIMA-Climate Change Center

Propegemus Foundation

Philippine Australia Community Assistance Program

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Global Environment Centre

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ACRONYMS

ACB	ASEAN Center for Biodiversity
ADB	Asian Development Bank
APMI	ASEAN Peatland Management Initiative
APMS	ASEAN Peatland Management Strategy
ASEAN	Association of South East Asian Nations
ATI	Agricultural Training Institute
BALS	Bureau of Alternative Learning Systems
BFAR	Bureau of Fisheries and Aquatic Resources
BFP	Bureau of Fire Protection
BSWM	Bureau of Soils and Water Management
EC-GAP	Coordinating Committee for Global Action on Peatlands
CHED	Commission on Higher Education
CI-Phils	Conservation International-Philippines
CLOA	Certificate of Land Ownership Agreement
CPPAP	Conservation of Priority Protected Areas Project
CSR	Corporate Social Responsibility
DAO	Department Administrative Order
DAR	Department of Agriculture
DAR	Department of Agrarian Reform
DA-RIARC	DA Regional Integrated Agricultural Research Center
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DOT	Department of Tourism
DTI	Department of Trade and Industry
EMB	Environmental Management Bureau
ERDB	Ecosystems Research and Development Bureau
FMB	Forest Management Bureau
GAA	General Appropriation Act
GEC	Global Environment Centre
GEF	Global Environment Facility

IACCC	Inter-Agency Committee on Climate Change
IPAS	Integrated Protected Areas System
IRA	Internal Revenue Allotment
KLIMA-MO	Climate Change Center-Manila Observatory
LGU	Local Government Units
LITWG	Local Inter-Agency Working Group
MTPDP	Medium Term Philippine Development Plan
NAMRIA	National Mapping and Resource Information Authority
NAP	National Action Plan
NCIP	National Commission on Indigenous Peoples
NGA	National Government Agency
NGO	Non-Government Organizations
NIA	National Irrigation Administration
NIPAS	National Integrated Protected Areas System
NITWG	National Inter-Agency Working Group
NMP	National Museum of the Philippines
NORMSIST	Northern Mindanao State Institute of Science and Technology
NWRB	National Water Resources Board
OIDCI	Orient Integrated Development and Consultancy Incorporated
PACAP	Philippine-Australian Community Assistance Programme
PAMB	Protected Area Management Board
PAO	Public Affairs Office
PAWB	Protected Areas and Wildlife Bureau
PIA	Philippine Information Agency
PNP	Philippine National Police
PTFCC	Presidential Task Force on Climate Change
SCPW	Society for the Conservation of Philippine Wetlands
UNCBD	United Nations Convention on Biological Diversity
UNFCCC	United Nations Framework Convention on Climate Change
VSU	Visayas State University

NATIONAL ACTION PLAN FOR SUSTAINABLE USE AND PROTECTION OF PHILIPPINE PEATLANDS

Part A. Background Information on Peatlands

Extent and Status of peatlands

Peatlands are wetland ecosystems that are characterized by the accumulation of organic matter called “peat” which derives from dead and decaying plant material under high water saturation conditions (CC-GAP, 2005). There are two sites in the Philippines where peatlands have been confirmed: the Agusan Marsh and the Leyte Sab-a Basin. However, information indicates that peatlands may be found in other areas. The location of these areas is shown in Figure 1.

The Sab-a Basin is a west-east elongated basin close to the north coast of Leyte separated by a metamorphic ridge. The total area is approximately 3,088 ha, about 44% of which has been reclaimed for agriculture. The remaining unutilized peatland (1,740 ha) in the eastern half of the basin consists of small remnant areas of swamp forest and sedge/grass peat swamp (ADB 2000). The two smaller peat basins in the area (Daguitan 210 ha) and Kapiwaran (430 ha) have mostly been converted to agricultural land.

The Agusan Marsh may hold the largest area of peatland in the Philippines. At present, there is no reliable estimate of the area as well as the distribution of peat within the marsh. Two areas of peatland within the marsh have been confirmed – the first one is found at the northern part of Bunawan, where most of the vegetation have been cleared and burned. The other is found at the west of Caimpugan and exhibits the characteristics of a peat dome where the forest is mostly intact except those

near the Gibong River. There may be other areas of peat within the marsh, especially in the *Terminalia copelandii*/*Metroxylon sagu* forests at the northwest portion of the marsh.

Peat is also probably present in the following areas:

1. Ligawasan Marsh in Mindanao, the largest marshland area in the Philippines;
2. Dolongan area in Basey, Western Samar (Bureau of Soils, 1975. Soil Survey of Samar Provinces, Philippines. Reconnaissance Soil Survey and Soil Erosion Survey);
3. Southern Leyte (Whitmore 1984) as cited in Draft Philippine Plant Conservation Strategy.;
4. Mt. Pulag in Northern Luzon (Leonard Co, pers. comm.);
5. Surigao del Norte, Northeastern Mindanao (areas overlying ultramafic rocks) (Edwino Fernando, pers. comm.)
6. Naujan Lake Marshland
7. Pangasinan Floodplains

Figure 1: Areas of peatlands in the Philippines



Values and Uses of Peatlands

Hydrology and Water Regulation

Peatlands are very important for reducing flood peaks and for maintaining base flows in rivers during dry periods. The peat, acting as a sponge, absorbs water during wet periods and releases it slowly during dry period. This feature is important in the Agusan Marsh where the peat area is situated in the middle reaches of the Agusan River and not on the coastal plains. The contribution to dry season base flows in the Agusan River and maintenance of groundwater levels is high.

Likewise, the peatland in the Leyte Sab-a Basin has the capacity to absorb and hold lots of water during the rainy season. It slowly releases the water to maintain base flows in the outflow rivers. Both peatlands are most likely significant in preventing the penetration of saline water up rivers.

Carbon Storage

The Philippines has relatively little peatland compared to other countries, but still plays a significant role in the storage and sequestration of carbon from the atmosphere. Despite this small area, much of the peatland in the country is still intact and actively accumulating carbon.

