Linking Disaster Risk Reduction and Climate Change Adaptation: Best practices of the Red Cross Red Crescent societies in delivering its assistance to support the flood prone areas in Indonesia

Febi Dwirahmadi

2010 International Climate Change Adaptation Conference, Gold Coast, Queensland, Australia
Structure of presentation

- Disaster and climate change from global context
- Disasters and climate change risks in Indonesia
- DRR and CCA concepts
- How RCRC deal with it?
- Develop the linkages
Climate change **exacerbates the frequency and intensity of hydro meteorological disasters** (IPCC, 2007)

The incidence of some extreme events is expected to increase, such as: high temperature, floods, drought, soil moisture deficit, fires and pest outbreak (IPCC, 2007)
Disasters and climate change in Indonesia

**Hydro meteorological disasters** are the most common disaster in Indonesia (BNPB, 2010)
Disasters and climate change from local context (3):

Projected Sea Level Rise in Jakarta (in cm)

Area loss due to SLR (in Km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jakarta City</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>18,7</td>
</tr>
<tr>
<td>2025</td>
<td>32,4</td>
</tr>
<tr>
<td>2050</td>
<td>54,5</td>
</tr>
<tr>
<td>2100</td>
<td>68,4</td>
</tr>
</tbody>
</table>

Land subsidence in Jakarta (cm)
Disaster and climate change in Indonesia (2)

Jakarta is sinking!
# DRR and CCA: Focus on the similarities

<table>
<thead>
<tr>
<th>CCA</th>
<th>DRR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is an actual adjustment, or modification in decision environment which</strong> aim to <strong>enhance resiliency</strong> of the community or to <strong>reduce vulnerability</strong> to the climate change risks (IPCC, 2007)</td>
<td><strong>Comprises a range of activities undertaken to minimize vulnerabilities and disaster risk, limit impact of hazards</strong>, within the broad context of sustainable development (UNISDR, 2008)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Similarities</strong></th>
<th><strong>Differences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Similar aims</td>
<td>Disaster risk reduction engages with a broader range of disaster</td>
</tr>
<tr>
<td>Mutual benefits</td>
<td>Different institutions (UNFCCC and HFA)</td>
</tr>
<tr>
<td>Both promote changes in policies, laws, training, and education</td>
<td>DRR more concerned with recent hazard, meanwhile CCA future hazard or new potential risks</td>
</tr>
<tr>
<td>Both need involvement of all stakeholders</td>
<td>DRR more practical application, CCA more theoretical application.</td>
</tr>
</tbody>
</table>
So how we deal with it?
Expected Outcome: Community Safety and Resilience

Strategic Objectives:
- Integration of DRR considerations into humanitarian response and disaster recovery
- Targeted disaster prevention, mitigation and preparedness activities
- Integration of DRR into policies, planning and Sector Based programming

ICBRR
ICBRR Program: in Indonesia

**Principles:**

- Participation
- Local capacity building,
- Advocacy & socialization,
- Community awareness
- Sustainability

Community based programme approaches:

1. **Capacity building at various levels including RCRC and non RCRC partners**
2. **Participatory Monitoring & Evaluation**
3. **Vulnerability and Capacity Assessment (VCA)**
4. **Community DRR action plan**
5. **Risk reduction activities including preparedness and mitigation (Structural and non-structural measures)**
Best practices from ICBRR in Jakarta

LESS resilience and MORE vulnerable

MORE resilience and LESS vulnerable
Through PRA: Understand cause and effect

- Coastal flooding
- Dam burst
- Environmental issues
- Diseases
- Livelihood disruptions
- Economic loss
- Infrastructure damage
- People injured or drowned
- Garbage in the river
- Water canal blocked by waste
- Canal over flooded
- Low areas
- High rainfall rate
- Poor drainage system

FLOODS in Jakarta

High rainfall rate, Garbage in the river, Water canal blocked by waste, Coastal flooding, Dam burst, Low areas, Environmental issues, Diseases, Livelihood disruptions, Economic loss, Infrastructure damage, People injured or drowned.
Develop the linkages

Disaster risk reduction

Advocacy and socialization

Environmental management

Comprehensive risk mapping and identification

No regret solution

Preparedness for respond and Community contingency plan

Poverty reduction and livelihood sustainability

NS capacity building

To build a more resilient and safer community

Climate change adaptation
What have been done: the linkages (1)

1. Preparedness for response and community contingency plan:
   - Water rescue training
   - Disaster preparedness in school
   - CB early warning system
   - Safety evacuation route, drills and simulation

2. Environmental Management
   - Green and clean promotion
   - Waste management (3 R), compost making
What have been done: the linkages (2)

3. Comprehensive risk mapping and assessment
   - Include climate risk into HVCA

4. Advocacy and socialization
   - Endorsement by local authority and other key stakeholders
   - Campaign

5. NS Capacity building
   - Well-prepared National Society: technical ability, volunteer mobilization, good governance, sound financial system
6. Poverty reduction and livelihood sustainability

- Microfinance: Establishment of saving and loan cooperation (transfer risk and protect livelihoods)
- Community training on business planning and business plan writing
- Community life skill training: small enterprises using used materials.
Thanks – *terima kasih*

**DO MORE DO BETTER**

**building safer communities**