



**PROJECT IDENTIFICATION FORM (PIF)**  
**PROJECT TYPE: Full-sized Project**  
**TYPE OF TRUST FUND: GEF Trust Fund**

**PART I: PROJECT IDENTIFICATION**

Project Title:	Sustainable Management of Peatland Ecosystems in Indonesia (2014-2018)		
Country(ies):	Indonesia	GEF Project ID:	5764
GEF Agency(ies):	IFAD	GEF Agency Project ID:	
Other Executing Partner(s):	Ministry of the Environment ASEAN Secretariat Global Environment Centre Local Government Agencies	Submission Date: Resubmission Date: 3 <sup>rd</sup> submission Date:	7 Mar 2014 21 March 2014 25 March 2014
GEF Focal Area (s):	Multi-focal Areas	Project Duration (Months)	48
Name of parent program:	SFM/REDD	Agency Fee (\$):	<b>452,841</b>

**A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK<sup>1</sup>:**

Focal Area Objectives	Trust Fund	Indicative Grant Amount(\$)	Indicative Co- Financing(\$)
LD-2	GEFTF	2,621,716	15,900,000
CC-5	GEFTF	953,351	5,500,000
SFM/REDD- 1	GEFTF	953,351	6,000,000
SFM/REDD- 2	GEFTF	238,338	1,300,000
Total Project Cost		4,766,756	28,700,000

**B. INDICATIVE PROJECT FRAMEWORK**

<b>Project Objective:</b> To conserve and significantly reduce GHG emissions from peatlands through sustainably managing peatlands and meeting the livelihood needs of adjacent communities						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co Financing (\$)
1. Capacity building for sustainable peatland management	TA/ INV	Capacity and institutional framework enhanced for implementation of National Peatland Regulation, National Strategy for Sustainable Peatland Management and ASEAN Peatland Management Strategy	1.1: Implementation of National Strategy for Sustainable Peatland Management by multiple agencies enhanced and monitored 1.2: National Peatland Regulations (PP Gambut) promoted and capacity for implementation developed at national and provincial levels. 1.3 Implementation of APMS and related regional processes by Indonesia strengthened	GEFTF	1,157,190  LD-2: 960,686 CC-5: 87,335 SFM/REDD-1: 109,169	2,830,000
2. Reduction of peatland degradation and fires to reduce haze and GHG emissions	INV	National fire prevention tools and plans enhanced, and reduced rate of degradation and fires in targeted peatlands	2.1: National Peatland Fire Prediction, Monitoring and Warning Systems strengthened and their usage in targeted provinces enhanced 2.2 Peatland hydrological unit maps for management zoning in selected provinces developed	GEFTF	2,139,710  LD-2: 960,686 CC-5: 524,011 SFM/REDD-1: 436,676 SFM/REDD-2: 218,338	11,670,000

			2.3: Peatland fire minimized through Fire/Haze Free Villages Program in targeted districts in northern Riau province 2.4: Assessment of potential GHG emission reductions from targeted peatlands			
3. Integrated sustainable management of peatlands	INV	Integrated sustainable management demonstrated at targeted peatlands	3.1: Partnership between private sector, government and community for sustainable management of peatland established in Indragiri Hilir District, Riau. 3.2: Best Management practices for sustainable peatland management documented and promoted	GEFTF	1,069,855  LD-2: 480,343 CC-5: 262,005 SFM/REDD-1: 327,507	11,700,000
Sub-Total					4,316,756	26,200,000
Project management cost				GEFTF	400,000	2,500,000,
<b>Total project costs</b>					<b>4,766,756</b>	<b>28,700,000</b>

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Project Government Contribution (Indonesia)	Ministry of Environment	In cash	11,450,000
Project Government Contribution (Indonesia)	Ministries of Agriculture and Forestry	In kind	17,000,000
GEF Agency	IFAD	In-kind	250,000
<b>Total Co-financing</b>			<b>28,700,000</b>

**INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY**

GEF AGENCY	TYPE OF TRUST FUND	FOCAL AREA	Country Name/Global	Grant Amount(a)	Agency Fee (b)	Total (c)
IFAD	GEFTF	Land Degradation	Indonesia	2,621,716	249,062	2,870,778
IFAD	GEFTF	Climate Change	Indonesia	953,351	90,568	1,043,919
IFAD	GEFTF	Sustainable Forest Management	Indonesia	1,191,689	113,211	1,304,900
<b>Total Grant Resources</b>				<b>4,766,756</b>	<b>452,841</b>	<b>5,219,597</b>

**PROJECT PREPARATION GRANT (PPG)**

Amount Requested (\$)      Agency Fee for PPG (\$)

100,000

9,500

**PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY**

Trust Fund	GEF Agency	Focal Area	Country Name/ Global	(in \$)		
				PPG (a)	Agency Fee (b)	Total c = a + b
GEF TF	IFAD	Land Degradation	Indonesia	55,000	5,500	60,500
GEF TF	IFAD	Climate Change	Indonesia	20,000	1,000	21,000
GEF TF	IFAD	SFM/REDD	Indonesia	25,000	3,000	28,000
<b>Total PPG Amount</b>				<b>100,000</b>	<b>9,500</b>	<b>109,500</b>

MFA: Multi-focal area projects; MTF: Multi-Trust Fund projects.

**PART II: PROJECT JUSTIFICATION**

**A. PROJECT OVERVIEW:**

**A1. Project Description**

***Global environmental problems, root causes and barriers that need to be addressed***

Land use change from forest to other land uses has taken place in most peatland ecosystems in Indonesia. The size of relatively intact peatland forests has decreased since the 1980s from 25 million ha, constituting approximately 50% of worlds' total tropical peatlands, to 15 million ha by 2011. Much of the remaining peatlands continue to be affected by logging and drainage.

The expansion of plantations for oil palm and pulp and paper and the associated drainage of peatlands has been an important cause of deforestation, biodiversity loss, and peatland subsidence. The drying out of peatlands has led to increased susceptibility to fire. While peatlands in Indonesia store an estimated 80 billion tons of carbon, equivalent to approximately 5% of all global soil carbon, decreasing water levels by 70 cm can cause subsidence rates of more than 5cm/year and an emission of 70 tCO<sub>2</sub>/ha/yr. In total, from degradation alone an estimated 2 billion tons of carbon dioxide is released per annum (equivalent to 5.6% of global emissions from fossil fuels). Peatland fires can release up to 1000 tCO<sub>2</sub>/ha.

An estimated 3 million ha of Peatland in the country have been burnt in the past 15 years. Peatland fire is mainly driven by land clearing for agriculture and lack of fire control during the dry season. This severely affects carbon storage, public health, biodiversity conservation and other ecosystem services. In 1997, for example, burning peatland and vegetation in Indonesia contribute the equivalent of 13-40% of the mean annual global carbon emissions from fossil fuels during the fire season (Nature, 2002). The regional impact of transboundary smoke haze pollution is massive, for example it is estimated that the 1997 - 1998 haze disaster cost the region US\$9 billion. The health and economy of some fifty million people in five countries in the region are affected by annual events of haze.