Biodiversity Values

Available information suggests that biodiversity values of Philippine peatlands are high (Davies 2005 Assessment Report). Considering the Philippine flora's high level of endemism, the botanical survey of peatland areas may yield undescribed species. Moreover, at the ecosystem level of biodiversity, there seems to be a unique vegetation assemblage on the Caimpugan peat dome, which is different from the peat domes in nearby northwest Borneo.

There are no faunal surveys in Philippine peatlands, although wild boar and deer are found in the Agusan Marsh. The endemic Philippine Tarsier has been observed in the Leyte Sab-a Basin peatland together with the resident Egret population.

Aesthetic Values

High scenic values are found in identified Philippine peatlands, including the striking forests of Lanipao (*Terminalia copelandii*) in both the Agusan Marsh and the Leyte Sab-a Basin. Both peatlands are surrounded by uplands, from where impressive views of the peatlands can be gained.

Socio-Economic Values

Peatlands are also important to local communities as a source of wood like timber and firewood for domestic needs and non wood products like the *Frimbistylis globulosa*, locally known as “tikog” for mat making and other livelihood purposes. Important peatlands in both Agusan and Leyte Sab-a have been drained and converted to agriculture.

Problems on Peatland Management

Since peat is a fairly rare soil type in the Philippines, there is a fundamental lack of awareness of what peat is, its properties and the appropriate management strategies for peatlands in all sectors (e.g local people, NGOs and government agencies). There is also very limited capacity for wisely managing peatlands and as well as a lack of a national institutional framework for peatland management.

This means that peatlands may be degraded through activities that do not take into account the special properties of peat. For example, some areas of peatland in the Leyte Sab-a Basin and the Agusan Marsh have been cleared for agriculture, but were abandoned after a few years due to poor yields. In addition, the Agusan Marsh faces

substantial migration from other parts of the Philippines, and farmers being familiar only with agriculture on mineral soils. Land clearance activities are also increasing in the Agusan Marsh and may pose a threat to intact peatlands. There is substantial clearing of land immediately to the west of the Caimpugan peat, which may threaten the unique vegetation communities due to fire and the lowering of the water table.

Large scale development projects, including irrigation components, also pose a threat to the Agusan Marsh and the Leyte Sab-a Basin. In the basin, some peatlands have been converted to agriculture by the defunct Leyte Sab-a Development Authority. Likewise, the Department of Agrarian Reform (DAR) continues to issue Certificate of Land Ownership Agreement (CLOAs) over the remaining peatlands. In the Agusan Marsh, 4,000 ha of the marsh could be declared as Alienable and Disposable for purposes of irrigation. It is not clear whether this is located in a peatland area.

With the two examples, it is clear that peatland may be converted to agriculture without any kind of land suitability assessment. This makes the characterization and mapping of peatland areas in the Philippines more urgent. These threats make it imperative that appropriate development strategies are implemented.

The Philippines can benefit greatly from the experience and knowledge gained by other countries in the sustainable management of peatlands. Information exchange and collaboration among relevant authorities in these other countries are also highlighted as a priority in this National Action Plan (NAP).

The above examples make the identification of peatland areas in the Philippines all the more urgent. These threats make it imperative that peatlands are identified, assessed and mapped so that appropriate development and sustainable use strategies can be implemented.

Existing Policies Relating to Peatland Management and Fires

A recent review of Philippine Policy and Legislation related to wetlands emphasized the main points that may relate to peatlands as summarized below (Luna 2005):

1. There is no policy or legislation relating specifically to peatlands in the Philippines, although there are policies and laws aimed at wetlands in general that would include peatlands.
2. The Water Code of the Philippines (Presidential Decree No. 1067) declares wetlands as part of the public domain and cannot be alienated.
3. The multi-sectoral Protected Area Management Board (PAMB) has jurisdiction over peatlands within the National Integrated Protected Areas System (NIPAS), such as the Agusan Marsh.

Institutions or Agencies Responsible for or Actively Working on Peatlands

At present, there are no institutions directly responsible for peatland management on a national basis. The Philippines is signatory to the Convention on Wetlands, more commonly known as the Ramsar Convention, since 1994. PAWB as its designated administrative authority is expected to provide guidance in the wise use and management directions over peatlands since by definition, peatlands are considered part of wetlands.

PAWB, in close coordination with other DENR units and offices, led the proposal development process for the IFAD/GEF Project on "Rehabilitation and Sustainable Use of Peatlands in Southeast Asia".

PAMBs would be responsible for conservation issues for individual peatlands within protected areas such as the Agusan Marsh Wildlife Sanctuary. One of the key activities recommended by the National Action Planning workshop held in Manila last 2 – 3 February 2006 is the setting up of an inter-agency working group which would oversee the development of an institutional framework for peatland management both at the national and local levels.

Part B. National Goal, Objectives and Strategies for Peatland Management

National Goal and Objectives:

National Goal: To promote the sustainable management and wise use of peatlands through awareness raising, capacity building and enhanced inter-agency cooperation for the conservation of biodiversity, climate change mitigation and the benefit of the local community.

Objectives:

- (1) To raise awareness of peatlands at the national and local level;
- (2) To build capacity in relevant agencies/institutions on peatland management;
- (3) To protect existing peatlands with high functional and conservation values;
- (4) To set up appropriate institutional framework and enhance cooperation in the management of peatlands; and
- (5) To develop sustainable strategies in peatlands for local livelihood.

Proposed new policies and strategies for peatland management

A National Policy for the sustainable use and protection of peatlands shall be developed. In the meantime, the following policy measures are considered urgent:

1. Declaration of peatlands with high biodiversity as protected areas;
2. Local level measure against the reclassification of peatlands as alienable and disposable lands;
3. Reversion of peatland areas covered by Certificate of Land Ownership Agreements (CLOAs) which are found to be unsuitable for agriculture back to forest land

Proposed Measures for Institutional Strengthening

One of the key activities recommended by the National Action Planning workshop held in Manila from 2 – 3 February 2006 and affirmed during the NAP Validation Workshop in January 2008, is the setting up of an inter-agency working group which would oversee the development of an institutional framework for peatland management.

