



**TECHNICAL MEETING
INTEGRATED PEATLAND MANAGEMENT, MALAYSIA
2012**



**IMPLEMENTATION OF
SUSTAINABLE PEATLAND
ECOSYSTEM MANAGEMENT, RIAU**

By: APFP LPIC-PROVINCE of Riau, INDONESIA

RIAU'S GENERAL PROFILE

Area : 107,932.71 km²

- ☐ Land : 80.11% of the total area
- ☐ Sea : 19.89 % of the total area

Strategic Position :

- ☐ Located in the international trading line, Malacca Strait, near Malaysia and Singapore
- ☐ Located in the economic growth triangle; Indonesia-Malaysia-Thailand

ADMINISTRATION :

- ☐ 2 cities and 10 districts
- ☐ 151 sub districts
- ☐ 1,643 villages

BOUNDARIES

- ☐ North : Malacca Strait, North Sumatera
- ☐ South : Jambi, West Sumatera
- ☐ East : Malacca Strait, Riau Islands
- ☐ West : West and North Sumatera



Riau's Forest Area based on the Spatial Use Plan of Riau of 1994

| No | ALLOCATION | AREA (HECTARES) | (%) |
|-------|---|--------------------|-------|
| 1. | Forest Area Development | 2,872,491 | 33.41 |
| 2. | Protected forest | 161,823 | 1.88 |
| 3. | Protected peatland area | 830,235 | 9.66 |
| 4. | Conservation forest | 570,412 | 6.63 |
| 5. | Area around lake/reservoir | 20,024 | 0.23 |
| 6. | Non forestry development (plantation, transmigration, settlement and others) | 4,143,772 | 48.19 |
| Total | | 8,598,757 | 100 |

ENVIRONMENTAL POLICY

- a. Restoring and conserving water resource, air, forest, land and coastal ecosystem as well as sea.
- b. Increasing management capacity and environmental quality.
- c. Forest land rehabilitation and protection.
- d. Strengthening mitigation actions of negative environmental impact and anticipating global impacts

Profile of Riau's Peatland

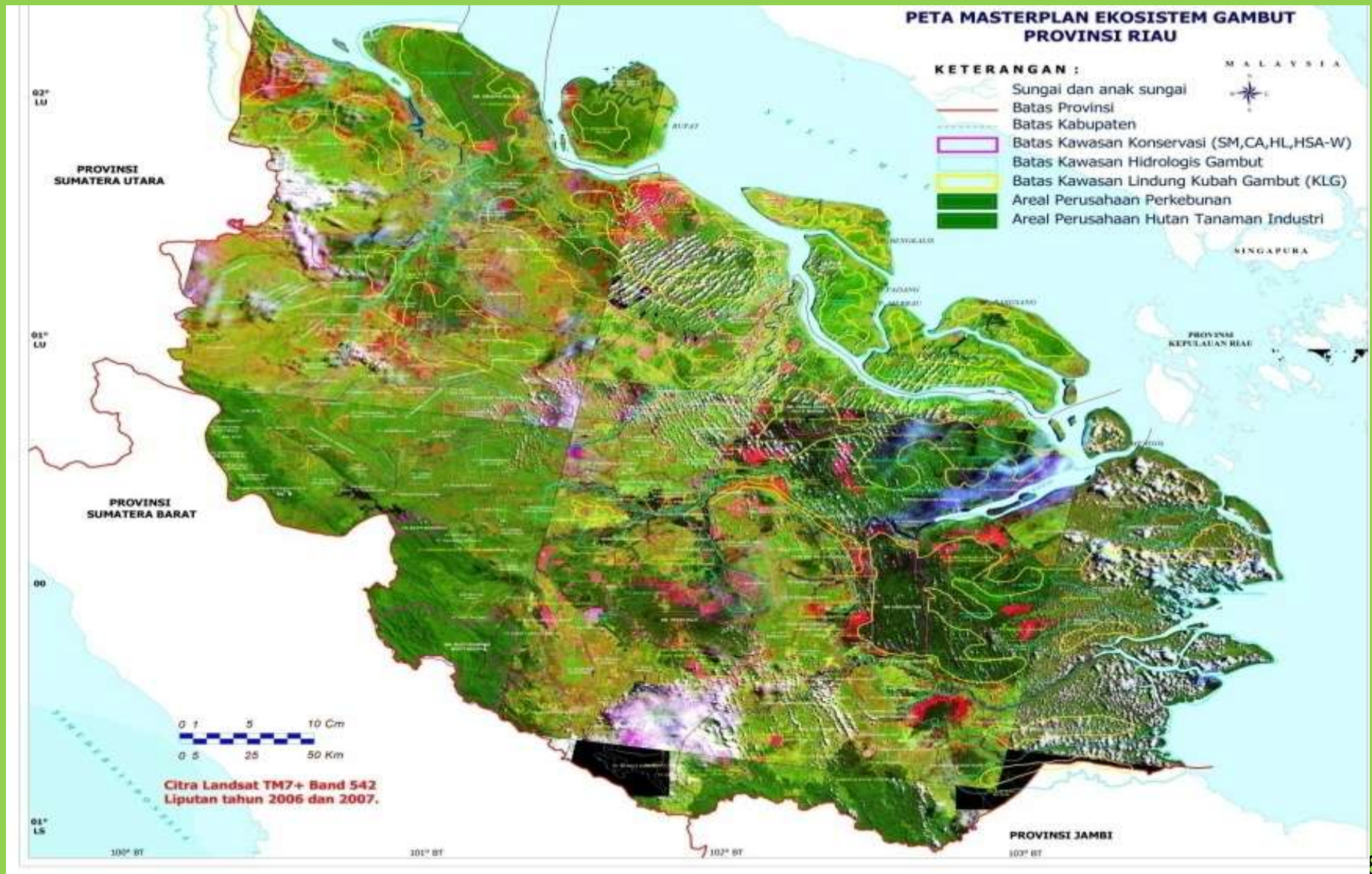
- ❑ About 5.7 million hectares of Riau's area belongs to peatland hydrological area (Master Plan of Riau's peatland ecosystem management) or about 64% of Riau's area
- ❑ There are 23 peatland hydrological areas in Riau
- ❑ Riau's peatland hydrological area consists of 1.7 million hectares of peat dome protected area and 4 million hectares of silvicultural area