Dried or degraded peatlands create negative impacts on: i) the regulation and maintenance of hydrological balance in dry and wet seasons, which is critical to prevent flood and drought in surrounding areas; ii) biodiversity conservation of endemic flora such as Jelutung (*Dyera polyphilla*), and Meranti (*Shorea spp*) and various fauna including False Gharial (*Tomistoma schlegelii*), Sumatran Tiger (*Panthera tigris sumatrae*), Honey Bear (*Helarctos malayanus*), Tapir (*Tapirus indicus*), White Winged Wood Duck (*Cairina scutulata*) and the Lesser Adjutant (*Leptoptilos javanicus*), which are designated as threatened and endangered species; and iii) loss of high value timber such as "ramin" (*Gonistylus bancanus*) and non timber forest products such as sap of Jelutung, and rattan.

Peatland degradation in Indonesia at macro level is mostly driven by i) increasing demand for palm oil for food, industrial and biofuel sectors; ii) increasing demand for pulp and paper and timber; iii) growing

population and shortage of alternative agricultural land in peatland regions; iv) poor inter-agency coordination, weak governance and inadequate enforcement; and v) climate change. Identified causes per peatland degradation result can be summarized as following:

- 1) Deforestation
  - Legal & illegal logging
  - Drainage associated with illegal logging access in peatlands
  - Wildfires
- 2) Drainage
  - Agriculture
  - Plantations (palm oil & pulp wood)
  - Infrastructure (roads/oil pipelines)
- 3) Limited development alternatives
  - Main development options easily available to community are oil palm and agriculture generally with land clearing using fire
  - Many unexplored options
- 4) Weak governance
  - Poor coordination between Government sectoral agencies for agriculture, forestry, environment and water resources
  - Poor integration between work of Central, provincial and local government
  - Lack of awareness
  - Competing sectors
  - Lack of coherent policies
  - Short-term profits versus long-term sustainability
  - corruption
- 5) Climate change
  - Reduced rainfall during dry seasons and increased length and severity of dry seasons which contribute to increasing fire risk and difficulties to control fires

### ***Lessons Learned***

To support the regional effort in tackling a continuing trend of peatland drainage, degradation, fires and haze pollution, the GEF funded a grant of USD 4.3 million for the project “*Rehabilitation and Sustainable Management of Peatlands in Southeast Asia* (referred to as *ASEAN Peatland Forest Project - APFP*)”. The APFP was implemented during 2010-2014 with parallel-financing from the European Union (EU) through the SEApeat project, and was led by the ASEAN Member States.

At regional and global levels, the APFP achieved the following: i) established an enhanced regional fire danger rating system (FDRS) for real-time warning (services provided by Malaysia/Singapore); ii) trained government agencies and communities for better peatland management; iii) established the ASEAN Peat Portal for disseminating publications, such as training modules on peatland assessment and management, and a peatland biodiversity toolkit; iv) established the Southeast Asia Peat Network database and a peatland directory; v) provided technical input to a documentary entitled *Haze Hell over Asia*, which was screened on the History Channel to raise awareness on peat fires and haze; v) engaged in the Roundtable for Sustainable Palm Oil (RSPO) and supported development of Best Management Practices (BMP) guidelines for existing oil palm plantations; and vi) participated actively in the 14<sup>th</sup> International Peat Congress, and contributed to peatland and climate change issues in the work of the Food and Agriculture Organization of the United Nations (FAO), and the Intergovernmental Panel on Climate Change (IPCC).

In Indonesia, the APFP has achieved, among others, the following:

- Reviewed and refined the National Strategy and Action Plan (NAP) on peatlands
- Trained personnel of the Ministries of Agriculture and Environment, local environment offices in Sumatera, Kalimantan and Papua, as well as university students
- Developed and promoted Masterplans for peatlands in the provinces of West Kalimantan and Riau
- Established small scale pilot activities to test new approaches for peatland management and fire prevention (in Riau, West Kalimantan and Central Kalimantan provinces)
- Completed an analysis of fire incidences in Riau, and a national working group on the FDRS was formed to study peatland fire prediction through establishment of hotspot maps
- Several policies, laws and regulations related to peatland management have been produced by the Government that strengthens the coordination among institutions and sectoral agencies responsible for peatland management

Although improvements have been made in awareness and policies there still remain significant challenges in terms of achieving mid to long-term objectives of sustainable management of peatlands. The governance of peatlands remains fragmented between different government ministries and agencies, and between the national, provincial and local governments. At local levels there is poor coordination and frequent conflict between private sector plantation developers, local communities and local government. The continuing expansion of plantations and agriculture in peatland areas, often with poor management of water resources and use of fire for land clearance is resulting in increasing peatland degradation and serious peatland fires and transboundary smoke haze.

The APFP project was working more at the macro-scale enhancing capacity and stakeholder engagement, developing plans and strategies and documenting best management practices. Its focus was primarily on biodiversity and land degradation issues and did not include a significant element on climate change. It also worked simultaneously in three provinces and several pilot sites – which was appropriate for enhancing capacity and for gathering experience of peatland management from different demonstration sites. Lessons learned from the APFP allow for a more targeted response to curbing larger scale degradation. The earlier activities did not strongly engage with the private sector and district governments. The APFP experience has demonstrated the need to adopt an integrated multi-stakeholder management approach for peatland management and fire prevention

Although actions by some initiatives including the APFP were able to prevent or reduce fires in certain areas, the scale of commodity related development activities combined with serious droughts led to extensive fires in 2013-2014. The Peatland fires in Riau province in Sumatra in June-August 2013, burnt an estimated 250,000 ha of peatland, and led to extremely high levels of choking haze in Sumatra, neighbouring Singapore, and Peninsular Malaysia. It is clear that a more targeted and comprehensive multi-stakeholder approach is needed to resolve the problem.

### ***Baseline project***

The Indonesian Government has recognized the negative environmental impacts of conversion of peatland forests and has implemented a **moratorium on new permits for conversion of peatlands and intact forests to oil palm and forest plantations since 2011**. However this ban is envisaged as temporary while Indonesia establishes institutional and regulatory measures to control exploitation of peatlands. Indonesia has also initiated a Plan of Action (POA) to address frequent peatland and forest fires and associated transboundary haze. The Ministers of Environment from the 10 ASEAN member states including Indonesia have adopted the ASEAN Peatland Management Strategy (2006-2020) (APMS) in 2006. Subsequently, as referred to above, Indonesia prepared a National Strategy and Action Plan on Peatlands in 2008 which was reviewed and updated in 2012.

In the absence of the GEF intervention, it is expected that the government of Indonesia will support specific activities through different sector Ministries and departments. The Ministry of the Environment will

continue to enforce (within their capabilities) regulations related to avoiding use of fire for land clearance, provide support for fire suppression by provincial environmental agencies and monitor the changes in air quality and environmental degradation. They will also start to implement the new Government regulation on Peatland Ecosystem Protection and Management which requires the detailed assessment of peatland areas and preparation of formal zoning maps for peatland use and protection. Considering this is a new approach being adopted, substantial technical support and capacity building will be required.

