Summary Presentation on Different Writers of BIMSTEC Countries
Bangladesh

Focused on Adaptation Innovation

Vulnerability: Sea Level Rise - Salinity ingress - Drought - Tropical Cyclone

Adaptation [Planning Step]

- NAPA in 2005
- BCCSAP in 2008 and Review in 2009
- Established the BCCTF & BCCRF for financing the actions
- Delta Plan 2100
- Climate Change Country Investment Plan
Bangladesh

Adaptation Innovation/Nature Base Adaptation
Rainwater Harvesting, Filtering polluted surface water with innovative local technologies [local & natural materials], Canal Re-excavation and drip irrigation system in agriculture Floating Garden for vegetable

Challenges & Opportunities Three major challenges; Do not consider innovation-evaluation-diffusion cycle, In-built knowledge generation system, MEL Monitoring, Learning and Evaluation system
Bhutan is highly dependent on the climate sensitive sectors of agriculture and hydropower.

- While 70 percent of the population is dependent on subsistence agriculture.
- About 40 percent of the country’s annual budget comes from exporting electricity from its numerous hydropower plants.
- Bhutan is also a carbon negative country.
- World hotspot of Biodiversity [70% forest, 50% always protected]

Vulnerability and CC Impact
- GLOF [Glacier Lake Outburst Flood] and Land Slide
- Reduction of water availability that affects irrigation & Hydropower generation
- Changing crop growing zones.
Myanmar

Vulnerability
- Second ranked climate vulnerable in CC impact
- Long coast line [2832km is 1/5 of Bay of Bengal] and half of the population [46.58%] living.
- Facing frequent tropical cyclones those regularly develop in BoB.

Fighting/Adaptation with CC
- Manage Mangrove Ecosystem
- Mangrove covers Myanmar 502900 ha [3.3% of global total] ranked as third largest in Asia
- Mitigation through “Blue Carbon” Process.
Myanmar

Challenges

- But volume of mangrove ecosystem are reducing [326513 ha in 2010 instead 659033 ha in 1980]
- Cyclone “Nargis” is the example of damaging mangrove, community, livelihoods and community structures.
- Limited scientific observation in explain the role of mangrove.

Opportunity for Regional Cooperation

- Myanmar has engaged with MFF [Mangrove for Future] project lunched by IUCN.
- Scientific Study need in both adaptation and mitigation aspect as regional basis.
India

Focused on community level response to climate change; Case of Odisha

Vulnerability

Weather-driven disasters [flood, cyclone, heatwave and drought]
- Cyclone 1999 super cyclone, 2013 Phailin, 2014 Hudhud
- Western Odisha face severe drought and leading to large scale migration of farmers’
- Odisha is ranked 5th flood prone state in India lasting at least 5-15 days
- Since 1998, Odisha faces unprecedented heat wave and causality in average 68-72/year.
Community Base Actions/Adaptation

- Selected families are getting free brick house from government
- Government has made obligation to follow specific design for construction of house with six feet high above the ground
- Roof could be made accessible by a staircase
- Special design are adopted for road and bridges in coastal areas of Odisha to face cyclone, tidal surge and tsunami.
Nepal

Vulnerability

- 4th vulnerable country
- Water insecurity in the greater-Himalayan river basin (Indus in the west and the Ganges-Brahmaputra-Meghna in the east).
- Severe flood [2016 flood] and land slide happened.
- Human displacement and repeated crop failure
Nepal

• Fighting with Climate Change
  • Nepal has developed many legal policy documents;
    – NAPA [National Adaptation Program of Action]
    – LAPA [Local Adaptation Program of Action]
    – Climate budgetary expenditure Framework

• Low Carbon development strategy [40% forest cover]

• Produce 80% Hydropower

• Nepal’s Offer to Regional Cooperation
  - Regional Hydropower management [80,000 MW]
  - Tourism Sector.
Agrarian Resilience against Climatic Impacts on Water Resources

Vulnerability

- Sri Lanka fully depends on surface water resources for agricultural, domestic and industrial uses.
- Surface water resources are already under pressure by economic and demographic change. Climate change threatens to intensify this pressure further by lacking of alternate surface water availability.
Adaptation Strategy
- Introduce and implement “Agro-Well” driven production system
- 20 feet diameter and 20-30 feet deep
- Harvest rain water and preservation for agriculture
- Profit at least six fold than rice production
Regional Cooperation

- India and northern and parts of eastern Bangladesh already possess low surface water flows. Increases in temperature will further impact water resources in such regions by raising evaporation rates.

- Introduce Agro-well system could be benefited both saving ground water resource along with effective utilization of surface water and cost saving.
Thailand

Study Report: Climate change impacts of options for municipal solid waste (MSW) management in the BIMSTEC region.

Vulnerability Issues/MSW and its impact in CC
MSW contribute at least 5 percent of the total greenhouse gas (GHG) emissions annually.
## Thailand

### MSW Processing and Risk of GHG emission

<table>
<thead>
<tr>
<th>Process</th>
<th>Increase GHG emission</th>
<th>Decrease GHG emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraction</td>
<td>GHGs are emitted during the harvest of resources and transport of raw materials</td>
<td>Waste prevention and recycling delay the need to extract some raw materials, lowering GHG emission during extraction.</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Manufacturing products release GHG during processing as energy is expanded during product use</td>
<td>Waste prevention and making product from recycled materials requires less energy. Both of these lowering GHGs emission during manufacture</td>
</tr>
<tr>
<td>Combustion</td>
<td>Burning different kind of waste in same incinerator increase GHG</td>
<td>Setting appropriate incinerator contribute to lowering GHGs during combustion</td>
</tr>
<tr>
<td>Landfilling</td>
<td>GHGs are emitted as waste decompose in landfills</td>
<td>Waste prevention and recycling reduce the amount of waste sent to Landfills.</td>
</tr>
</tbody>
</table>
Thailand

Issues for Regional Cooperation

- Share data on waste generation, composition & management strategies.
- Sharing knowledge to assess and understanding the best practice & technologies in BIMSTEC country context to address the CC.
Thank you