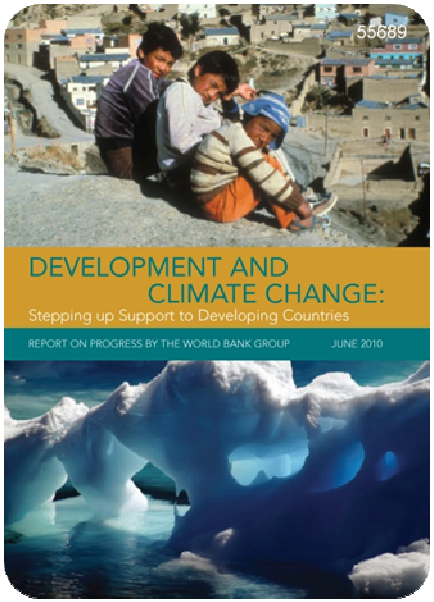

Information Sharing Event on Work Program for Loss and Damage

Contribution from the World Bank

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Lead Adaptation & PPCR Coordinator
World Bank
June 7, 2011
Bonn

THE WORLD BANK

World Bank Approach to Climate Adaptation

- ❑ Emphasizes and promotes synergies between climate resilience and disaster risk management as part of overall adaptation strategies and climate smart development.

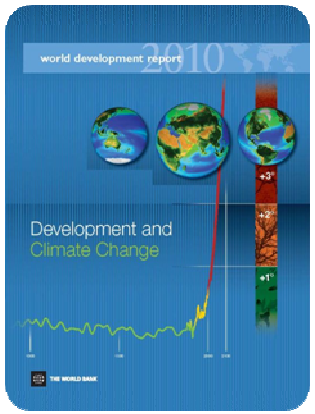
- ❑ Building **knowledge** and **partnerships**, supporting **country-led action** through instruments of choice, and sourcing and extending multiple **typologies of financing**

1. Knowledge Products

- ✓ Economics of Adaptation to Climate Change
- ✓ WB Climate Change-GFDRR Knowledge Portal
- ✓ WB Products and Advisory Services on Disaster Risk Financing
- ▪ Ecosystem Based Adaptation – promoting nature based solutions to counter L&D
- ▪ Natural Hazards, Unnatural disasters
- ▪ Social Dimensions of climate change

2. Adaptation TFs

- ▪ CIF/PPCR
- ▪ GFDRR
- ▪ SCCF, LDCF



3. Instruments

- ▪ CASs/CPSs
- ▪ IDA/IBRD instruments
  - ▪ SILs, DPOs,
  - ▪ TA
  - ▪ IDA-16 provision
- ▪ TFs (bilateral, MLTF, etc)

I. Economics of Adaptation to Climate Change

Overarching lessons

➢ The ***cost*** to developing countries of adapting to 2°C warmer world between 2010-2050 is ***≈ US$70-100 billion per year***

➢***Economic development*** is a central element of adaptation to climate change, but it should ***not be business as usual***

➢***Start with low-regret options****; Tackle the weather risks* that countries already face*; Do not rush* into making long-lived investments in adaptation unless.

➢Look beyond planned and hard adaptation to *soft* adaptation and enabling *private* adaptation

➢***Good policies, planning and institutions*** are essential to ensure that more capital-intensive measures are used in the right circumstances and yield the expected benefits

SECTOR	Climate Scenario	
	DRY	WET
Agriculture, Forestry, Fisheries	2.5	2.6
Water Supply	19.7	14.4
Human Health	1.5	2.0
Coastal Zones	27.6	28.5
Infrastructure	13.0	27.5
Extreme events	6.4	6.7
Total ($ BN)	71.2	81.5
Adding costs differently ($BN)	70.0	100.0