The Ministry of Forestry will allocate resources for the management of peatland forest areas under its jurisdiction, and minimize fire occurrence through equipping forest fire fighting teams. The Ministry of Agriculture will continue to implement its regulations related to the cultivation of oil palm (e.g. Indonesia Sustainable Palm Oil Regulation) and to promote the use of zero burning techniques. It is also planning to strengthen fire prevention and control in agricultural and plantation areas. The Provincial and local governments will (according to their capability) enforce the local regulations related to land development and approval of new developments. It is envisaged that the bulk of government financing will be directed to these activities, and having well-articulated land use plans developed through a multi-stakeholder consultation process will help optimize government financing for action on the ground.

Based on current experience however, it is expected that these activities by the different agencies will be implemented in an independent manner with coordination and synergy building receiving scant attention. A significant portion of the allocated national resources will focus on monitoring and controlling peatland fires, and providing support and services to those communities negatively impacted by the fires and haze. As such, resources will be less available for: translating national laws into provincial and local level action plans; clarifying jurisdictional responsibilities for fire prevention and management; building multi-stakeholder coordination mechanisms at different levels; engaging mid-level oil palm planters; articulating approaches for scaling out the FDRS nationally; mapping hydrological units and hotspots; rehabilitating abandoned palm oil plantations on peatlands; engaging a broader group of peatland research institutions; and maintaining political and community interest in haze management, to name a few.

### ***Proposed alternative scenario***

The GEF project is expected to change this baseline scenario and address the land use change threats to peatlands by spearheading and facilitating multi-stakeholder collaboration to:

- a) More effectively coordinate work among government, private sector, CSOs, and community stakeholders to implement the national peatland strategy and relevant aspects of the ASEAN Peatland Management Strategy;
- b) Address challenges of sustainable peatland management in the targeted areas in an integrated manner;
- c) Resolve land management problems – through enhancing capacity and developing cooperative partnerships between plantation companies, local communities and local government with the support of CSOs, as well as, provincial and national agencies;
- d) Enhance fire prevention measures through improved planning, preparedness and control capacity;
- e) Develop and implement participatory water management and fire prevention plans at a landscape level for individual peat hydrological units involving different stakeholders and land managers; and
- f) Enhance conservation status of remaining intact peatlands and monitor GHG emission reductions.

**Vision:** In September 2013, drawing on the contributions of the APFP and SEAPEAT projects, Environment Ministers of the 10 ASEAN Member States approved the establishment of an ASEAN Programme for Sustainable Management of Peatland Ecosystems (2014-2020) to support the implementation of the ASEAN Peatland Management Strategy (APMS) with the following key targets:

- (1) All peatland areas in ASEAN identified and inventoried;

- (2) Zero-burning uniformly practiced to prevent any uncontrolled wildfires on peatland, in order to eliminate any widespread smoke haze;
- (3) Fire-prone sites rehabilitated by focusing on root causes of fire;
- (4) Peatlands sustainably managed through enhanced sustainable livelihoods and economic use;
- (5) Peatlands conserved to contribute to significantly reduced emissions of greenhouse gases, and increased peatland biodiversity in the region; and
- (6) APMS and NAPs implemented, and national and regional capacity enhanced

At the National level, Indonesia has set targets to significantly reduce wildfires in Peatland areas, eliminate smoke haze and significantly reduce GHG emissions from peatlands compared to “business as usual”.

**The Project:** The proposed Sustainable Management of Peatland Ecosystems in Indonesia (SMPEI) project has been developed to support Indonesia with the implementation of the ASEAN Programme for Sustainable Management of Peatland Ecosystems (2014-2020) as well as related national Strategies and plans. The **overall goal** of the project is to conserve and significantly reduce GHG emissions from peatlands.

The **objective** of this project is to sustainably manage peatlands and meet the livelihood needs of adjacent communities.

**Project Components:** The project is comprised of three components:

Component 1: Capacity building for sustainable peatland management

Component 2: Reduction of peatland degradation and fires to reduce haze and GHG emissions

Component 3: Integrated sustainable management of peatlands

The following is a brief overview of the Components, Outcomes and Outputs envisaged in this project. Details of the specific activities and associated indicators and targets will be determined during the PPG design stage.

#### **Component 1: Capacity building for sustainable peatland management**

**Outcome 1: Capacity and institutional framework enhanced for implementation of National Peatland Regulation, National Strategy for Sustainable Peatland Management and ASEAN Peatland Management Strategy.**

Based on the National Strategy for Sustainable Peatland Management developed in 2006 by the National Peatland Working Group, relevant stakeholders at the national level agreed to prepare a national regulation for peatland management in Indonesia. The preparation of the regulation was initiated by the Ministry of Environment using a comprehensive consultation process involving various stakeholders such as, the Ministries of Forestry, Agriculture, Home Affairs, Public Works, Labour and Transmigration, Research and Technology, as well as, the National Land Use Agency, the Indonesian Science Institute, various universities and NGOs, the private sector and local government agencies. The draft regulation was finalised as a Government Planning Regulation on Environmental Degradation Control of Peatland Ecosystems and was approved by related Ministries - it is expected to be approved by the President in April 2014.

Peatland management in Indonesia is also supported by the President Instruction No. 10/2011 and No. 6/2013 - Moratorium of New Permit and Finalization of Management for Primary Forest and Peatland. This instruction is one of the implementation measures to reduce GHG emissions from Business as Usual (BAU) by about 26 % (using domestic resources) by 2030 or 41% with international assistance. The Government of Indonesia thus places a high priority for reducing GHG emissions by improving peatland management. Indonesia is expected to ratify the ASEAN Agreement on Transboundary Haze Pollution

(AATHP) in 2014 which is the key regional mechanism for cooperation in addressing peatland degradation and fires.

The proposed outputs under this outcome are:

*Output 1.1: Implementation of National Strategy for Sustainable Peatland Management by multiple agencies enhanced and monitored.*

The National Strategy for Sustainable Management of Peatlands in Indonesia was formulated by a multi-stakeholder group in 2006. It was reviewed and updated in 2011 and a revised version adopted in 2012 (this process was supported by APFP). This national strategy guides the work of different government agencies to sustainably manage peat resources. The project will support the further promotion and implementation of the strategy in partnership with a broad range of stakeholders. Monitoring and reporting on progress with implementation of the strategy will be supported. Combined with evidence from the local level, this will allow for providing strategic guidance to upstream decision-making on defining budgetary allocations for relevant sector ministries, and for better targeting financing to peatland management needs on the ground.

