



The State of Governance of Climate Change Adaptation in Coastal GBM delta Districts of Bangladesh

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Abstract

This poster examines the governance of adaptation programs of government, NGOs, and affected communities of 4 coastal district of Bangladesh. An assessment of adaptation programs is made based on peoples' perception.

Methodology

- The field work sites were chosen through using hot spots vulnerability & hazard maps produced by WP2 and Demographic Analysis (WP3.1) and GIS Migration Map (WP3.2).
- Data was generated from gender segregated 13 FGDs in 4 Upazilas (Sarankhola, Moralganj, Kolaparaand Ramgoti) of 3 coastal districts & Stakeholder Meetings (1 National & 2 district level)
- Upazilas were selected on the basis of high level of vulnerability + high net migration, high level of vulnerability +low migration and presence of high level of adaptation practice

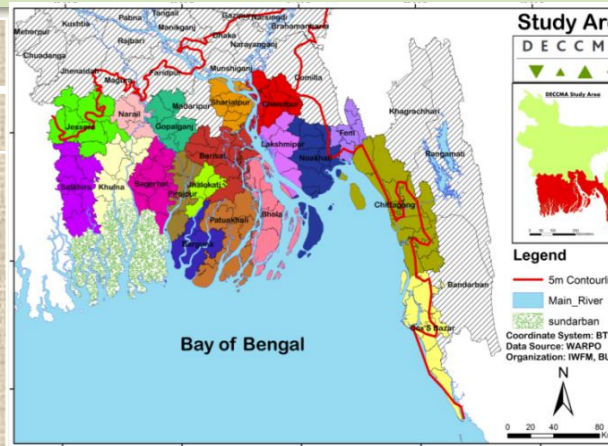


Introduction

Low-lying coastal GBM delta districts of Bangladesh are vulnerable to climate change, especially for its huge population density, exposure to frequent disasters and lack of local adaptive options. Asset loss, resource constraints, lack of adaptation finance are major stumbling blocks in people's effort towards rebuilding and fighting climatic shocks. The Bangladesh government, its development partners, INGOs & local NGOs are implementing different adaptation actions to address the climatic challenges. Community people have also taken many autonomous initiatives. This poster has drawn findings on existing implementation and governance system and made a reflection of people's perception about the effectiveness of these activities.

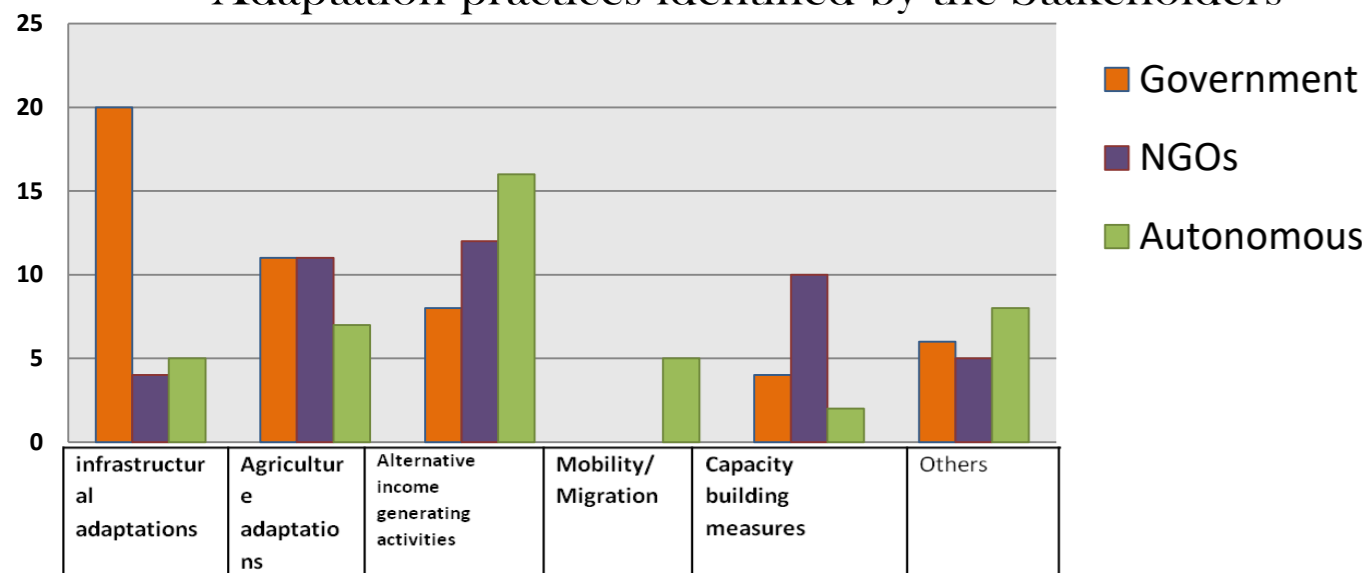
Adaptation Initiatives taken by Different organizations