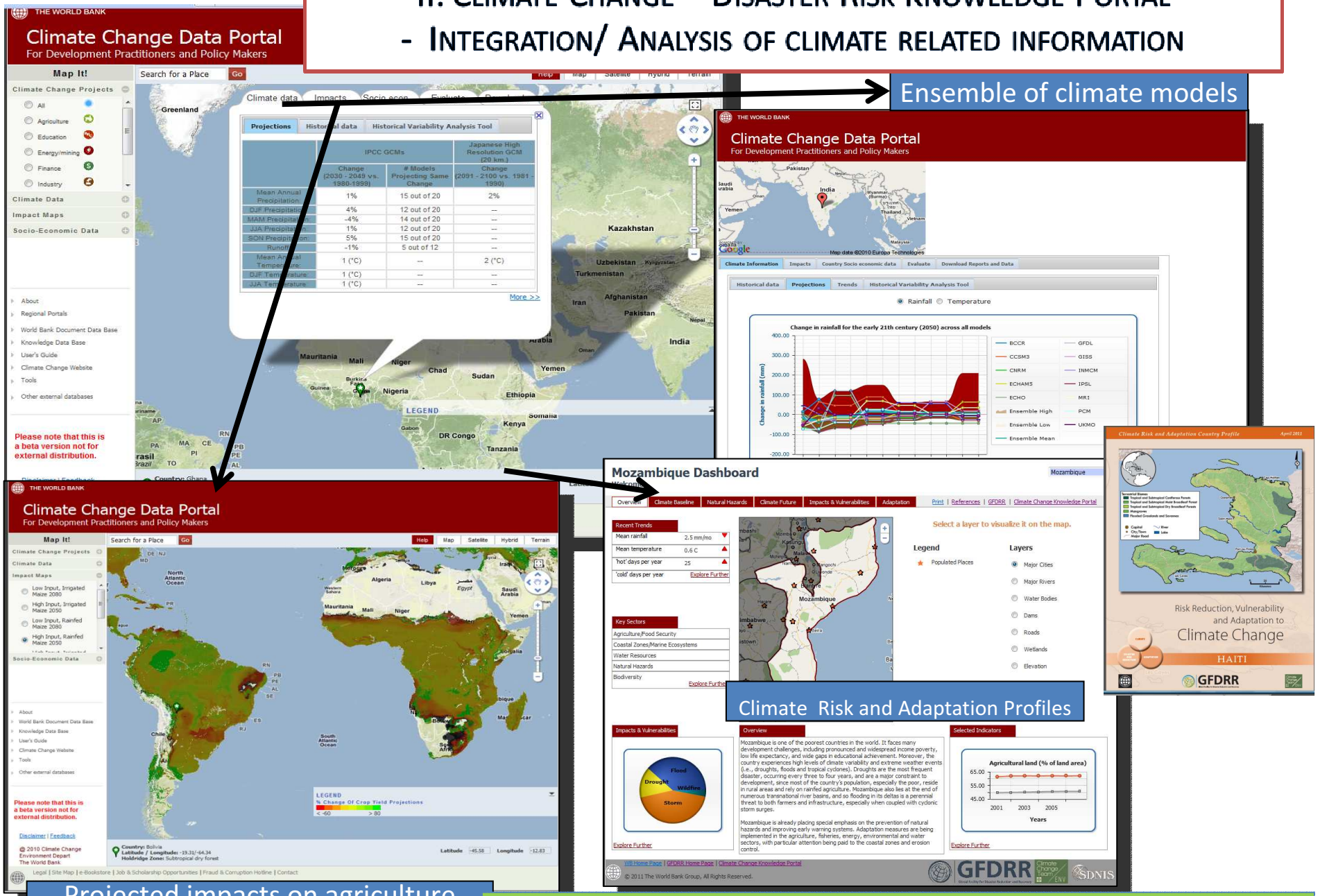
SAMOA: Cyclone Heta (2004)

- Damages with 2004 design standards (1-10 yr event; peak winds 108 kph) *limited*
- Damages with 1990-91 design standards (1-5 yr event; peak winds 90 kph) *estimate at 35-40% GDP*

➢ The adoption of *more stringent design standards today* would *reduce* the adaptation

Message: EACC as robust, replicable methodology and analytical tool for assessment of L&D in CCA

