

### **Climate Change Mitigation and Adaptation Policy in Indonesia**





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## **Outline of Presentation**

- Introduction of the Indonesia National Council on Climate Change (the DNPI)
- Mitigation Policy
- Adaptation Policy
- Concluding Remarks



## Introduction



Chairmen and members of the Task Force comprise of relevant stakeholders, including government officials, NGOs, private sector, academician, professionals

#### UNDERSTANDING THE CAUSE AND THE EFFECT OF CLIMATE CHANGE



# Mitigation Policy

#### Indonesia's GHG emission profile



Source: SNC, 2010: Indonesia Second National Communication,, November 2010

#### Mitigation Policy - National Emission Reduction Plan (the RAN GRK)



## Forestry and peat plays the biggest role in the Mitigation Actions



#### Example of Land Conflict Potential in East Kalimantan



Source: Saragih, B. 2011.

# Adaptation Policy



### **Trends of Climate Change Impacts**

Extreme events and severe climate anomalies (including droughts) are normally associated with ENSO years in Indonesia.

- The 1997/98 ENSO event triggered forest and brush fires of 9.7 million hectares, causing serious domestic and trans-boundary pollution.
- Projected severe flood risk with <u>rising sea levels</u>.
- Stability of <u>wetlands</u>, <u>mangroves</u>, <u>and coral reefs</u> is likely to be increasingly threatened.
- Of all the disasters happening in Indonesia, 75-80% were induced by the climatic change (Country Report, 2007).
- From January September 2010, there were 196 flood disasters → exceeding the previous years (140-150 floods disasters).

#### Four main sectors are being threatened:

- 1. Agricultural
- 2. Coastal, Marine, Fishery and Small Islands
- 3. Health Sector
- 4. Infrastructure
  - a. Water Resources
  - b. Housing, Building, Planning, and Urban Development
  - c. Roads and Bridges
  - d. Zoning

The provision of National Adaptation Action Plan is critical to cope with the impacts of Climate Change



## **Vulnerability Assessment (VA)**

## National and Local Response

#### Small island:

- VA and mainstreaming Climate Program into small Island development in Lombok.
- VA in Tarakan Island (East Kalimantan).

#### **Cities**:

- VA in Palembang;
- VA in Bandar lampung;
- VA in Semarang.

#### $\textbf{Terestrial} \rightarrow \textbf{Province}$

- VA in North Sumatera.
- VA in South of Sulawesi.
- VA in Gorontalo.



## **Concluding Remarks**

- Understanding climate change mitigation and adaptation is fundamental for policy makers and other key stakeholders to avoid unmanagable causes of climate change and to manage the unavoidanle impacts of climate change at both national and sub-national levels;
- Land-use, land-use change and forestry (LULUCF) is the major GHG emission in Indonesia. Space-based applications to support identification and to track the dynamic changes of LULUCF is an utmost important to help monitor and evaluate the status of mitigation measures with respect to rapid changes of land uses in Indonesia;
- Indonesia is the bigest archipelago in the world, and the most diverse country in terms of geophysical characteristics. Agriculture is being thretened and the most effected sector due to climate change. Adaptation has been entered as one of the cornerstones for future agricultural response to climate change. Utilization of space-based application, including provision of vulnerability mapping is therefore critical in the adaptation policy.



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