- ❑ Peatland hydrological area is a hydrological ecosystem unit. Disturbance toward one of the subsystems of the ecosystem will result in impacts on other ecosystems (Master Plan of Riau's Peatland Ecosystem Management, Ministry of Environment , Indonesia, 2009)
- ❑ Protected peat dome area of about 30% of the peatland hydrological area (Master Plan of Riau's Peat Ecosystem Management, Ministry of Environment , Indonesia, 2009)
- ❑ Silvicultural peat area belongs to peatland which is potentially to be utilized and is located in protected peat dome area (Master Plan of Riau's Peatland Ecosystem Management, Ministry of Environment , Indonesia, 2009)

PEATLAND HYDROLOGICAL UNIT AREA OF RIAU

| KABUPATEN | KHG | KLG | KBG |
|-----------------|-----------|-----------|-----------|
| BENGKALIS | 1,240,122 | 474,383 | 765,740 |
| INDRAGIRI HILIR | 1,267,237 | 222,706 | 1,044,531 |
| INDRAGIRI HULU | 225,635 | 107,938 | 117,697 |
| KAMPAR | 153,811 | 15,924 | 137,887 |
| KOTA DUMAI | 298,521 | 123,317 | 175,204 |
| KOTA PEKAN BARU | 42,266 | 0 | 42,266 |
| PELALAWAN | 904,461 | 234,088 | 670,373 |
| ROKAN HILIR | 734,050 | 263,032 | 471,018 |
| ROKAN HULU | 117,645 | 19,607 | 98,036 |
| SIAK | 735,835 | 231,990 | 503,845 |
| Jumlah | 5,719,583 | 1,692,985 | 4,026,598 |

PEATLAND MAP OF RIAU



PEATLAND ISSUES IN RIAU

- ☐ Peat land utilization for plantation forest and estate crops
- ☐ Peatland and forest fire
- ☐ Peatland emission
- ☐ Canals in peatland
- ☐ Decreased peatland vegetation cover

BENEFITS OF SUSTAINABLE PEATLAND MANAGEMENT

ECOLOGY

- Carbon sink
- Hydrological system
- Biodiversity conservation, etc

SOCIAL-ECONOMY

- ❑ Poverty alleviation (plantation, agriculture, fishery etc)
- ❑ Contribution to Riau Province because estate crops and plantation forest on peatland provide job opportunity in Riau

IMPLEMENTATION OF SUSTAINABLE PEATLAND MANAGEMENT IN RIAU

1. Proposed protected peatland area in the new revised spatial use plan of Riau)
2. Peatland spatial use plan of Riau
3. Water management especially in plantation forest
4. Encouraging biosphere reserve of Giam Siak Kecil Bukit Batu management (peat swamp forest conservation area)

IMPLEMENTATION OF SUSTAINABLE PEATLAND MANAGEMENT IN RIAU

5. Zero burning in peatland
6. Carbon conservation and green house gas emission mitigation resulting from peatland through REDD+ and establishment of Riau's climate change center information
7. Research on alternative livelihood options for people around biosphere reserve of Giam Siak Kecil Bukit Batu under the Asean Peat land Forest Project (APFP)
8. Conservation information dissemination toward local people around conservation forest which have peatland ecosystem, for instance biosphere reserve of Giam Siak Kecil Bukit Batu

CHALLENGES OF IMPLEMENTATION IN SUSTAINABLE PEATLAND MANAGEMENT

- Revised spatial use plan of Riau has not finished yet
- Green house gas emission from peat fire
- Peatland utilization for palm oil is still high compared to other commodities
- The use of environmentally-friendly peat land and technology at community level is still low

THANK YOU