A multi-sectoral inter-agency working group on peatlands shall be created. This is going to build on, reactivate, strengthen and/or expand the Task Force on Wetlands under the Sub-Committee on Biodiversity of the Philippine Council for Sustainable Development (PCSD).

The ITWG is expected to perform the following functions:

1. Coordinate all efforts in the conservation and sustainable use of the country's peatlands and peatland resources;
2. Review and recommend policies, legislative and administrative measures and issuances relative to peatlands;
3. Recommend appropriate and sustainable use strategies to effectively implement the National Action Plan on Philippine Peatlands;
4. Establish linkage and networking with concerned local government units, national and international organizations to promote information exchange, sustained financing and synergies on the sustainable use and protection of Philippine Peatlands;

Proposed mechanism and allocation of resources for peatland management;

1. Determine from current regular funding of National Government Agencies specific budget for activities that could include or subsume any of the activities in the NAP;
2. For concerned local government units to allocate funds from their Internal Revenue Allotment for peatlands within their jurisdiction;
3. Undertake feasibility studies on various modalities for use in generating sustainable funding mechanisms for peatlands (e.g. BOT agreements, tax incentives, MOA)

PART C: National Action Plan Matrix

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
1. Inventory and Assessment	1.1 Determine the extent and status of peatlands in the ASEAN region (including issues of definition)	1.1.1 Harmonize definition and classification of peatlands (e.g. type, depth, vegetation, water regime, extent) include flora and fauna	Adopt Ramsar definition as Philippine working definition until such time that the ASEAN comes up with its own definition	H	S	DENR, DA, Academic Institution, NGO's, and LGUs	DENR	Resource Persons	✓	✓	✓	GEC, Academic and Research Institutions
		1.1.2 Determine and update the extent and status of peatlands in the region through comprehensive national inventories (including status of protection, degradation, land use, fire risk, biodiversity values)	Identify peatland areas and conduct comprehensive profiling (including status of protection, degradation, land use, susceptibility to fire and biodiversity)	H	C	National Government Agencies & LGUs, Acad. Institutions	DENR, DA/BSWM, NAMRIA and ITWG Member agencies	IRA from PLGU and MLGU; complimentary funds from regular funds of agencies concerned; resource persons	✓	✓	✓	ADB's Agusan River Master Planning project; VSO in Agusan; Visayas State Univ Rainforestation Project; Samar Island Biodiversity Proj; GEF, ACB, CSR portfolio
		1.1.3 Ascertain the direct and indirect uses and values of peatlands and associated biodiversity	Ascertain the direct and indirect uses and values of peatlands and associated biodiversity water condition, indicator species, association and profile	H	C	LGUs and NGAs, academic institutions	DENR in close partnership with other NGAs and LGUs (e.g. Resource valuation: DENR)	IRA, regular funds of national agencies	✓		✓	NGOs and other funding agencies
	1.2 Assess problems and constraints faced in peatland management	1.2.1 identify problems, constraints and opportunities faced in peatland management	identify problems, constraints and opportunities faced in peatland management, offer possible solutions	H	S	LGUs and NGAs, NGO's Academic Institutions	National Agencies in close partnership with LGUs	IRA; regular funds of national agencies	✓		✓	Multisectoral
		1.2.2 Undertake assessment of issues related to peatland management to identify potential management options	Undertake advocacy/consultations on the problems/constraints identified	H	M	LGUs and NGAs	LGUs in close partnership with National Agencies	IRA, regular funds of national agencies	✓		✓	multisectoral
	1.3 Monitor and evaluate peatland status and management	1.3.1 Develop a guideline for monitoring of peatland areas for ecological change and management purposes	Implement/Maintain existing Biodiversity Monitoring System (BMS) in identified peatland areas	H	C	Protected Areas Mgt. Board (PAMB), LGUs for peatland outside PA's	DENR	Agency regular funds			✓	multisectoral

Time Frame: S – Short Term (2008-2010), M – Medium Term (2008-2015), L – Long Term (2008-2020);
C – Continuous for actions that should be undertaken on a continuing basis/

Priority Level: L – Low, M – Medium, H – High
Assistance Needed: (ASEAN/External/Technical/Financial) AT, ET, F

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		1.3.2 Undertake regular monitoring of peatland areas, including peatland water quality and physico-chemical conditions	Conduct semi-annual monitoring of water regime and physico-chemical composition (baseline: pH and conductivity, dissolved O2 at min and max water level)	H	C	LGUs assisted by the DENR and DA	EMB-DENR, DA-BSWM, Academe and concerned LGUs	Agency regular funds			✓	NWRB, NIA, academic institutions
2. Research	2.1 Undertake priority research activities	2.1.1 Undertake research on appropriate techniques and practices for peatland management	Undertake research on appropriate techniques and practices for peatland management	M	C	DENR-ERDB and other research institutions (RDA Networks)	ERDB-DENR	Agency regular funds	✓		✓	All research institutions
		2.1.2 Undertake basic research on peatland ecosystems and species and hydrological processes to better understand peatland functioning	Undertake basic research on peatland ecosystems and species and hydrological processes to better understand peatland functioning	H	L	ERDB-DENR and other research institutions (Academe, Museums and local state universities and colleges)	ERDB-DENR, DA Reg'l Integrated Agricultural Research Center (DA-RIARC)	Agency regular funds	✓		✓	All research institutions
		2.1.3 Undertake R&D to enhance existing or develop new uses for peatland products and resources	Undertake R&D to enhance existing or develop new uses for peatland products and resources	H	C	ERDB-DENR and other research institutions	ERDB-DENR	Agency regular funds	✓		✓	All research institutions
		2.1.4 Undertake research to assess and support community development and livelihood activities building on indigenous knowledge and practices	Undertake research to assess and support community development and livelihood activities building on indigenous knowledge and practices	H	C	ERDB-DENR and other research institutions	ERDB-DENR	Agency regular funds	✓		✓	All research institutions
		2.1.5 Undertake economic valuation of peatland resources	Undertake economic valuation of peatland resources	H	M	ERDB-DENR and other research institutions	ERDB-DENR	Agency regular funds	✓	✓	✓	All research institutions. REECS

