

NATIONAL SEMINAR ON CLIMATE CHANGE

Bangladesh and Bay of Bengal Regional Cooperation

Summary Presentation on Different Writers of BIMSTEC Countries





Bangladesh

Focused on Adaptation Innovation

Vulnerability: Sea Level Rise - Salinity ingressions & 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

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

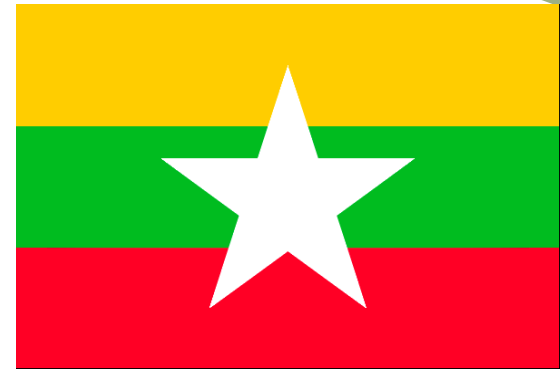
Vulnerability

- 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.

India



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.

Sri Lanka

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.



Sri Lanka

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

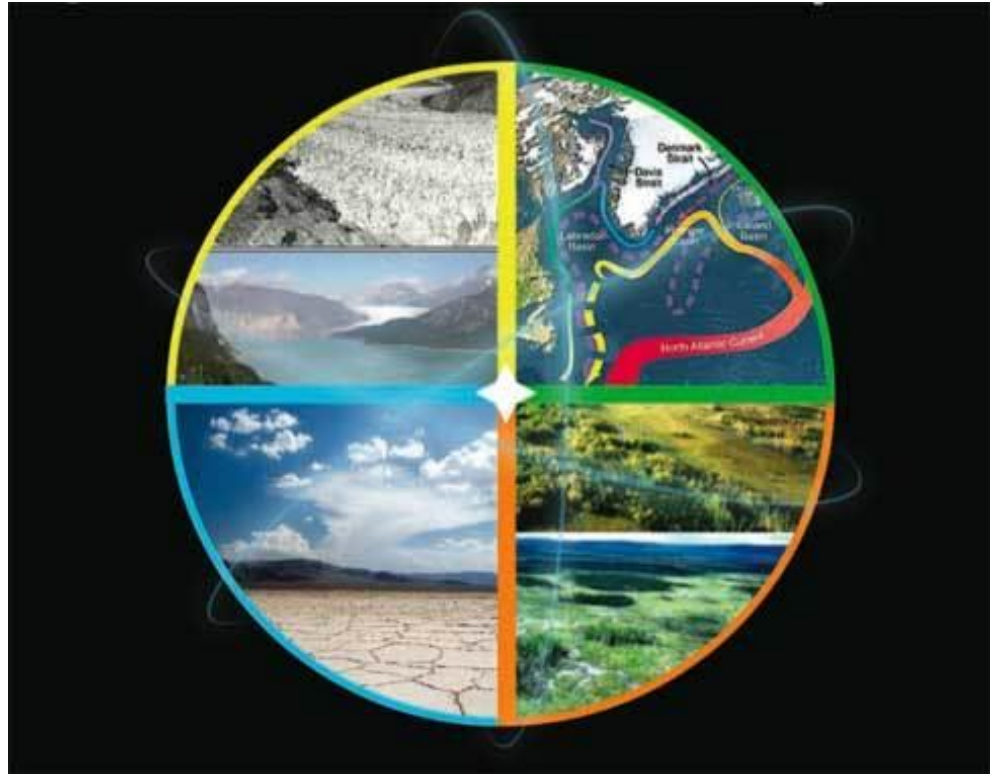
Process	Increase GHG emission	Decrease GHG emission
Extraction	GHGs are emitted during the harvest of resources and transport of raw materials	Waste prevention and recycling delay the need to extract some raw materials, lowering GHG emission during extraction.
Manufacturing	Manufacturing products release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

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