The co-funding allocated to the project by the government of Indonesia is drawn from the recurrent and development budgets for the respective agencies in accordance with the Indonesian government's medium term budget framework. These funds are allocated for implementation and enforcement of related regulations, implementation of the Programme of Action (POA) for Peatland and Forest Fire Control; mainstreaming of mitigation and adaptation to climate change; and support for various activities at provincial level. It is envisaged that by taking a multi-stakeholder and multi-agency approach to the implementation of the national strategy, effectiveness and efficiency will be enhanced and some of these resources will be reallocated to support integrated management approaches, as well as, more support for the prevention of peatland fires and degradation rather than being focused primarily on peatland fire control. The detailed scope and allocation of the co-funding will take place in the PPG stage based on the final project scope, activities target sites etc.

*Output 1.2: National Peatland Regulations (PP Gambut) promoted and capacity for implementation developed at national and provincial levels.*

The Regulation on Environmental Degradation Control of Peatland Ecosystems is expected to be approved in April 2014 and implemented thereafter. This comprehensive regulation is the first specific regulation of peatlands in the country and an important part of the national strategy to reduce the GHG emissions from peatlands. The regulation will require all peatlands to be demarcated within an associated hydrological unit, which will include adjacent riverine and coastal lands. Thereafter, a minimum of 30% of the peatlands plus any areas with peat deeper than 3m, and any other areas of conservation significance, must be designated for protection. Other portions of the peatland unit may be permitted for development but following strict guidelines to minimize environmental impacts.

The project will enhance the situation compared to the baseline by focusing on enhancing the capacity and level of engagement of a range of stakeholders (central, provincial and local government, research institutions, CSOs and the private sector) in the promotion and implementation of the regulation and in the protection of designated peatland conservation zones. Early engagement of these stakeholders in the implementation of the regulation will engender a sense of ownership over the process and outcome, and set the stage for an effective and efficient implementation.

*Output 1.3 Implementation of APMS and related regional processes by Indonesia strengthened.*

Sustainable management of peatlands in the ASEAN region is guided by the APMS or ASEAN Peatland Management Strategy (2006-2020) updated in September 2013. In addition, Indonesia is in the final stages of ratification of the ASEAN Agreement on Transboundary Haze Pollution (AATHP), which provides a coordinating mechanism for regional collective action and partnership to promote sustainable peatland management, and reduce fires and transboundary haze. Considering that Indonesia is a major source of smoke from peat fires which affects the public health of the South East Asian region, Indonesia's participation in the regional actions is crucial. In the framework of the APMS and AATHP there are a number of key regional programmes and activities. The baseline activities include the regular ASEAN meetings of senior officials and the Ministerial Steering Committee on Haze and the Conference of Parties on the Haze Agreement. The proposed project will support additional, value-added activities including drafting of policy and position papers, development of best practice guidelines, advocacy on Indonesian best practice, and collaboration in addressing issues of regional importance, such as, engagement with multi-national and transnational companies engaged in plantation and other sectors. The project will also enable sharing of experience and lessons learned and tap into resources and expertise available in the ASEAN region through linkage to the ASEAN Peatland Programme 2014-2020.

## **Component 2: Reduction of peatland degradation and fires to reduce haze and GHG emissions**

### **Outcome 2: National fire prevention tools and plans enhanced, and rate of degradation and fires in targeted peatlands reduced**

Over the past 25 years there has been an unprecedented level of peatland degradation in Indonesia with nearly 4 million ha affected by fire, 5-6 million ha drained and up to 10 million ha logged. If this trend continues most of the peatland resources in Indonesia will be degraded or destroyed in the next 10-15 years. Peatland degradation and fires are the largest source of GHG emissions in Indonesia and a significant reason why Indonesia is one of the highest emitters of GHGs in the world, considered within the top 10. This outcome will focus on enhancing the use of key tools and systems for fire prevention at national level and in key provinces and districts.

*Output 2.1: National Peatland Fire Prediction, Monitoring and Warning Systems strengthened and their usage in targeted provinces enhanced.*

The project will support capacity building for fire prediction, monitoring and warning systems and improvement of the available tools and systems for peatland fire prediction and monitoring in Indonesia. The main existing tools and systems for peatland fire prediction and monitoring in Indonesia currently include: i) fire danger rating systems based on real time weather stations supplemented by satellite based rainfall monitoring; and ii) hotspot monitoring<sup>2</sup> using weather satellites and dissemination of hotspot data to national agencies. These systems need to be enhanced through improvement of real time data collection, especially from fire prone peatlands; upgrading of fire risk prediction products; and development and implementation of standard operating procedures (SOPs) for fire prevention and control measures.

The project will improve the dissemination of near real time information including data from automated weather stations and weather satellites for data generation to run the Fire Danger Rating System (FDRS). The project will also utilize near real time fire hotspot data from analysis of NOAA and other satellite data (MODIS, TERRA, Aqua and VIIRS) through the ASEAN Specialized Meteorological Centre in Singapore and the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG) and the Indonesian Space Agency (LAPAN). The project will enhance the dissemination and use of such information for fire prevention and control at local level through the use of mobile technology and social networking. SOPs for the use of the FDRS at local level, and demarcation of hotspot geospatial coordinates will be developed and

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<sup>2</sup> ASEAN Haze Action Online: [http:// haze.asean.org](http://haze.asean.org)

disseminated. Enhanced local capacity (local government, community, CSOs and private sector) to utilize the information is expected to lead to improved effectiveness of prevention and control activities. Feedback will also be generated from local levels to enhance the accuracy of the prediction and monitoring systems. The project will also work to better clarify jurisdictional responsibilities for fire management and provide training at local level on SOPs and the use of the FDRS GSM messaging.

*Output 2.2: Peatland hydrological unit maps for management zoning in selected provinces developed.*

One of the key requirements under the new peatland regulations is the designation, assessment and mapping of peatland hydrological units throughout Indonesia to act as a key regulatory and planning tool for sustainable peatlands management. The lack of a common definition and classification of peatlands has been one of the challenges for better peatland management as the accuracy of the available data was debatable. The project will build on baseline maps which have been developed by Wetlands International and the Bogor Soil Research Institute in 2002-2006 as well as maps refined between 2010-2013 as part of the National REDD+ strategy Development (ICCC and National Council on Climate Change) and the REDD+ One Map system, and maps used for monitoring the Forest and Peatland Moratorium. The project will use the initial outline maps on peatland hydrological units developed by the Ministry of Environment in 2013. Further surveys will be undertaken to develop more detailed maps of individual hydrological units in selected provinces/districts for demarcating the units of management that would be governed by the new National Peatland Regulation. These maps will form the basis for land-use planning and will guide the future conservation and sustainable use of each hydrological unit. The approach, methodology and tools developed through the project will be made available to other provinces and districts in Indonesia for scaling up the implementation of the new National Peatland Regulation country-wide.