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
3. Awareness and Capacity Building	3.1 Enhance public awareness on importance of peatlands, its vulnerability to fire and the threat of haze through implementation of a comprehensive plan	3.1.1 Develop and implement a communication strategy for peatland management including use of video, TV, media, schools, extension services, workshops, information exchange programmes and networks such as SEA-Peat Network	Implement IEC on peatlands (multimedia system)	H	C	DENR Public Affairs Office, DA-ATI / IEC clusters, Philippine Information Agency (PIA) and LGUs	LGUs in partnership with DENR, DA clusters	Agency regular funds	✓		✓	sponsorship from civil society; Society for the Conservation of Philippine Wetlands
		3.1.2 Develop appropriate local language awareness materials and activities to enhance understanding of peatland values, threats, impacts and sustainable management options	Develop localize information materials on peatlands	H	C	DENR Public Affairs Office, DA API/IEC clusters, and LGUs NGO's	LGUs in partnership with DENR, DA IEC cluster	Agency regular funds; IRA			✓	NGOs, DEP ed, PIA
		3.1.3 Provide the general public and government agencies with information on the roles of peatlands, its ecology and economy	Provide the general public and government agencies with information on the roles of peatlands, its ecology and economy, through the media (print TV radio, internet media)	H	C	DENR Public Affairs Office, DA ATI/IEC cluster, and LGUs	LGUs in partnership with DENR, DA clusters	Agency regular funds			✓	Radio stations, TV, print media
			Integration of peatland concerns in school curriculum at TERTIARY levels	M	C	CHED, DepEd, Academe	DepEd	Agency regular funds			✓	Radio stations, TV, print media
	3.2 Build institutional capacity on management of peatlands	3.2.1 Support and enhance human resources and strengthen institutional capacity	Support and enhance human resources and strengthen institutional capacity	H	C	DENR with DA, DAR and LGUs Academic institutions	DENR in partnership with LGUs and NGAs	Agency regular funds	✓	✓	✓	ASEAN countries; ACB

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		3.2.2 Source expertise to train and develop a core group of local experts	Source expertise to train and develop a core group of experts at the national and local levels	H	C	DENR with DA, DAR and , LGUs Academic institutions	DENR in partnership with LGUs	Agency regular funds	✓	✓	✓	ASEAN countries, ACB
		3.2.3 Establish mechanisms and organise training programmes, workshops, attachments and study tours	Establish mechanisms and organise training programmes, workshops, attachments and study tours	H	C	DENR with DA, DAR and LGUs	DENR in partnership with LGUs	Agency regular funds	✓	✓	✓	ASEAN countries; ACB, NEDA
		3.2.4 Support transfer of technology for peatland management including practical training	Support transfer of technology for peatland management including practical training	H	C	DENR with DA, DAR and LGUs	DENR	Agency regular funds	✓	✓	✓	ASEAN countries; ACB
		3.2.5 Provide necessary equipment and training to appropriate authorities in areas with high fire risk	Provide necessary equipment and training to appropriate authorities in areas with high fire risk	M	C	DENR with DA, DAR, DILG Bureau of Fire Protection and LGUs	DENR	Agency regular funds	✓		✓	ASEAN countries; NEDA
		3.2.6 Enhance coordination among stakeholders related to peatland management through networks or working groups	Enhance coordination among stakeholders related to peatland management through networks or working groups	H	C	DENR with DA, DAR and LGUs	DENR	Agency regular funds			✓	multisectoral
4. Information Sharing	4.1 Enhance information management and promote sharing	4.1.1 Establish or strengthen existing information systems or clearing houses to manage and make available information related to peatlands	Establish or strengthen existing information systems or clearing houses to manage and make available information related to peatlands at all levels	H	C	ITWG	DENR	Agency regular funds			✓	multisectoral

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		4.1.2 Strengthen regional sharing of experience and networking through use of mechanisms such as the ASEAN Haze Action Online, the SEA Peat Portal, workshops, documentation, network as well as strengthening national capacity for information sharing	Support the strengthening of regional sharing of experience and networking through use of mechanisms such as the ASEAN Haze Action Online, the SEA Peat Portal, workshops, documentation, network as well as strengthening national capacity for information sharing	H	C	ITWG	DENR	Agency regular funds	✓		✓	multisectoral
		4.1.3 Enhance regional information sharing on the extent, status and management of peatlands and develop handbooks for best management practices	Enhance regional information sharing on the extent, status and management of peatlands and develop handbooks for best management practices	H	C	ITWG	DENR	Agency regular funds	✓		✓	multisectoral
5. Policies and Legislation	5.1 Develop or strengthen policies and legislation to protect peatlands and reduce peat fire	5.1.1 Designate specific institutions for peatland management	Create an inter-agency technical working group for peatland	H	S	ITWG	DENR, DA, and LGUs	Host rotation by ITWG		✓	✓	ITWG
		5.1.2 Formulate or update national policies and strategies relating to peatland conservation and wise use, including facilitation of integrated land use planning and management for peatlands	Formulate specific policy to address issues regarding peatlands	H	S	ITWG at the national level; PAMB for protected areas and LGUs for non-NIPAS area	DENR, DA, and LGUs	DENR-GAA, LGU-IRA, DA-BSWM-GAA			✓	- Congress (long-term), - DAR Adjudication Board (short-term)
		5.1.3 Strengthen law enforcement	Review existing policies/laws and strengthen law enforcement	H	S	ITWG, PAMB, DILG and LGUs	DENR (include LGUs)	DENR GAA and LGU-IRA			✓	Law enforcement agencies and deputized Environment and Natural Resources Protection (ENRP) Committees

