

# **POLICY ON PROTECTION AND MANAGEMENT OF PEATLAND ECOSYSTEM IN INDONESIA**



**MINISTRY OF ENVIRONMENT, REPUBLIC OF INDONESIA**

**Presented in the Workshop on Enhancing Sustainability of Forestry  
Practices on Peatlands (WESFPP), 27-28 June 2012, Bogor, INDONESIA**

# INTRODUCTION

- Peat swamp forest is a unique forest ecosystem grow in peatland or organic layer in flooding condition for thousand years,
- South East Asia has more than 25 million ha of peatland, of which Indonesia peatland of about 20 million ha (updated data: 15 million ha),
- Peat contains more than 90% water of its unit volume, which has function as water storage and water supply for surrounding areas,
- Peatland has function as global climate control, besides hydrological and production function,
- Production function of peatland ecosystem covers:
  - \* Forest products: wood and non wood (jelutung, honey, sago, and rattan,
  - \* Fresh water fish: *gabus*, *Lele*, *Betok*, *Sepat*, etc.
  - \* Cultivation area: traditional farming and plantation
- This Workshop is conducted to facilitate information sharing and encourage sustainable practices in forest management and plantation in peatland
- Efforts on rehabilitation and sustainable use of peatland/forest are in line with and support peatland ecosystem management.

# PEATLAND IN INDONESIA

- Indonesia has the fourth largest peatland in the world after Canada, Russia and USA
- The largest tropical peatland in the world
- Total peatland hydrological unit area is about 32,656,106 Ha.
- Indonesia peatland store peat carbon storage about 46 giga tonnes or about 8 - 14% of the total global carbon.



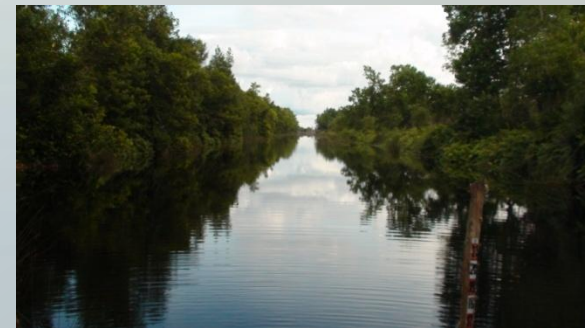


# PEATLAND ECOSYSTEM BENEFIT

- Forestry
- Flood control and water supply
- Tourism
- Local community livelihood (fishery, agriculture, plantation)
- Climate stabilization
- Biodiversity
- Education and research



**NEED SIMILAR PERCEPTION ON PRIORITY IN  
SAVING PEATLAND FUNCTIONS**



# PEATLAND CONDITION

Over 30 years, peatland management ignoring sustainable principle implementation, lead to some problems such as:

1. 2,669 mill ha or 37 % peatland in Sumatera destroyed and unproductive
2. Unsustainable Peatland development (PLG/mega rice project 1 mill Ha).
3. Biodiversity degradation.
4. Peatland fires, smoke haze, floods, etc..
5. Socio-economic (loss of livelihood/ local bussiness opportunity, poverty, etc.).

# MANAGEMENT CONSTRAINTS

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- Limited access of knowledge, awareness, and commitment of related stakeholders and local community to understand the value of sustainable peatland ecosystem and to support sustainable peatland uses
- Population pressure and the increase of land demand for cultivation in and surrounding peatland area
- Lack of efforts on sustainable peatland ecosystem development.

# **POLICIES ON PEATLAND ECOSYSTEM MANAGEMENT IN INDONESIA**

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- Peatland ecosystem management based on Peatland Hydrological Unit
- Peatland ecosystem uses in accordance with function and carrying capacity



# **POLICIES IN NATIONAL LEVEL**

- ✿ Laws No.: 32 Year 2009 on Environmental Protection and Management
- ✿ Government Regulation No. 26 Year 2008 on National Spatial Plan.
- ✿ Presidential Instruction No.: 1 Year 2007 on Acceleration of Rehabilitation and Revitalization of Peatland area in Central Kalimantan.
- ✿ Presidential Instruction No.: 1 Year 2010 on Acceleration of National Development Implementation
- ✿ Minister of Agriculture Regulation No.: 14/Permentan/PL.110/2/2009 on Guidelines of Peatland Uses for Oil Palm Cultivation.