*Output 2.3 Peatland fire minimized through Fire/Haze Free Villages Program in targeted districts in northern Riau province.*

Riau Province in Sumatra covers 8.8 million ha of which about 4 million ha are peatlands. This province has been the site of the most serious peatland degradation and fires in recent years. Northern Riau is the main area of the province with uncontrolled fires; in particular the districts of Rokan Hilir, Bengkalis and Dumai, which together cover 2.3 million ha. These districts are undergoing rapid development for agriculture and plantations. Since 2011, new permits for conversion of peatlands and intact forests to oil palm and forest plantations have been banned. Still, more than 150,000 ha of peatland burnt in June 2013 in these districts due to medium and small-scale operations and illegal land conversions. The national government has recently been successful in legal action against one company in violation of the moratorium however such action takes significant time and effort.

The large scale violation of the moratorium is connected to the lack of capacity or political will at the district and local level to enforce the moratorium. In order to address this problem, it is necessary to work at a district or sub-district level through support to alternative development strategies which maintain the integrity of the peatland hydrological units. This needs to be implemented in partnership with central, provincial and local government, private sector and local communities. Support is also needed at sub - district and village levels to establish fire/haze free villages, where fire is no longer used for land clearing and there is local capacity to prevent and control fires that occur.

The project will work to strengthen capacity at village level to undertake agriculture without the use of fire and to control any fires that may occur in their village area. In this regard, alternative livelihoods and agricultural practices generated from the APFP will be introduced as a means for reducing pressure on peatlands. Also, improved water management, and rehabilitation of degraded peatlands and abandoned palm oil plantations will be undertaken with government co-financing. Some of the project activities will include forming incentive systems for zero-burning agriculture, provision of support for alternative land

clearing measures; alternative use or disposal options for biomass without the use of fire; and improvement of village fire prevention and control groups. It is expected that CSOs, will be actively engaged in enhancing the capacity of villagers to sustainably manage the peatlands in their village areas and prevent and control fires. Establishment and operation of village fire prevention teams (Masyarakat Peduli Api) will also be supported. The detailed scoping of the activities and targets under Outcome 2 including the selection of targeted districts and villages will be undertaken in the PPG stage.

#### *Output 2.4 Assessment of potential GHG emission reductions from targeted peatlands.*

The fourth output under this component will assess the GHG emissions in targeted peatlands and the potential reductions that can be achieved through implementation of fire prevention and control measures. The proposed assessments can build on methodologies already being used or developed in Indonesia – such as those proposed for the Monitoring Reporting and Verification (MRV) of emissions under the National REDD+ Strategy. In addition, the project may draw on guidelines recently published by IPCC<sup>3</sup>. The project will focus primarily on documentation of activity data (i.e. area of drained, burnt or rewetted peatland etc.) for the project areas and support for refinement of emission factors linked to planned project activities (i.e. rewetting, fire prevention, improved water management).

This can help verify emission reductions as a result of the project as well as contribute to ongoing work by the REDD+ agency, Ministry of the Environment and other agencies to develop appropriate MRV methodologies for peatlands (especially for fire related emissions). This output will be elaborated further during the PPG stage with inputs from appropriate stakeholders.

### **Component 3: Integrated sustainable management of peatlands**

In the pilot areas peatlands are currently managed in a fragmented manner by separate sectoral managers which contribute to the continuing degradation of the system. It is envisaged that following the project intervention, progress will be made to take a multi-stakeholder integrated approach to peatland management, including the development of common strategies and master plans for the entire peatland hydrological units in the pilot areas. Lessons learned from the APFP and other project experiences on integrated peatland management (eg. community-based management, etc.) will guide the establishment of demonstration sites for facilitating large scale protection and rehabilitation efforts.

Currently the private sector and local communities are perceived by many as being responsible for the clearance, burning and degradation of the regions peatlands. Although in the past, large-scale conversion of peatlands by the private sector for plantations and land clearance using fire by local communities have been very extensive – there are potential options to change these key stakeholders from destructive to constructive forces through development of appropriate controls and incentives to encourage wise stewardship of the peatlands. It is envisaged that following the project interventions the selected local communities as well as private sector groups will play a more positive role and actively contribute to the sustainable management of peatland resources in the pilot areas. Lessons learned from these experiences will be documented to inform scaling up at the regional and national levels.

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<sup>3</sup> The IPCC has issued (with inputs from APFP) a 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands, which provides guidance for quantification of GHG emissions from peatlands. The report provides “updated emission factors and methods for both drained and rewetted organic soils including for off-site carbon dioxide (CO<sup>2</sup>) emissions via waterborne carbon losses. Guidance on methane (CH<sup>4</sup>) emissions from rewetting of organic soils, ditches on drained inland organic soils and CO<sup>2</sup>, CH<sup>4</sup> and carbon monoxide (CO) emissions from peat fires”.

CSOs, including Mitra Insani Foundation, Jikalahari (Riau Forest Protection Network), Roundtable on Sustainable Palm Oil (RSPO) and the Global Environment Centre, are expected to be actively engaged in facilitating partnership between private sector, local government and local communities in the Indragiri Hilir District and enhancing capacity for sustainable peatland management, fire prevention, community development and conservation and rehabilitation of intact peatlands.

*Output 3.1: Partnership between private sector, government and community for sustainable management of peatlands established in Indragiri Hilir District, Riau.*

Indragiri Hilir District in Southern Riau has about 1 million ha of peatlands, which are located in a number of large peat domes. Significant portions of peat have been developed for oil palm and pulp and paper plantations in the district and other areas are under community agriculture. The amount of degradation and fire in the peatlands is less than in the northern portion of Riau Province, but the trend of such problems is increasing as more areas are coming under development. Based on a number of recent stakeholder dialogues, the district has been identified as one where there is high potential to establish a partnership between the district government, private sector plantations and the local community to promote sustainable peatland management approaches. Some large regional plantation companies (including Sinar Mas, APRIL, Tabung Haji and Sime Darby), which have a combined area under management of more than 150,000 ha in the district, have agreed in principle to join such a partnership to enhance peatland management and prevent fires and degradation. In addition, a successful model of village development without use of fire has been pioneered in Harapan Jaya Village in the district through the APFP/SEApeat project. The head of the district administration has recently asked that this model be scaled up to other villages. For scaling up this model, financing mechanisms such as access to credit, micro-credit or revolving funds, performance bonds, conditional transfers based on progress in land management and rehabilitation, will be explored. The project will support establishment of the partnerships, development of joint strategies between different stakeholder groups and the implementation and reporting of results.

This knowledge-based partnership will be supported by CSOs who have been actively involved in promoting peatland conservation and sustainable management including the following organizations: Mitra Insani Foundation; Wetlands International Indonesia; Jikalahari (Riau Forest Protection Network); and Global Environment Centre. The Bogor Agricultural University, University of Riau, CIFOR and ICRAF are expected to provide additional technical support and backstopping to the local agencies. CSOs will be further strengthened and empowered to provide project implementation support through: i) mobilizing the network that each CSO or research institute has established with other international communities, the public sector and local communities; ii) discussions and knowledge exchange on methods and approaches each CSO is taking; and iii) empowering the CSOs to work with communities and private sector to monitor and promote good management practices.

