Winning against the odds?

- Enormous progress in reducing poverty between 1990 and 2010
- Perspective Plan 2021 and the 7th Five Year Plan - key policy frameworks – accelerated poverty reduction
- The GoB aims to end extreme poverty by 2021 and increasing the country’s GDP growth rate by 7 % annually over 2011-2021
- Economic transformation from agriculture-based to manufacturing-based economy
- By 2021, the garment sector aims to double revenue to USD50 billion per year
- About 1/4th of 160 million people still below poverty line
- Many of social indicators are at low level
• High degree of heterogeneity
• Half of 64 districts have poverty incidences greater than the national average
• Marginalised communities are often located in ecologically and climatically vulnerable and remote areas of the country
• Poverty pockets in relatively developed divisions
• Interaction between water hazards and exposure across socio-economic vulnerability have a profound bearing on poverty
• Poverty measurements do not consider water security
• Vulnerable groups include hard to reach communities, women and children
Living in water security and poverty

- Unique geographical location, extreme hydro-climatic variability and flat topography has made Bangladesh highly vulnerable to hazards and disasters.
- Extreme flood events inundate more than 60% of the country.
- Moderate to severe droughts affect the northwest and southwest zones, having negative effects on livelihoods.
- Cyclonic storms are sure in the coastal area.
- River erosion along 75 rivers.
- Salinity intrusion (soils, river water, GW).
Linking water security and poverty

- Challenge: provision of sufficient, physically accessible, affordable, reliable and safe water
- Degraded water quality resulting from industrial water pollution
- Water service delivery declined from 95% by availability alone to 13% when other service factors were considered, particularly safe water quality
- 5 to 19 million people affected by arsenic in groundwater
- Greater future challenge

REACH Improving water security for the poor
Linking water security and poverty
Correlation between adverse ecology and poverty incidence is more pronounced for extreme poverty

Women and children are particularly vulnerable

Efforts to climb up the income ladder are hindered by periodic push backs by loss of productive assets

More proneness to food shortages, lower household income, more difficulties in recovering from financial crisis

Costs for addressing health shocks are high for extreme poor

Poverty reduction efforts need to include productive investments in water security and protective interventions against water related risks
Observatories

Managing coastal risks

Universal safe drinking water
Risk-based framework for improving water security and benefitting the poor

**WATER-RELATED HAZARD**
- Storm surges
- Soil erosion
- Arsenic, salinity

**EXPOSURE**
- Location inside/outside embankment
- Location of farmed land

**VULNERABILITY**
- Household coping capacity
- Response to different flood depths

**Risk-based indicators and decisions**
- Compare alternatives
- Identify uncertainties /assumptions most relevant in influencing risk to the poor

REACH
Improving water security for the poor
Water security pathways for the coastal poor

Khulna Observatory

- Agricultural water security
- Access to safe drinking water
- Health impacts
- Gender specific impacts
- Major physical interventions – 139 polders
- On-going projects: CEIP (US$ 400 million), Blue Gold (EUR 60 million)
- Dynamics of water climate and poverty?
- How to identify, sequence and implement interventions to address water-related risks to achieve multiple objectives and benefit the poor?
- Relevance to other coastal areas?

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Improving water security for the poor
Universal drinking water security

Matlab Observatory

- A population of 223,000 people
- Arsenic-affected area with seasonal Meghna flooding
- Matlab Health & Demographic Surveillance System (HDSS) by icddr,b – a unique demographic surveillance programme
- Options for installation of novel monitoring systems
- Develop a relationship between social, environmental, economic, seasonal, infrastructure and water quality variables
- Inform Investment strategies
- Support improved institutional design and regulatory frameworks for identifying and reducing drinking water security risks

REACH
Improving water security for the poor
Building partnership with practitioners

- Implications - new **water security based poverty metrics and methods** to inform policy in Bangladesh and beyond.

- REACH has consulted widely with multiple **government and non-government stakeholder groups** identifying the observatory sites in Khulna and Matlab.

- Further work is planned to build on excellent engagement with stakeholders in the **Ready Made Garment Industry** sector including the Bangladesh Garment Manufacturers and Exporters Association, International Finance Corporation and other stakeholders.
Thank You