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									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
6. Fire Prevention, Control and Monitoring	6.1 Reduce and minimize occurrence of fire and associated haze	6.1.1 Identify peatlands in the region with high fire risk and develop and promote preventive measures	The APMS Action under Operational Objective 1.1.2 calls for the identification of peatlands and their comprehensive profiling. The profiling of peatlands would include items corresponding to whether fire is an identified threat to a particular peatland. Preventive measures would thus be designed according to the causal factor behind the occurrence of fire		S	DENR, LGU, DILG Bureau of Fire Protection	DENR Regional Office/LGU/ DA-BSWM	DENR-GAA; LGU-IRA; DA-BSWM-GAA			✓	
		6.1.2 Monitor weather conditions and hot spots in high-risk areas and issue alerts as appropriate	Monitor weather conditions and hot spots in fire-risk peat areas and issue alerts as appropriate		L	DENR, DOST, PAGASA and LGUs	DENR Regional Office and LGU	DENR-GAA; LGU-IRA;			✓	
		6.1.3 Manage water tables in peatlands appropriately according to land use to prevent fire	Ensure that land-use do not contribute to lowering of water table. Incorporate FLUP and other site management plans into CLUP of LGUs		L	LGU, DA-BSWM, NIA, DENR	LGU, DA-BSWM, NIA	LGU-IRA; DA-BSWM; NIA - GAA			✓	
		6.1.4 Develop and promote appropriate techniques for fire control in peatlands	Develop and promote appropriate techniques for fire control in peatlands		C	DENR, (DILG / BFP	DENR, DILG / BFP	DENR, DILG / BFP regular funds		✓	✓	Academe and NGOs
		6.1.5 Strengthen coordination among and capacity of agencies involved in peatland fire prevention and control, including establishment of peat fire prevention units in agencies responsible for forestry and agriculture	Create peat fire prevention unit and develop fire preparedness/management plans		C	LGU, DENR	DENR, DILG-BFP, LGU,	DENR, LGU, DILG-BFP regular funds	✓		✓	Academe and NGOs

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		6.1.6 Actively involve villagers and other local stakeholders in fire prevention and control	Actively involve communities and other local stakeholders in fire prevention and control; train local community to assist in fire fighting	H	C	DENR; LGU; NCIP	DENR; LGU; NCIP	NCIP; DENR; LGU regular funds			✓	
		6.1.7 Implement zero-burning strategies for all commercial agriculture and zero or controlled burning for local communities	Assess the practices on commercial agriculture and small farmers regarding the burning of areas identified as peatlands. The assessment would be part of the profiling called for in the National Action under Operational Objective 1.1.2.	L	L	DA, LGU	DA and LGUs	Regular funding			✓	
7. Conservation of Peatland Biodiversity	7.1 Promote conservation of peatland biodiversity	7.1.1 Identify peatlands in the region which are of regional or global importance for conservation of biodiversity	The profiling under Operational Objective 1.1.2 would take into consideration the importance of peatlands in the conservation of biodiversity; in short, biodiversity assessment shall be made.	H	S	DENR	DENR	Regular GAA	✓		✓	Academe; NGOs.
		7.1.2 Assess the status, gaps and threats within the network of protected areas for peatlands and peatland biodiversity and identify priority areas for conservation	From the identified peatlands, prioritize areas for conservation	H	C	DENR and LGUs	DENR	Regular Agency funds	✓	✓	✓	Academe; NGOs

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		7.1.3 Legally designate national, regional or globally significant peatland sites as conservation or protected areas	Set aside as protected areas or conservation areas by proclamation or by law those peatlands that have been identified to be nationally, regionally or globally important for biodiversity conservation or ecological services.	H	C	DENR and LGUs	DENR-PAWB	Regular regular funds	✓		✓	Academe;NGOs
		7.1.4 Strengthen all aspects including 'institutional frameworks' of the management of peatland conservation areas	Strengthen mgt. and protection of peatland areas within PAs e.g. Agusan Marsh WS	H	C	ITWG at the national level; PAMB for protected areas and LGUs for non-NIPAS area	DENR, PAMB and LGU				✓	Development Alliance of Agusan Marsh Wildlife Sanctuary and other site based NGOs
		7.1.5 Develop sustainable utilization of peatland resources for local communities within peatland conservation areas	Assess extent of sustainable use of peatland resources	H	C	DENR, DA and LGUs,	DENR		✓		✓	Academe, NGOs, other NGAs (include DOT, BFAR)
8. Integrated Management of Peatlands	8.1 Promote multi-agency involvement in peatland management	8.1.1 Establish national inter-agency working groups to develop strategies for peatland protection and sustainable use.	The inter-agency group proposed to be formed as called for under National Action corresponding to APMS Action 5.1.1 shall be tasked to develop strategies for peatland protection and sustainable use.	H	S	Multi-sectoral and agencies represented in the ITWG	DENR and DA				✓	Academe, NGOs, and NGAs
		8.1.2 Encourage sustainable management practices for all peatland users, including those from forestry, agriculture and plantations	Develop guide for wise utilization of peatland resources/development e.g. proper water mgt.	H	C	Multi-sectoral and agencies represented in the ITWG	ITWG		✓		✓	