# **POLICIES IN NATIONAL LEVEL**

continued

- ✿ Minister of Environment Decree No.: 5 Year 2000 on Guidelines of EIA Preparation of Development Activities in Wetland Area.
- ✿ Presidential Instruction No.: 10 Year 2011 on Moratorium of New Permit and Management Improvement of Primary Natural Forest and Peatland.
- ✿ Presidential Regulation No.: 61 Year 2011 on National Action Plan for GHG Emission Reduction
- ✿ Presidential Regulation No.: 71 Year 2011 on National GHG Inventory.
- ✿ Government Regulation Plan on Peatland Ecosystem Protection and Management

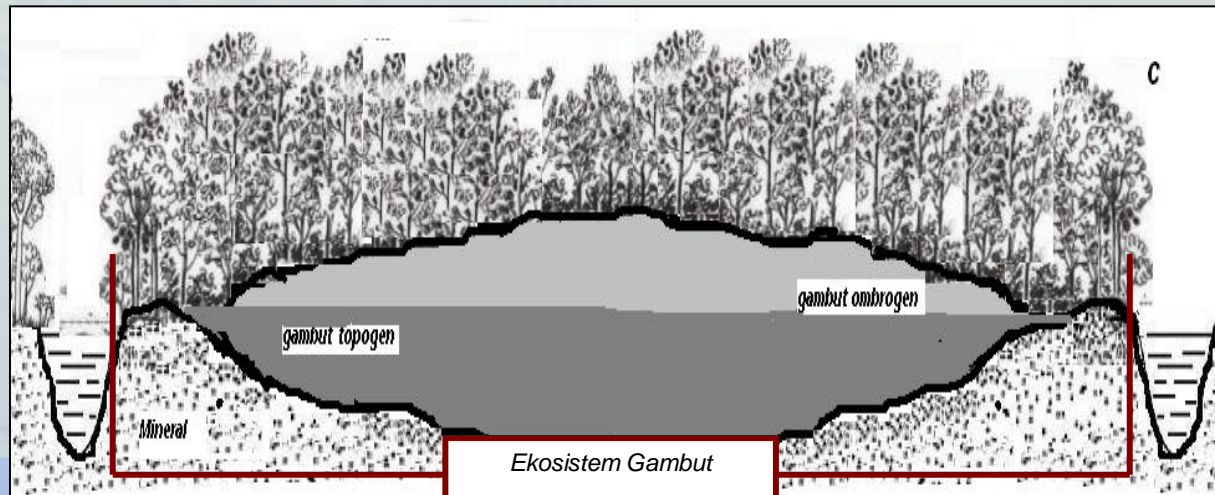
# SUSTAINABLE PEATLAND MANAGEMENT STRATEGY

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1. Institution and human resource development
2. Technology utilization and adaptive commodity selection
3. Community empowerment and participation enhancing
4. Data and information provision
5. Peatland degradation and peatland fire control
6. Funding source and mechanism

# PEATLAND HYDROLOGICAL UNIT

- ✿ Peatland hydrological unit (KHG): peatland ecosystem bordered by river and/or river branch and /or higher elevation land. KHG is a unit that can be used as peatland ecosystem management unit.
- ✿ Protected area of peat dome is determined to keep the function of peatland ecosystem protection



# PETA SEBARAN KESATUAN HIDROLOGIS GAMBUT INDONESIA



0 100 200 300 400 500 Km

Proyeksi ..... : Transverse Mercator  
Sistem Grid ..... : Grid Geografi dan Universal Transverse Mercator,  
Datum horizontal ..... : VGS 1984

## LEGENDA

- Batas Negara
- - - Batas Provinsi
- Garis Pantai

## KESATUAN HIDROLOGIS GAMBUT

- Kawasan Budidaya Gambut
- Kawasan Lindung Kubah Gambut

Sumber: 1. Pengolahan Interpretasi Citra Landsat TM+5 dan ETM+7 (Tahun 2007/2008)  
2. Peta Luas Sebaran Lahan Gambut dan Kandungan Karbon, Wetland Internasional, Tahun 2003  
3. Peta RefPPro, Tahun 1990

PULAU	LUAS (Ha)		
	KA WASA N BUDIDA YA GAMBUT	KA WASA N LINDUNG KUBA H GAMBUT	KESA TUA N HIDROLOGIS GAMBUT
SUMATERA	8.185.668	2.702.531	10.888.199
KALIMANTAN	7.371.307	3.013.740	10.385.047
SULAWESI	548.496	62.656	611.152
PAPUA	9.415.435	1.266.827	10.682.262
JAWA	89.446	0	89.446
<b>TOTAL</b>	<b>25.610.352</b>	<b>7.045.753</b>	<b>32.656.106</b>



**KEMENTERIAN NEGARA LINGKUNGAN HIDUP  
2009**





**THANK YOU**