Impacts of disasters on agricultural sector: A case of Kampong Speu Province

Presented by
Cheb Hoeurn

Content
❖ Background of Kampong Speu
❖ Rationale of the study
❖ Emerging issues and challenges
❖ On-going adaptation activities
❖ Existing loss and damage assessment

Background of Kampong Speu
❖ Area: 653,396 ha, 167,771 ha is for cultivation area
❖ Population: 812,290 people (51% female), 67.61% are farmers.
❖ Prek Thnom catchment influences all hydrological conditions.
❖ Lower part covered by rice fields with less forest and low elevation.

Rationale of the study
❖ Why Kampong Speu?
   — Third vulnerable province to Climate Change
   — Farmers in the KPS province will face more productivities losses in the future due to Drought
   — KPS has very a high incidence of poverty compared to other provinces.

Emerging issues and challenges
❖ Disasters and vulnerability assessment
   — 3rd vulnerable province in Cambodia.
   — Drought was the most severe natural hazard.

Emerging issues …Cont
❖ Disasters impacts and social change
   — Increase migration to urban and foreign countries
   — Increase more responsibilities of vulnerable groups (women, children, elderly without adult protection and poorest households)
   — Changes in social status and identity of the communities
     ▪ From property owners to debtors
     ▪ From farmers to migrant workers…
On-going adaptation ...Cont

• Community commitment and participation in responding to disaster impacts
  – local communities have high commitment and willing to participate in the DRR programs
  – They formed as CBO, whose roles to mobilize collectives in protecting natural resources, creating saving groups.
  – However, poor and vulnerable groups seem to stand behind the stages because they often spend most of their time for daily livelihood activities.

On-going adaptation ...Cont

• Perceptions of local community on climate change
  – Not many Cambodians understand the basic science of climate change
  – Most farmers in KPS have limited knowledge and understanding about the cause and consequences of climate change or the disaster risks.

• The responses of local farmers
  1) To Drought
     – Supplying water to rice filed during the prolong drought
     – Shifting crop calendar and crop variety
     – Increasing the use of chemical fertilizer
  2) To Flood
     – Spreading information about potential hazards among villagers;
     – Sending young kids and aged people to safe places
     – Sharing food commodities among affected families/groups

Existing loss and damage assessment (current and future)

• Lose Income sources

<table>
<thead>
<tr>
<th>Year</th>
<th>Droughts (Ha)</th>
<th>Pests (Ha)</th>
<th>Floods (Ha)</th>
<th>Livestock diseases (Head)</th>
<th>Droughts (Ha)</th>
<th>Pests (Ha)</th>
<th>Floods (Ha)</th>
<th>Livestock diseases (Head)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,475</td>
<td>1,270</td>
<td>-</td>
<td>2,304</td>
<td>232</td>
<td>-</td>
<td>-</td>
<td>189</td>
</tr>
<tr>
<td>2010</td>
<td>1,926</td>
<td>-</td>
<td>1,766</td>
<td>2,645</td>
<td>223</td>
<td>-</td>
<td>-</td>
<td>277</td>
</tr>
<tr>
<td>2011</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,650</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>161</td>
</tr>
<tr>
<td>2012</td>
<td>10,715</td>
<td>-</td>
<td>-</td>
<td>1,564</td>
<td>350</td>
<td>-</td>
<td>-</td>
<td>144</td>
</tr>
<tr>
<td>2013</td>
<td>2,238</td>
<td>-</td>
<td>-</td>
<td>2,590</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>129</td>
</tr>
<tr>
<td>Total</td>
<td>10,358</td>
<td>1,270</td>
<td>1,766</td>
<td>13,049</td>
<td>865</td>
<td>-</td>
<td>-</td>
<td>277</td>
</tr>
</tbody>
</table>


Conclusion

• KPS was the third most vulnerable province to natural disasters due to low adaptive capacity.
• Agriculture is the most affected factor.
• Drought is most severe hazard.
• Communities have limited understanding on related root causes and the consequences of disaster impacts.
• Disasters bring about severe incomes and infrastructure losses and social problems such as gender issues, school drop-out, social vulnerability.

Areas for improvement

• Exclusive livelihood programs should be established to assist the most vulnerable peoples and help stabilize their livelihoods in the short time period.
• Also, government agencies and development partners should work in close partnership to continue:
  – building community capacity;
  – providing them with necessary infrastructure such as irrigation systems, road and other techniques, which are beneficial for communities in the long-term.

Thanks for your attention!