Theme	Government Initiatives	NGOs Initiatives	Individual/Community Initiatives
Climate-Resilient Physical Infrastructures	<ul style="list-style-type: none"> Climate resilient infrastructures Riverbed management/TRM, Sluice gate Multi purpose cyclone shelters Construction of approach roads/culverts Resettlement projects 	<ul style="list-style-type: none"> Cyclone Shelters Approach road construction & repair Providing climate resilient housing Solar energy PSF 	<ul style="list-style-type: none"> Climate resilient house preparation raising home plinth, Raising height of tube-well basement, toilet and pond side Protection of embankment &controlling erosion by using bamboo or local materials
Agriculture innovation	<ul style="list-style-type: none"> Supply of agricultural seeds Saline/drought/flood tolerant seeds innovation & supply Economic assistance Agricultural subsidies Fishing regulation Modern agricultural technologies 	<ul style="list-style-type: none"> Supply of agricultural seeds including HYV New crop variety supply Saline/drought/flood tolerant seeds Farmer Field School (FFS) Farmers forum, Micro Finance & Capacity Building (IGA) 	<ul style="list-style-type: none"> Adjustment with seasons & short duration cropping Cultivation of vegetable in dikes Raising seedbed platform Homestead vegetable gardening Crop diversification Fresh water aquaculture Backyard livestock production Cash crop cultivation i.e. Soybean
Alternative income generating activities	<ul style="list-style-type: none"> Low interest loan Economic assistance Subsidy/grant for livestock production, i.e. 'One house, one farm' Government allowances (i.e. VGF) 	<ul style="list-style-type: none"> Micro credit Livelihood training Alternative livelihood creation Integrated fish farming 	<ul style="list-style-type: none"> Animal Husbandry/Poultry Farming Small and petty business, Raising livestock (hen, duck) Changing livelihoods, Women work outside the home
Mobility/Migration	<p>People move to government initiated Gucchogram, Asrayon, Char Development and Settlement Project areas. Government provides housing, sanitation, potable water & provision to the settlers of a legal title to land</p>	<p>In the resettlement sites NGOs provide micro-finance services, education ,training on income-generating activities and disaster management, raise awareness for legal rights, and extend health and family planning services.</p>	<p>People migrating, both seasonally and temporarily, to supplement the loss of family income due to climatic and other stresses. Other forms of migration include: permanent migration to slums or urban areas, cross border migration, short term international contract migration. Some people take shelter on embankments & government <i>Khas</i> land also.</p>
Capacity building measures/Climate-Resilient Green Infrastructure	<ul style="list-style-type: none"> Improving early warning, Cyclone preparedness etc. Tree plantation & coastal forestation Mangrove forestation Awareness building 	<ul style="list-style-type: none"> Training on DRR issues Advocacy Initiative Awareness building Water purification training Training on agricultural innovation Livelihood training Tree plantation 	<ul style="list-style-type: none"> Using Indigenous knowledge to minimize disaster vulnerability. Tree plantation as a disaster mitigation strategy i.e. to reduce temperature rising/oxygen producer.
Others (Health & Sanitation, Education)	<ul style="list-style-type: none"> Providing access to pure drinking water Deep Tube well Free education Provide sanitary latrine Installed community clinic/Health centre 	<ul style="list-style-type: none"> Pond Sand Filter (PSF) Water tank, deep tube wells and community bathroom for women Wash programme Free education (i.e. BRAC school) Child food programme 	<ul style="list-style-type: none"> Rain water harvesting Drink river water using Alum /Fitkri Reserve rain water adjacent to Killa Multiple use of rain water