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									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
	8.2 Promote integrated water resources and peatland management using a basin-wide approach and avoiding fragmentation	8.2.1 Establish the fundamental importance of the natural water regime as the basis for best practice peatland management	The national action corresponding to APMS Action 8.1.2 that calls for the guides for wise use: utilization of peatland resources and development shall address peatland users including those from forestry, agriculture and commercial plantations for forestry or agriculture.	H	S	ITWG	ITWG		✓		✓	
		8.2.2 Control or restrict further drainage and conversion (for agriculture, plantation, forestry, settlement, mining, infrastructure and other uses) of deep peat, peat domes, undisturbed peatlands as well as other ungazetted areas of conservation importance	Develop laws/policies restricting further conversion of peatlands; link to 5.1.2	H	C	ITWG	ITWG	Agency regular funds			✓	
		8.2.3 Develop guidelines to assist the process to restrict the opening up and drainage of deep peat, peat domes and undisturbed peatlands.	Develop guidelines to assist the process to restrict the opening up and drainage of deep peat, peat domes and undisturbed peatlands. This forms part of national action under 5.1.2	H	C	ITWG	DENR, PAMB or LGU (for non PA)	Agency regular funds	✓		✓	NIA
		8.2.4 Develop an appropriate water management regime for peat domes and surrounding peat areas, including the blocking of disused or illegal canals.	Subsumed under 8.2.1								✓	

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
	8.3 Promote integrated forest and peatland management	8.3.1 Ensure the long-term designation and protection of peat swamp forest in reserves and take urgent measures to protect the remaining undisturbed peatlands	Set aside important peatlands as protected areas or conservation areas by proclamation or by law	H	C	DENR and LGUs	DENR-PAWB					Academe and NGOs
		8.3.2 Develop forest management plans and guidelines for production forest reserves *										
		8.3.3 Develop and promote sustainable forest management practices, including low-impact harvesting, zero-drainage harvesting, etc. *										
		8.3.4 Develop and implement measures for post harvesting rehabilitation *										
		8.3.6 Control illegal harvesting practices and associated trading activities	Implement Wildlife Act (RA 9147)	H	C	DENR, LGUs	LGUs, DENR	Regular agency funds			✓	
		8.3.8 Document peatland biodiversity and socio-economic, cultural, and ecological uses	Document peatland biodiversity and socio-economic, cultural and ecological uses. This is closely tied up as an activity under 1.1.2 and 7.1.2	H	L	ITWG member agencies, NCIP and LGUs	NCIP and LGUs	Regular agency funds	✓		✓	Academe, and NGOs
	8.4 Manage agriculture in areas adjacent to the peatlands in integrated manner	8.4.1 Restrict future agricultural development to degraded shallow peat	Conduct land suitability assessment in shallow peat (less than 1 meter). If found feasible, confine agricultural activities in these areas.	H	S, C	DA and LGU	DA and LGUs	Regular agency funds	✓		✓	Academe, and NGOs

* May apply in Peatland previously released under IFMA.

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		8.4.2 Document and promote indigenous knowledge and methodologies, such as techniques for prevention of subsidence and over-drainage; and low impact land-clearing and agricultural practices in existing peatland agricultural areas.	Document and promote indigenous knowledge and methodologies, such as techniques for prevention of subsidence and over-drainage; and low impact land-clearing and agricultural practices in existing peatland agricultural areas	H	C	DA, NCIP and LGU	DA with NCIP and LGUs		✓		✓	Academe, and NGOs
		8.4.3 Develop best practice land clearing techniques affordable and appropriate for communities living in peatland areas	Develop best practice land clearing techniques affordable and appropriate for communities living in peatland areas after the conduct of land suitability assessment in shallow peat (less than 1meter)	H	C	DA and LGU	DA		✓		✓	Academe, and NGOs
	8.5 Promote integrated community livelihood and peatland management	8.5.1 Enhance local community knowledge of peatlands through awareness and education	Enhance local community knowledge of peatlands through awareness and education This is closely linked with national actions under 3.1	H	S	ITWG member agencies and LGUs, CSOs	LGUs	Agency GAA and IRA	✓		✓	
		8.5.2 Support the protection and sustainable use of peatlands through application of customary laws and traditional practices	Document indigenous knowledge system and practices and incorporate into mgt. strategies for peatlands (link with research)	H	C	ITWG member agencies and LGUs	NCIP and LGUs	Agency GAA and IRA	✓		✓	
		8.5.3 Promote and enhance market access for traditional products developed by local communities from peatlands	Determine the current marketing schemes and take actions to improve the system	H	C	DTI and LGUs, DA-AMAD	DTI		✓		✓	

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		8.5.4 Support and empower local communities to protect and sustainably use peatland resources to contribute to their livelihood and environmental security	Support and empower local communities to protect and sustainably use peatland resources to contribute to their livelihood and environmental security	H	C	ITWG member agencies and LGUs, DA-ATI	LGUs		✓		✓	
		8.5.5 Introduce and strengthen alternative livelihoods to minimize impacts or dependence on peatlands	Introduce and strengthen alternative livelihoods to minimize impacts or dependence on peatlands	H	C	ITWG member agencies and LGUs, DA-ATI	LGUs		✓		✓	
		8.5.6 Engage grassroots stakeholders in participatory management of peatlands	Engage grassroots stakeholders in participatory management of peatlands	H	C	ITWG member agencies and LGUs, DA-ATI	LGUs			✓	✓	
9. Establishment and Promotion of Demonstration Sites for Peatland Management	9.1 Promote best management practices	9.1.1 Identify and promote demonstration sites for best management practices, for example site for eco tourism, livelihood options, restoration, etc.	Explore the possibility of promoting the following as possible pilot sites for best practice example for peatlands Leyte: Barangays Tabangohay and Divisoria in Alangalang Agusan: Barangay Caimpugan, San Francisco extended to Barangay kauswagan and Calingayan and San Teodoro in Bunawan, Talacogon Liguasan: Dungan	H	C	ITWG and LGUs, DA-ATI	Leyte: LGU Agusan: PAMB	283,000 sq m training center with dorms; traversed by barangay roads in Leyte. Existing Visitors' center access is via river in Agusan Marsh	✓		✓	DA DAR projects. Agusan River basin Project. ABD ZOPAD covers Liguasan (e.g. microfinancing for rebels)