*Output 3.2 Best Management practices for sustainable peatland management documented and promoted.*

This component will include activities to better manage knowledge for promoting best management practices (BMPs) for peatland conservation and sustainable use. There will be a focus on BMP approaches for oil palm, pulp and paper plantations, and agricultural activities, as well as, water management, conservation, fire prevention and control and integrated management. This component will enable the promotion of the experiences and lessons learned at the national level. BMP manuals in local language and training modules for best practices will be provided and training of trainer (TOT) workshops will enhance up-scaling.

The project will be led at the national level by the Ministry of Environment working in close partnership with the Ministries of Forestry, Agriculture, Public Works and Home Affairs, and provincial and district governments. It will be managed and implemented using as far as possible, the existing national institutional

mechanisms to minimize project management and overhead costs. Implementation of the project will incorporate coordinated efforts at the national and local levels as experience has demonstrated that coordinated policy making and sharing pilot project experience can lead to sustainable and cost effective solutions.

The project will be linked closely with the ASEAN Peatland Programme (2014-2020) led by the ASEAN Secretariat with technical support from the Global Environment Centre (GEC). This project will link with, and benefit from, regional activities and mechanisms undertaken under the regional programme. Detailed implementation structures especially at the provincial and local levels will be developed based on the detailed design in the PPG phase.

### ***Incremental reasoning***

Without GEF support, co-funding and other leveraged assistance the degradation of peatlands in Indonesia will lead to continuing annual fires, associated GHG emissions, and serious transboundary haze. Targeted interventions from the project are expected to significantly enhance multi-stakeholder partnership approaches linking national, provincial and local government from different sectors, communities and private sector to develop and manage peatlands in a sustainable integrated manner rather than the current fragmented sectoral approach. In the business-as-usual (BAU) scenario, government efforts related to peatland fires will likely continue to focus mainly on fire suppression and control rather than fire prevention – in other words the symptoms rather than the causes. Enforcement will continue to be ineffective in preventing fires and government expenditure on fire-fighting will continue to be allocated too late to prevent large scale fires and degradation. It is envisaged that through enhanced cooperation between stakeholders and more focus on prevention at local levels a more effective sustainable peatland management regime can be engendered.

The expected value added of the GEF intervention is securing the global environment benefits related to the reduction in the rate of peatland degradation leading to improved ecosystem services related to biodiversity, carbon storage and climate regulation. It will also help support the implementation of the APMS and the NAPs, further contributing to the sustainability of peatland management initiatives. The GEF intervention allows for a multi-stakeholder, multi-level approach to integrated peatland management, involving several sectors. It will also ensure that lessons learned from demonstration and pilot testing will help scale up national, provincial and local land management activities as well as regional activities and training programs to ensure that the benefits from integrated peatland management be incorporated into a wider framework, including policies and plans that relate to forests and other land-related resources.

### ***Global environmental benefits***

The project will contribute to significant reductions in GHG emissions from targeted peatlands, through reduced fires and enhanced water management. According to the carbon emission estimation using the EX-ACT tool related to drained areas, a 10% reduction of the drained area in the Riau province alone could reduce CO<sub>2</sub> emissions between 10 - 57 million tons. Currently the emissions from the decomposition of drained peatlands are estimated to be between 355 million tons and 2 billion tons annually. The above analysis only considered drained area excluding avoided fire or logging. At the PPG stage, the carbon emission assessment will take peatland subsidence and the cause of fire and logging into consideration. In 2013, the Indonesian government has pledged to reduce its emissions to 26 percent below the business as usual levels by 2020, and as much as 41 percent if international funding support is forthcoming. The project has high potential to help the country achieve such targets.

The project will also contribute to protection of globally significant peat swamp forests, associated carbon stocks and biodiversity. The key global environmental benefits will arise from the protection, rehabilitation and sustainable management of key peatland areas. Rehabilitating degraded areas of peatlands will increase carbon sequestration. The tropical peat swamp forests of Indonesia feature some of the highest freshwater

biodiversity of any habitat in the world and are home to the largest remaining populations of orang utan, among other fauna. Rehabilitation and sustainable management of these globally important peatlands will enable them to support these species in the longer term. Preventing the degradation of peatlands and encouraging rehabilitation, conserving globally important biodiversity and taking action to promote sustainable land and forest management will contribute towards the fulfillment of Indonesia's obligations under the CBD, UNCCD, and UNFCCC.

### ***Innovativeness, Sustainability and Potential for Scaling up***

One of the main innovative aspects of the project will be focus on multi-stakeholder engagement in addressing sustainable peatland management in an integrated way. The engagement of private sector, civil society and local communities working in partnership with government agencies will be more effective compared to conventional sectoral approaches. At the local level the expertise and resources of the larger private sector plantation companies can help with sustainable management of adjacent areas.

Secondly, the introduction of the peatland hydrological unit as the key unit for planning and management of peatlands is critical to ensure the long-term sustainability of the peatlands as maintaining the integrity of the units is essential to prevent fire and minimize drying and degradation.

It is also expected that the project will change the way rural people invest, produce and manage their assets through scaling up the innovative income generation methods and alternative agricultural practices. The practices of the Sorjan farming<sup>4</sup>, Green Contract system<sup>5</sup> and Buying a Living Tree (BLT)<sup>6</sup> were introduced to the local communities through the APFP project. The proposed project will scale up the proven approaches and technologies, and pilot test the promising practices piloted outside Indonesia.

In terms of sustainability the project will link closely to the implementation of the National Peatland Regulations, National Peatland Strategy and the National REDD+ Strategy. The experiences and lessons learned under the project can be continued and scaled up to other districts and provinces through the regulations and peatland strategy. The project will engender strong sustainability through increased community participation in sustainable peatland management practices. Partnerships established with

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<sup>4</sup> Sorjan farming is an intensive method for growing crops on alternately raised beds and troughs. A traditional method in Java, Indonesia, where population density is high and space for planting limited. Sorjan farming is usually practised in swampy or flooded areas. Crops are grown on the raised beds while rice may be concurrently grown in the troughs. At demonstration sites at Sab-a Basin, the Philippines, the troughs were also used as fish ponds.

<sup>5</sup> Under the Green Contract in U Minh Thuong National Park (UMTNP), Viet Nam, landless settlers are given a temporary lease on a 5-hectare plot of land in the bufferzone of the peatlands and a US\$750 grant disbursed in two payments subject to performance. Three hectares are for crops or any other agriculture development activity including fish-rearing and livestock, while the remaining 2 hectares are reserved for planting *Melaleuca*, a native tree used, among others, as support timber and firewood, and for furniture and fencing. This provides a sufficient incentive for smallholders to protect the adjacent peatlands.

