ADAPTATION TO CLIMATE CHANGE IN BANGLADESH: LEARNING BY DOING

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Bangladesh, a low-lying country is known globally as one of the most vulnerable countries to climate change.

Why is it highly vulnerable?

- Its biophysical resources, particularly water, is highly sensitive to climate variability and change
- People’s livelihoods & the production system are at high risk
- Disadvantageous biophysical characteristics
- High population density
- High prevalence of poverty
- Poor institutional capability to deal with extreme climate events

There exists a strong social interaction towards managing EWEs
A project on ‘Reducing Vulnerability to Climate Change (RVCC)’ has been launched in mid-2002 to promote adaptation to CC.

CIDA provided financial assistance for the implementation of RVCC

CARE-Bangladesh is implementing the project in the Southwestern Bangladesh

Goal: To increase capacity of communities in southwest Bangladesh to adapt to the adverse effects of climate change.

Purpose: Communities and institutions in the southwest region demonstrate capacity to:
- raise awareness on climate change
- reduce climate change-induced vulnerabilities, and
- influence relevant policy.
Vulnerability through the eyes of vulnerable ones

Initial attempt was made to define ‘vulnerability’ to climate variability and change, as perceived by the target beneficiaries.

How people perceive their vulnerability?

When a climate-induced phenomenon affects

• their livelihoods / food security / income security

• their well-being beyond coping ability

(health at risk / housing at risk / quality of asset ………….)
78 FGD in 55 communities
### Defining vulnerability

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*Figure: Vulnerability Assessment in Bangladesh*
Field assessment suggests that the major causes of vulnerability are:

Floods (High to Extreme)

Cyclones & associated storm surge

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<tr>
<th>Salinity intrusion</th>
<th>Water scarcity</th>
<th>Water logging</th>
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<td>Potable water</td>
<td>Irrigation water</td>
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<tr>
<th>Climate induced phenomena</th>
<th>Perceived Vulnerability Issues</th>
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<td></td>
<td>Livelihood-related</td>
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<td>Food security</td>
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<td>Flood</td>
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<td>Drought</td>
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<td>Water logging</td>
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Integrated farming
(rice, fish, poultry and vegetables)
through family/household approach
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<tr>
<th>Problem definition</th>
<th>Strategic approaches to solution</th>
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<tr>
<td>Food Security</td>
<td>Increase food availability through (a) food production; (b) improved food storage</td>
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<tr>
<td>Income Security</td>
<td>Enhance income by strengthening agricultural activities or by introducing alternative livelihood practices</td>
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<tr>
<td>Health</td>
<td>Increase access to non-saline, safe water supply</td>
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<td>Housing</td>
<td>Ensure safety by introducing hazard-resistant housing (improved material, alternative design etc.)</td>
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<td>Asset quality</td>
<td>Situation friendly planned enhancement of biophysical resource base</td>
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<td>Cross-cutting</td>
<td>Advocacy towards enabling communities to modify their risks; awareness raising; introduction of information of climate change in curricula; grassroots-, regional- &amp; national-level dialogues with relevant stakeholders</td>
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4300 rural hhs

Community level
1. Preparing a floating garden with water hyacinth

2. Vegetables growing on a floating garden

Cage Aquaculture

Duck rearing in waterlogged area
Example of an awareness raising activity

A pot song and folk drama on climate change developed, field tested and is being performed in courtyards.
Learning by doing

Let community define why they feel they are currently vulnerable (if any), and how they would become (more) vulnerable

Explaining strategic solutions help community buy-in

Elaborate field-level discussions provide indigenous solutions! Be prepared for surprises!!

Interventions targeted only at households may not lead to sustainable solutions

For long-term solutions, governance must be enhanced

Advocacy can play a key role for authority buy-in

Awareness building at every level is equally important!
Acknowledging people of the Southwest of Bangladesh, RVCC, CARE & CIDA for allowing to undertake this action research.
Thank you