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		9.1.2 Establish pilot project(s) in each country (according to local needs) to test new sustainable management and fire prevention approaches for peatlands	Establish pilot sites to test new sustainable management for peatlands	H	S	ITWG and LGUs	DENR and LGUs				✓	
		9.1.3 Promote the application of best management practices for peatlands through research and development	Documentation of the uses of wetlands. Periodic conventions, exchange/study tours.	H	S	LGU, DENR, DA, DAR, NIA and DOT	DENR, DA			✓		
		9.1.4 Establish multi-country technical working groups to work on issues of common concern, such as peatland water management, peatland silviculture or rehabilitation options	The inter-agency group proposed to be formed as called for under National Action corresponding to APMS Action 5.1.1 shall work on the issues of common concern such as peatland water, management, peatland, silviculture.	H	S	ITWG member agencies, LGUs and NGOs	LGU at local level DENR at the National level	none	✓		✓	
10. Restoration and Rehabilitation	10.1 Develop appropriate techniques for the restoration or rehabilitation of degraded peatlands	10.1.1 Develop and promote widely proper guidelines and manuals on peatland restoration and rehabilitation based on local knowledge, regional experience and R&D findings	Develop and publish manuals and other written guides (e.g. popular versions Komiks) for rehabilitation of peatlands; Regional consultations/Symposia; Review existing/ related guidelines on peatlands.	H	S	ITWG member agencies, LGUs and NGOs	LGU at local level DENR at the National level; DENR Ros and LGUs to coordinate closely	Technical reports of previous projects e.g. Conservation of Priority Protected Areas Project (CPPAP); OI/CI report on wetland evaluation in Leyte Sab-a	✓	✓	✓	
		10.1.2 Establish pilot projects to test techniques	Same areas as in 9.1.1. Establish pilot project to test new techniques	H	C	ITWG and LGU	DENR and LGU; NCIP for applicable areas.		✓	✓	✓	

Focal Area	Operational Objectives	APMS Action ^a	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		10.1.3 Organize specific training programmes related to peatlands restoration and rehabilitation	Conduct training needs analysis; Several processes are involved before training can commence. This will be undertaken by the ITWG.	H	C	LGU DENR and DA	LGU DENR, DA, and NCIP for applicable areas		✓	✓	✓	Academe
		10.1.4 Revise and update guidelines based on experience from local knowledge and findings from R & D	Review the existing related guidelines/policies.	H	C	ITWG and LGUs	ITWG and LGUs	none	✓	✓	✓	
	10.2 Rehabilitate burnt, drained and degraded peatlands	10.2.1 Identify and classify degraded peatlands according to the rehabilitation options based on local knowledge, regional experience, R&D findings and appropriate technology	Identify and classify degraded peatlands according to the rehabilitation options based on the local knowledge, regional experience, R&D findings and appropriate technology	H	C	ITWG and LGU	LGU; DENR; DA and NCIP for Ancestral domains	none	✓	✓	✓	
		10.2.2 Develop national programmes to initiate peatland restoration and rehabilitation activities	Develop national programmes to initiate peatland restoration and rehabilitation activities	H	L	ITWG	ITWG	none	✓	✓	✓	
		10.2.3 Implement programmes for peatland rehabilitation	Implement programmes for peatland rehabilitation	H	C	ITWG	ITWG and LGUs		✓	✓	✓	
11. Peatlands and Climate Change	11.1 Protect and improve function of peatlands as carbon sequestration and storage	11.1.1 Quantify the above and below ground carbon content in peatlands in ASEAN countries and its role in mitigating climate change	Quantify the above and below ground carbon content in peatlands and its role in mitigating climate change	M	L	DENR (EMB, ERDB and FMB)	DENR		✓	✓	✓	Academe and NGOs working on Climate Change, KLIMA Climate Change Center - Manila Observatory (KLIMA-MO), World Agroforestry Center/International Center for Research on Agro-Forestry (ICRAF)

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		11.1.2 Identify degraded peatlands and explore the possibility for restoration through the Clean Development Mechanism (CDM) under the Kyoto Protocol	Identify degraded peatlands and explore the possibility for restoration through the Clean Development Mechanism (CDM) under the Kyoto Protocol	M	L	DENR(EMB; ERDB and FMB)	DENR		✓	✓	✓	Academe and NGOs working on Climate Change, klima-MO, World Agroforestry Center (ICRAF)
		11.1.3 Facilitate support for peatland management and restoration from other climate change-related funding mechanisms	Facilitate support for peatland management and restoration from other climate change-related funding mechanisms	M	L	DENR (EMB; ERDB and FMB)	DENR		✓	✓	✓	Academe and NGOs working on Climate Change e.g. KLIMA, World Agroforestry Center (ICRAF)
	11.2 Support peatland adaptation process to global climate change	11.2.1 Assess the impact of climate change scenarios on peatland ecosystem in ASEAN countries	Assess the impact of climate change scenarios on peatland ecosystem in the country	H	L	DENR-EMB	DENR-EMB		✓	✓	✓	Academe and NGOs working on Climate Change e.g. WWF, KLIMA, World Agroforestry Center (ICRAF, Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)
		11.2.2 Identify management strategies applicable to minimising peatland vulnerability on global climate change	Identify management strategies applicable to minimising peatland vulnerability on global climate change	M	L	DENR-EMB	DENR-EMB		✓	✓	✓	Academe and NGOs working on Climate Change (e.g. WWF, KLIMA) and World Agroforestry Center
		11.2.3 Integrate peatland issues into national or regional climate change adaptation plans	Integrate peatland issues into national and regional climate change adaptation plans	M	L	DENR-EMB	DENR-EMB		✓	✓	✓	Academe and NGOs working on Climate Change WWF, KLIMA World Agroforestry Center (ICRAF), Presidential Task Force on Climate Change (PTFCC), Inter-Agency Committee on Climate Change (IACCC)