<sup>6</sup> Buying Living Trees System (BLTS). BLTS is an approach pioneered in Indonesia that engages local communities in reforestation activities over a period of 4 – 5 years for ensuring optimal seedling survival. An area for reforestation is demarcated and individuals or households are assigned specific and equal subplots within the area. Each participating member can choose a mix of tree species for planting his/her subplot without any land clearance and preparation. Every 3 months the participating member together with a certifier/technician counts the number of seedlings and a payment is made according to the number alive. Dead seedlings are replaced and can be accounted for in the next round of verification. This approach has proven effective in peatland forest restoration in Indonesia (Limin et. al. 2006) and is being replicated in the Philippines through a national environment-based conditional cash transfer programme via a collaborative approach of the Department of Interior and Local Government, Department of Environment and Natural Resources and the Department of Social Welfare and Development.

certified plantation companies operating in the same districts will help communities obtain certification and higher prices for their products and maintain their good practices.

By aiming to support the management of the ASEAN Programme for Sustainable Management of Peatland Ecosystems (2014-2020), the project will be provided with the scaling up framework at policy level. Supported by the national policies and action plans, and regional cooperation, the above mentioned innovative income generation activities, fire management and financial mechanisms will be scaled up by other ASEAN countries. CSO network will also enable the scaling up to other continents as long as the enabling context and conditions are met.

## A.2. Stakeholders.

The main stakeholders and their envisaged roles are given in the table below:

<b>The main stakeholders</b>	<b>Envisaged roles</b>
Ministry of Environment	Leading project implementation and coordination at national level as well as overseeing national regulations on Peatlands and their enforcement
Ministry of Forestry, Ministry of Agriculture, Ministry of Public Works, Ministry of Home Affairs	Supporting the project implementation and coordination, including responsibility for the documentation and promotion of best management practices Leading specific interventions at national and district level
Indonesia REDD+ Agency	This new agency is charged with overseeing the implementation of the national REDD+ strategy which includes significant work on peatlands. It is envisaged that the agency will help integrate selected project activities with the implementation of relevant National and provincial REDD+ strategies.
Riau Provincial government	Leading project implementation at the provincial level including facilitation of work at district level and support for implementing Provincial Masterplan on peatlands.
District government of Indragiri Hilir, Rokan Hilir, Dumai and Bengkalis	Facilitating development of plans for integrated peatland management at the district level and establishment of fire/haze free villages.
Local community including sub groups such as farmers, women and youth	Key participants in the implementation of the project activities at village and local levels. Project implementation in pilot sites
Private sector (including oil palm plantation companies such as TH Plantations, Sime Darby Plantations and PT Smart; forest plantation companies such as Sinar Mas Forestry, and Riau Andalan Pulp and Paper; and forest management companies such as PT Diamond Raya Timber	Support for the promotion of integrated management of peatland areas and establishment of multi-stakeholder partnerships for peatland management. Support to fire prevention and establishment of haze free villages and assistance to local communities to implement zero-burning land preparation and adoption of good management practices for peat and water management.
CSOs (including Mitra Insani Foundation, Jikalahari (Riau Forest Protection Network Riak Bumi Foundation, Dian Tama Foundation, ARPAK (Aliansi Rakyat Pengelola Gambut)), community based organizations such as village fire prevention and control organizations)	Facilitating the engagement of local communities and development of fire/haze-free villages. Facilitating partnerships and links between community, private sector and local government Scaling up actions at pilot sites

Roundtable on Sustainable Palm Oil (RSPO)	Encouraging the active participation of the RSPO member companies in the project activities. Providing tools and guidance for GHG emission reduction through the RSPO Emission Reduction Working Group.
Research institutions and universities (including the Bogor Agricultural University, University of Riau and ICRAF Tanjung Pura University, Palangkaraya University, BPTP, Indonesian Swampland Agricultural Research Institute (BALITRA), Forestry Research Institute)	Input and technical support for the national and provincial level activities Technical support and backstopping to the local agencies and Assisting in monitoring , reporting and evaluation
Global Environment Centre	Technical and operational support partner of the ASEAN Peatland Management Strategy. Providing technical backstopping and implementation support to the project including development of partnerships with regional private sector plantation companies and technical guidance for fire prevention and peatland rehabilitation.
ASEAN Secretariat	Coordinating the implementation of the related ASEAN Peatland Programme (2014-2020) and facilitating linkage of project to ASEAN-supported activities.

**A.3 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design.**

Risk	Mitigation Measures
Weak enforcement of policies and regulations related to peatland management	Awareness-raising on the impact of peatland degradation  Enhancement of monitoring and enforcement measures through capacity building of responsible government units and clarifying the roles and responsibilities in the governance structure of multi-stakeholders
Lack of political will or poor governance	Linking project activities closely with national policies and regulations and addressing issues prioritized by the country/province
Potentially slow implementation of multi-stakeholder integrated management strategies	Careful selection of project partners (this will include local government agencies with demonstrated commitment to addressing peatland issues) and through close monitoring and guidance of project activities
Climate change risk including intensification of the periodic El Niño droughts which are a key root cause of extensive peatland fires. An El Niño drought is anticipated to occur at some time during implementation of the Project (possibly in 2015 or 2016) and could affect some aspects of project achievement.	Fire prevention by sustainable peatland management and community stewardship, combined with better drought prediction and fire prevention measures  Focus on enhancing resilience of peatlands to future climate change scenarios  The project will work closely with the Meteorological and Climatological Service Agency (BMKG) of Indonesia to detect any early warning signs of El Niño

	and use the information to adjust the planning of activities especially in the fire prone regions, to minimize disruption.
Reputational risk including being drawn into politically and socially sensitive issues	Focus on rehabilitation of abandoned peatlands and best management practices adopted in existing plantations. From the project will not engage with illegal new plantations and inform the appropriate authorities.  Conduct extensive risk assessment through the consultation of diverse stakeholder at the start-up

**A.4. Coordination. Outline the coordination with other relevant GEF financed and other initiatives:**

The project has built upon the experience and lessons learned from various GEF and non-GEF supported activities in the country/region including IFAD-GEF supported ASEAN Peatland Forest Project (APFP) (2010-2014) and the EU supported SEApeat project. This project will aim to upscale the learning from these projects at national and local levels. Links will also be made to related regional, national or bilateral-supported initiatives. In terms of linkages to relevant frameworks - the project is carried out under the framework of the ASEAN Peatland Management Initiative (APMI) and the associated ASEAN Peatland Management Strategy (APMS), and the National Action Plans on Peatlands (NAP) prepared by Indonesia. The project will work closely with the ASEAN programme on Sustainable Management of Peatland Ecosystems (2014-2020) and will play a key role in supporting the implementation of the Indonesia component of this programme. Links will also be made to the various ASEAN mechanisms related to fire and transboundary haze – such as the ASEAN Specialised Meteorological Centre in Singapore, the ASEAN FDRS system coordinated by Malaysia and the proposed Haze Monitoring System (HMS) being developed by Singapore.

The maps and zoning of Peatland Hydrological Units which are required under the new Indonesian Peatland Regulation are separate and complementary to other processes to harmonize map-based information on land use in Indonesia such as the REDD+ One Map Initiative – a single, all-encompassing map of Indonesia that aims to contain all relevant information linked to forest licensing and land use claims. It is envisaged that the results of the zonation of the Peatland hydrological units will be integrated into the OMI.