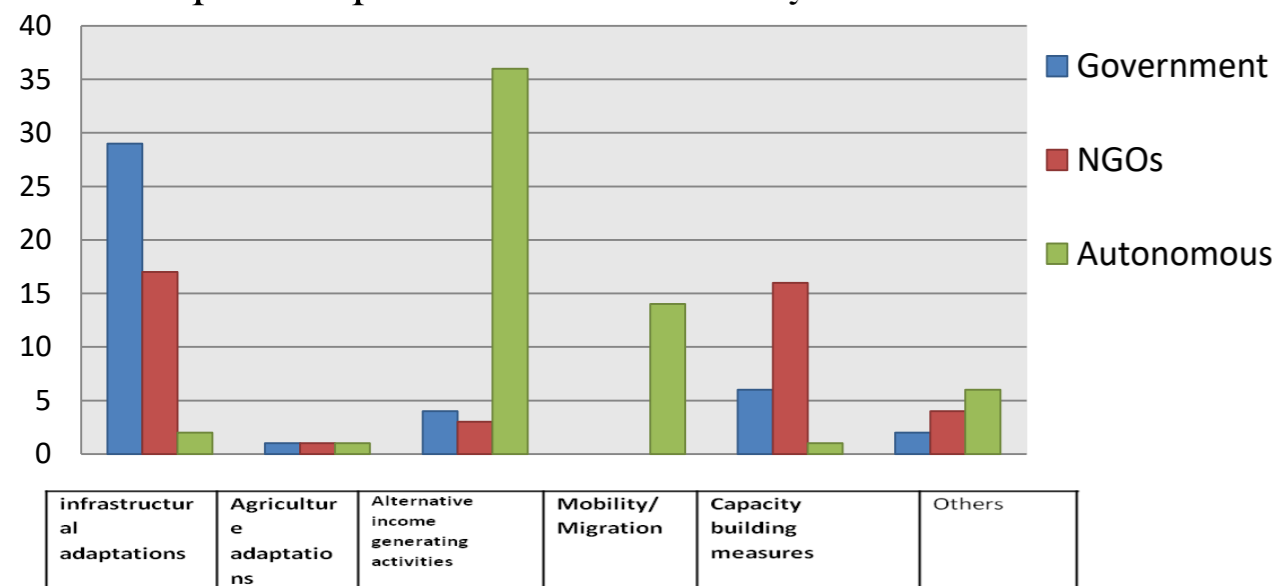


Findings

Adaptation practices identified by the Stakeholders



Adaptation practices identified by the FGDs



People's perception on current state of governance of adaptation programs

Problems of government-led adaptations

- Lack of planning and research on sustainable adaptation techniques
- Inadequate peoples' participation in planning and implementation process,
- Top-down system of implementation, Non activeness of local committee.
- Apart from DRR activities in absence of local governance role
- Unplanned engineered infrastructures i.e. embankments,
- Lack of coordination between and among different public and private sectors
- Still old fashioned authoritative government approach rather than multi-stakeholders led governance approach
- Mismanagement of the project, corruption, nepotism in allocation of tasks, Lack of accountability and transparency
- Inappropriate and untimely implementation,
- Lack of regular maintenance and monitoring mechanism, i.e. irregular river dredging, non-repair of small damage
- Lack of technical knowledge in a changing situation
- Lack of funding and delayed budget disbursement.
- Using adaptation fund for normal development activities
- Lack of policy coherence, (commercial policy vis-a-vis climate change adaptation strategy)
- Lack of inter-ministerial coordination i.e. agriculture-environment-Local government
- Inadequate research i.e. entrepreneurs are affected by virus in aquaculture but no initiatives taken for virus prevention
- Lack of funding or resources to experiment agricultural innovations
- Lack of reach of technological innovation of farming
- People's limited access to adaptation implemented by Government saline/drought /flood tolerant varieties are inaccessible to many people
- Poor communication strategy in terms of informing adaptation innovations, policies , local officials not regularly monitoring or providing counseling services
- Absence of crop insurance system

NGO-led adaptations

- Lack of wider coverage,
- High pricing (Solar energy)
- Profit centric
- Short term project and try to show case good practices
- Though NGO workers have better communication with field communities but there are Inadequate production and marketing,
- High pricing & commercial approach
- Repetition of activities or schemes and absence of coordination among the NGOs.

Autonomous

- Lack of resources i.e. (allocate a land to build structure to fulfill community needs),
- Lack of coordination and stimulating leadership.
- Problem of like-mindedness. Hard to reach consensus to make any community effort
- Diminishing social bonding
- Fewer naturally grown resources (firewood, vegetables, fruits) available to adapt locally
- Non awareness



