INDIGENOUS COMMUNITIES IN INDONESIA
MEMBER OF AMAN
DIRECT IMPACTS

Extreme weather events: Prolonged Drought, Increased Rainfall

- Water unavailability
- Floods and landslides (in Feb. 2007 alone: inundated 70,000 houses, displace 420,440 people, killed 69 people, lost US$ 451 millions, WHO)
- Diseases (malaria, dengue, diarrhea, infection, respiratory effects)

Food Insecurity – decreased food production and increased hunger

In 2006, total areas in Indonesia of flood-affected rice fields were 66,400 hectares.

Between October to December 2007 only, have inundated 68,277 hectares of rice fields, of which some 6,676 hectares failed to be harvested.

Sea-Level Rise

Sea-level is currently increasing at 1-3 mm/year in coastal areas of Asia and is projected to accelerate to a rate of about 5 mm per year over the next century (Cruz et al., 2007).
More than 59 million hectares of forest area has changed into critical land (Forestry Department, 2005)

The rate of forest cover change in Indonesia, 1989-2003

<table>
<thead>
<tr>
<th>Region</th>
<th>Degradation (000 ha)</th>
<th>Deforestation (000 ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java</td>
<td>339</td>
<td>648</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>15,814</td>
<td>10,931</td>
</tr>
<tr>
<td>Maluku</td>
<td>2,349</td>
<td>1,033</td>
</tr>
<tr>
<td>Bali-Nusa Tenggara</td>
<td>173</td>
<td>257</td>
</tr>
<tr>
<td>Papua</td>
<td>4,539</td>
<td>3,136</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>4,561</td>
<td>1,915</td>
</tr>
<tr>
<td>Sumatera</td>
<td>9,185</td>
<td>9,951</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>36,960</td>
<td>27,871</td>
</tr>
<tr>
<td>Rate of land cover change (000 ha/year)</td>
<td>2,640</td>
<td>1,991</td>
</tr>
</tbody>
</table>

Source: FWI (Forest Watch Indonesia) analysis on the overlay of NFI maps (1996) and interpretation of the images of Landsat7 ETM+ (2003); Figures are rounded to thousands.
Criteria for the inclusion of “Customary Forest” in REDD project:

- Having the Decision Letter from the Minister of Forestry on Customary Forest Management Right (this require another policy by the Minister of Forestry);
- Having the recommendation from the local government on the implementation of REDD;
- Fulfilling the criteria and indicators for the REDD project site;
- Submitting an implementation plan for the REDD project.
Climate Change and Indigenous Peoples in North Lombok, Indonesia
Mt. Rinjani
Segara Anak Caldera
LOMBOK ISLAND
Marine: 35,403Ha.
Terrestrial: 86,550 Ha
NORTHERN LOMBOK
121,953 Ha
Mt. Rinjani
121,953 Ha
Mataram
Sasak Paer Daya Indigenous Community in North Lombok

- Sasak Paer Daya Indigenous Community live in North Slope of Rinjani Mountain with total population 213,000 people, distributed in 5 subdistrict and 32 villages.
- They own a unique cultural system and indigenous institution they inherited from their ancestor and are still strongly preserve including natural resources management which is balancing the natural diversity.
- Existing maintained cultural system of Sasak Paer Daya has make Rinjani Mountain as one of the center of cultural, religious cosmology orientation of peoples in Lombok island.
1. Ecology:

- Natural caring capacity has reduced. For example, the clove production reduced to 40% (2002)
- Temperature increased to 3 – 5 centigrade
- Rainy season can’t be predicted, rivers getting extremely dry and flood happened more often in rainy time (40 ha of ricefield has damaged from the flood in 1999)
2. Agricultural Production Pattern

• Pest Resurgence especially to plantation crops (cacao), like cancer disease on bananas that led the community to destroy and burned banana trees (2004-2005)

• Pest resurgence

• Palawija (Legume) Crops has suffered from dry season because of the delay of rainy season

• Long drought
IMPACTS OF CLIMATE CHANGE, Cont...

3. Economy

- Potential assets of Natural Resources in Rinjani area is Rp. 5,178 billion/year or Rp. 38 trillion in 25 years (WWF, 2001), threat by drastic change of climate
- Food insecurity
- Health and education services
- Broadening chances of job
- High cost on monotonous agricultural development
- Infrastructural development
4. Social Cultural

- Limited of livelihood resources
- Conflicts on water resources among communities (horizontal conflicts)
- *Illegal* Logging by outsiders
- Migration from village to city and to another countries as migrant workers.
INDIGENOUS PEOPLES IN ADAPTATION TO CLIMATE CHANGE

• Trees planting in water resource areas especially with local trees based on indigenous knowledge, to preserve water resources
• Diversified crops (polyculture system)
• Planting pattern (cash crops)
• Organic plants
• Enrich the forest resource management Inter community Coordination and collaboration
• Customary laws enforcement
Terima Kasih
THANK YOU