The proposed project will support the implementation of the National REDD+ national Strategy as well as the REDD+ Strategy for Riau Province. The further development of the project through the PPG stage will be closely coordinated with the new REDD+ Agency which is in the process of being established. Linkages will also be made with the UN-REDD activities.

**B.1 Description of the consistency of the project with:**

**National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAs, NAPs, NBSAPs, national communications, TNAs, NCSAs. NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:**

The project has been developed and will be implemented under the framework of the ASEAN Peatland Management Strategy (APMS) which was endorsed at Ministerial Level by the 10 ASEAN countries in November 2006 and reiterated/revised following a review in September 2013. The project will assist countries to implement priorities identified in the APMS and the associated National Action Plans (NAPs). The project has been specifically designed to build on ongoing activities and initiatives at local national and regional levels. The proposal is in line with country priorities articulated under the National Action Plan on Climate Change, National Action Programme for UNCCD (NAP/UNCCD - although peatlands are

subsumed under forest protection priorities), and biodiversity conservation (e.g. National Biodiversity Action Plans and Strategies, National Wetland Action Plans, etc.).

The focal areas and operational objectives of the APMS specify to protect and improve functions of peatlands for carbon sequestration and storage, and support incorporation of peatlands into climate change adaptation processes, and this project will directly address this matter. In 2013, the Indonesian government pledged to reduce its emissions to 26 percent below the business as usual levels by 2020, and as much as 41 percent if international funding support would be forthcoming. Current effort in developing a standardized method of assessing peatland emissions will help Indonesia fulfill its UNFCCC obligation to measure, report and verify its mitigation actions. Another APMS' objective of rehabilitation of burnt, drained and degraded peatlands directly contributes to Indonesia's national action programme of UNCCD which looks at the issues of land degradation by fire and lowered land productivity. The project is also specifically in line with Recommendation 12/15 of CBD SBSTA in July 2007 which calls for collective action to address the conservation of tropical peat swamp forests.

Relating to NAMAs, Indonesia has not registered any LULUCF programme as yet. Currently the consultation process is ongoing between the Ministries of Agriculture, Forestry, Industry, Energy and Mineral Resources, Public Work and Environment coordinated by the National Planning Agency (Bappenas). A draft initiative on *Sustainable Peatland Management in Indonesia* is currently under preparation to be potentially funded by Japan.

The ASEAN Programme on Sustainable Management of Peatland Ecosystems (2014-2020) is a targeted programme established by ASEAN Member States in September 2013 to enhance the implementation of the ASEAN Peatland Management Strategy (2006-2020) adopted in 2006 and the related National Action Plans on Peatlands (NAPP). The Implementation of the APMS and the ASEAN Peatland Programme is overseen by the Committee and Conference of Parties of the ASEAN Agreement on Transboundary Haze Pollution which meets annually. Since more than 90% of transboundary Haze in Southern ASEAN is derived from peatland fires – the APMS and related NAP is seen as the main mechanism to implement the earlier ASEAN haze Action plan (AHAP).

### **B.2 GEF focal area and/ or fund (s) strategies, eligibility criteria and priorities:**

The broad benefits of the project support two GEF focal areas (FA) of Land Degradation (LD) and Climate Change (CC). Within the LD FA, the project is directly related to Strategic Objective 3 through strengthening policy and institutional framework for initiating and promoting integrated management and rehabilitation of peatlands and avoiding the degradation of peatlands. With relation to CC, Strategic Objective 5 will be operationalized for engendering: a) good management practices in LULUCF adopted both within the forest land and in wider landscape; b) restoration and enhancement of carbon stocks in forests and non-forest lands including peatland; and c) GHG emissions avoided and carbon sequestered.

The project is also envisaged to link to the focal area of SFM/REDD to achieve multiple benefits from the improved management of peatland forests. The project provides an opportunity for forest fire management, enforcement of forest and peatland related policies and biodiversity value improvement within the scope of SFM/REDD-1. The establishment of enabling environment to reduce GHG emissions from deforestation and forest degradation and to enhance carbon sinks from LULUCF activities underpins SFM/REDD-2 objective.

### **B.3 The GEF Agency's comparative advantage for implementing this project:**

IFAD has been a key partner of ASEAN and Indonesia in peatland management through assisting the design and implementation of GEF/IFAD ASEAN Peatland Forest Project (2009-2014) in Indonesia, Philippines, Malaysia and Viet Nam in coordination with ASEAN Secretariat and Global Environment Centre. This

partnership was based on IFAD's expertise in supporting smallholder farmers engage in sustainable land management, biodiversity conservation and climate change mitigation and adaptation in rural poor or marginalized areas.

In recognition of sustainable environment and natural resource management as a key to rural livelihood improvement, IFAD's Strategic Framework 2011-2015 seeks to make natural resource assets, such as forests, more resilient to climate change, environmental degradation and market transformation, as one of the five strategic objectives of IFAD's support. The new Strategic Framework also affirms that IFAD will continue to address the impacts of climate change on the poor and their assets, including forest resources, and the importance of promoting adaptation measures to reduce their vulnerabilities. Furthermore, IFAD is implementing its Environment and Natural Resource Management (ENRM) policy and Climate Change Strategy through respectively mainstreaming sustainable ENRM activities in a majority of its investments, and through the development of specific adaptation projects under its new Adaptation for Smallholder Agriculture Programme (ASAP).

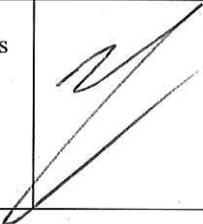
In Indonesia, IFAD has been a solid partner of the government investing a total of USD 927 million through supporting 15 projects and programmes. Through IFAD's support, more than 2,600,000 households received direct development benefits. Currently IFAD is financing four on-going projects worth over USD 205 million. IFAD is establishing a country office in Indonesia and the country team will be charged with provision of supervision and implementation support to the project, while the Environment and Climate Division will provide technical backstopping from IFAD headquarters in Rome, Italy. The overall supervision will be provided by the Country Programme Manager for Indonesia, and will be supported by the Regional Climate and Environment Specialist for Asia and Pacific, and the GEF Portfolio Officer, Asia and the Pacific Division. The proposed GEF project will be a key catalyst for orienting IFAD's upcoming investments in Indonesia with addressing issues surrounding peatland conservation and sustainable use.

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

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (with Operational Focal Point endorsement letter(s))**

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Mr Dana A. Kartakusuma	GEF Operation Focal Point, Assistant Minister	Ministry of Environment, Indonesia	03/06/2014

**B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	Date (MM/DD/YYYY)	Project Contact Person	Telephone	Email Address
Elwyn Grainger-Jones Director, Environment and Climate Division IFAD		03/25/2014	Roshan Cooke, Regional Climate and Environment Specialist	+39 06 5459 2156	ro.cooke@ifad.org