"We are being informed about the danger signal through radio or television. Union Disaster Management Committee of Union Parishad under Cyclone Preparedness Program also informs us. Deputy Commissioner's Office, executive officers, members of Union Parishad keeps them busy twenty-four hours during the disaster. They try hard to bring people of backwards area to cyclone centers. NGOs are working for building awareness. They have taught us how to response in disaster. They told us to save food and fresh water. They also gave pot so that we can save food and water." (FGD: Female, Bagerhat)

"We have no work here. What can we do? So migration is generally helpful for us. Even it is better to go outside the country by borrowing money from others. If we repay the loan within two years, we will have a bright future. It is very rare that migration brings bad luck to us." (FGD: Female, Bagerhat)

Successful Adaptation Activities

- Homestead raising, raising plinth
- Cyclone Shelter
- Homestead vegetable gardening
- Aquaculture, Soyabin cultivation
- Awareness raising training, CCP
- Migration
- Women work outside for monetized income (NGOs Jobs, or local grocery stores, tea stalls, tailoring, making handicrafts)
- Livestock farming
- Resettlement project

"This embankment has not been maintained or repaired for a long time. Worse, the prawn cultivators have set hundreds of pipes that have weakened the mud shield which easily collapsed when Aila hit," says Nuru of Dacope village. The owners of shrimp ponds manage to set these illegal pipes by bribing the Bangladesh Water Development Board (BWDB) officials. (SH Meeting , Khulna).

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Conclusion

- The role of governance is pivotal in a changing climate and addressing the challenges faced by delta populations. Though there are some successful model of adaptation implementation i.e. multi-purpose cyclone shelters, CCP, capacity building training but governing process of many other large scale adaptation activities have had severe problem.
- Major problems of governance includes top-down system of implementation, lack of incorporation of local of knowledge and local experts in planning & design, non-involvement of local peoples in implementation and monitoring process, non activeness of local committee, lack of coordination within various department of government, mismanagement of the project, lack of regular maintenance and proper monitoring mechanism, and lack of funding and delayed budget disbursement. Problems of NGO led adaptations includes lack of wider coverage, high pricing, profit centric approach, repetition of activities or schemes and absence of coordination among the NGOs. Autonomous activities are facing the problems of lack of government policy support, lack of resources , lack of cooperation and scarcity of natural resources to adapt locally.