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		11.2.4 Source support for peatland management from adaptation funds linked to the UNFCCC	Source support for peatland management from adaptation funds linked to the UNFCCC	M	L	DENR-EMB	DENR-EMB		✓		✓	Academe and NGOs working on Climate Change (e.g. WWF, KLIMA, PTFFCC, IACCC)
12. Regional Cooperation	12.1 Promote exchange of expertise in addressing peatland management issues	12.1.1 Develop regional collaborative research projects and other activities involving experts from ASEAN countries	Support the development of regional collaborative research projects and other activities involving experts from ASEAN countries									Regional activity
		12.1.2 Strengthen the SEA Peat Network to include all experts on peatland in the ASEAN region										Regional activity
		12.1.3 Organise regional workshops to strengthen cooperation and exchange of experience	Organise national workshops and cross visit to strengthen cooperation and exchange of experience	M	C	ITWG	DENR, DA		✓	✓	✓	
	12.2 Establishment of 'centres of excellence' in the region for peatland assessment and management	12.2.1 Designate appropriate 'centres of excellence' in the region on specific aspects related to peatland management	Utilize the existing training facilities of the Agricultural Training Institute of Region 8 as a possible centre of excellence on certain aspect of peatland management	H	L	ITWG	DA- ATI in close coordination with the diff. ITWG member agencies and LGUs	Agency regular funds	✓		✓	ASEAN-ACB and external organizations
		12.2.2 Support the strengthening and selected activities of selected centres										Regional activity
		12.2.3 Enhance linkage and cooperation between centres								✓		Regional activity

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
	12.3 Contribute to the implementation of other related agreements and regional cooperation mechanisms	12.3.1 Incorporate peatland issues into ASEAN frameworks related to Nature Conservation and Biodiversity, Multilateral Environment Agreements, Water Resource Management, Forestry and Agriculture; and Education	Ensure that peatland management issues and concerns in the Philippines are reflected in our commitments to relevant environmental agreements and conventions. Also ensure that peatland issues are incorporated in the NBSAP, NAP on Desertification and Land Degradation, and UNFCCC future iterations	M	M	ITWG	DA, DENR		✓		✓	
		12.3.2 Ensure contribution of regional strategy to the implementation of the ASEAN Agreement on Transboundary Haze Pollution	Support 12.3.2									Regional activity
		12.3.3 Support input on peatland issues into related global convention deliberations (including Ramsar Convention, Convention on Biological Diversity, Convention to Combat Desertification, and UN Framework Convention on Climate Change)	Support 12.3.3									Regional Activity
	12.4 Enhance multi-stakeholder partnerships to support peatland management	12.4.1 Strengthen partnership among stakeholders through the APMI and related activities	Support regional actions							✓		Regional activity

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		12.4.2 Forge or strengthen partnerships at local and country level among key stakeholders, including government agencies, NGOs, community and private sector to implement sound peatland management and development	Forge or strengthen partnerships at local and country level among key stakeholders, including government agencies, NGOs, community and private sector to implement sound peatland management and development Promote information exchange e.g forum, consultations, etc.	H	C	DENR, ITWG and other stakeholders	- do -	- do -	✓	✓	✓	ASEAN-ACB and external organizations
13. Financing of the Initiative	13.1 Generate financial resources required for the programmes and activities to achieve target of the strategy	13.1.1 Develop a financing strategy for implementation of the APMS including cost benefit analysis	Develop a financing strategy for implementation of the NAP including cost benefit analysis using as basis resource valuation studies	H	S	ITWG	DENR, DA, LGU		✓	✓	✓	ASEAN and external organizations
		13.1.2 Undertake a feasibility study to explore use of polluter-pay and user-pay schemes, tax incentives or other options to generate sustaining resources to support the implementation of the strategy	Undertake feasibility studies on various modalities for use in generating sustainable funding mechanisms for peatlands (e.g. BOT agreements, tax incentives, MOA)	H	S	ITWG	DENR DTI with Academe, LGUs		✓		✓	
		13.1.3 Establish or enhance funding mechanisms to support the strategy implementation	Establish, enhance and promote private-public sector partnerships in generating sustainable funding mechanisms for peatlands	H	S	ITWG	LGU in partnership with DENR and ITWG members agencies		✓	✓	✓	ASEAN-ACB and external organizations

Focal Area	Operational Objectives	APMS Action	National Action	Priority	Time Frame	Implementing Bodies	Lead Agency(ies)	Existing Resources	Support Requirements			Linkages
									AT	ET	F	
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13
		13.1.4 Develop specific budgets and proposals for funding of activities by national governments, external supporters and other sources to generate resources to support the implementation of the strategy	Develop specific budgets and proposals for funding of activities by national governments, external supporters and other sources to generate resources to support the implementation of the strategy			ITWG and LGUs	DENR and other ITWG member agencies		✓	✓	✓	Agency initiative
		13.1.4 Develop specific budgets and proposals for funding of activities by national governments, external supporters and other sources to generate resources to support the implementation of the strategy	Develop specific budgets and proposals for counterpart funding by local governments (e.g. from IRA)	H	C	ITWG	ITWG member agencies and LGUs		✓	✓	✓	
		13.1.5 Organise regular forums among donors and supporters to facilitate coordinated funding of activities	Organise regular fora among donors and supporters to facilitate coordinated funding of activities	H	C	DENR and other stakeholders	LGU in partnership with ITWG and other stakeholders		✓	✓	✓	
		13.1.6 Establish funding mechanisms related to payments for peatland environmental services to generate funds for peatland conservation and management	Establish funding mechanisms related to payments for peatland environmental services to generate funds for peatland conservation and management	H	S	LGU in partnership with ITWG and other stakeholders; Protected Area Management Bureau (PAMB) (for applicable areas)	LGU in partnership with ITWG and other stakeholders		✓	✓	✓	
		13.1.7 Establish appropriate mechanisms to channel resources to local government or community groups to support sustainable management and rehabilitation activities (e.g. micro credit)	Establish appropriate mechanisms to channel resources to local government or community groups to support sustainable management and rehabilitation activities (e.g. micro credit)	H	C	LGU in partnership with ITWG, FAMB (for applicable areas) and other community groups	LGU in partnership with ITWG and other stakeholders		✓		✓	

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