II. Climate Change – Disaster Risk Knowledge Portal
- Integration/ Analysis of climate related information



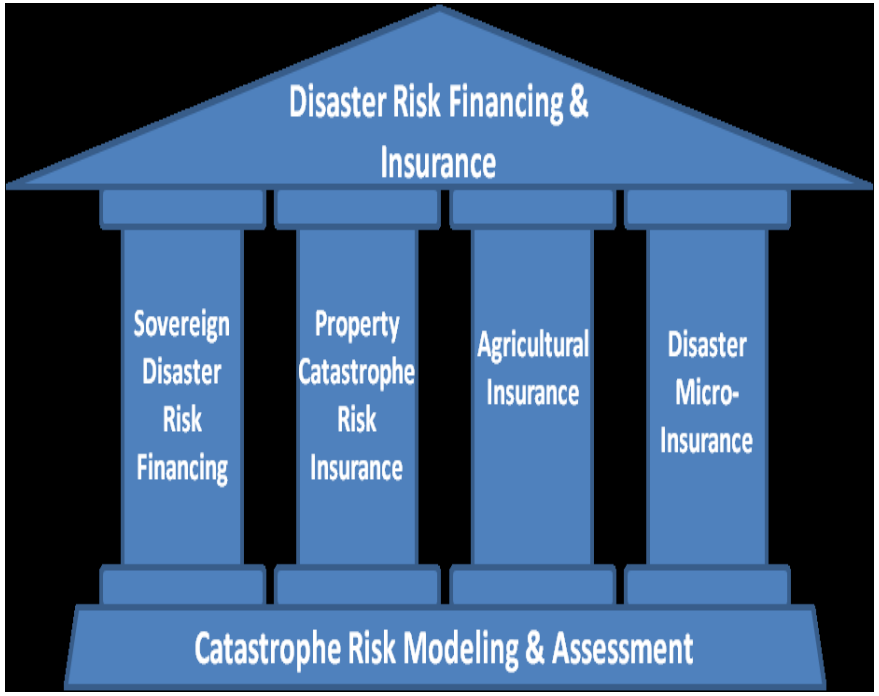
III. Post Disaster Needs Assessments (PDNAs) – Mainstreaming Adaptation into Recovery Needs

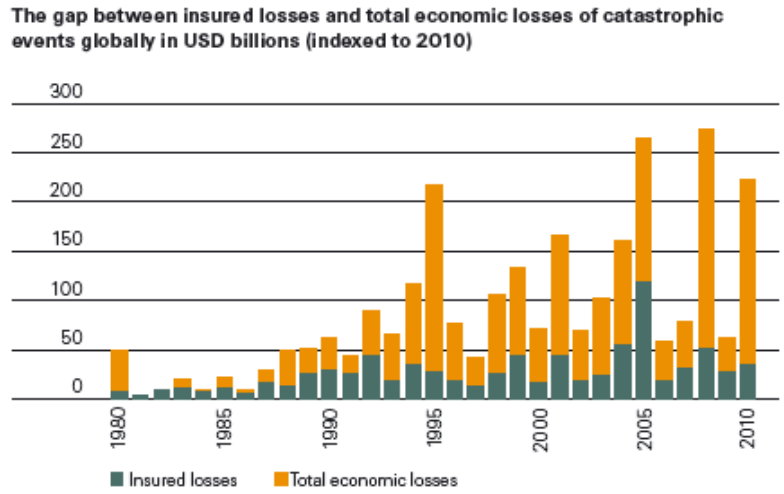
- Bank-GFDRR, UN, EU and other partners support Government-led PDNAs to assess damage and losses from disasters and cull out Needs for Recovery.
- Governments are most receptive to medium and long-term CCA imperatives in the Post Disaster Response phase.
- Recovery Framework of PDNAs contains the elements of Adaptation that are worked into the post-disaster recovery and reconstruction needs.
- As an assessment with universal (government, external partners) ownership, it is a unique mechanism for mainstreaming CCA into long-term development priorities of governments.
- GFDRR is currently engaged in further 'greening' of the PDNA Methodology for programmatic and upstream integration of DRM and CCA.
- 21 PDNAs completed and training to others (total 38)

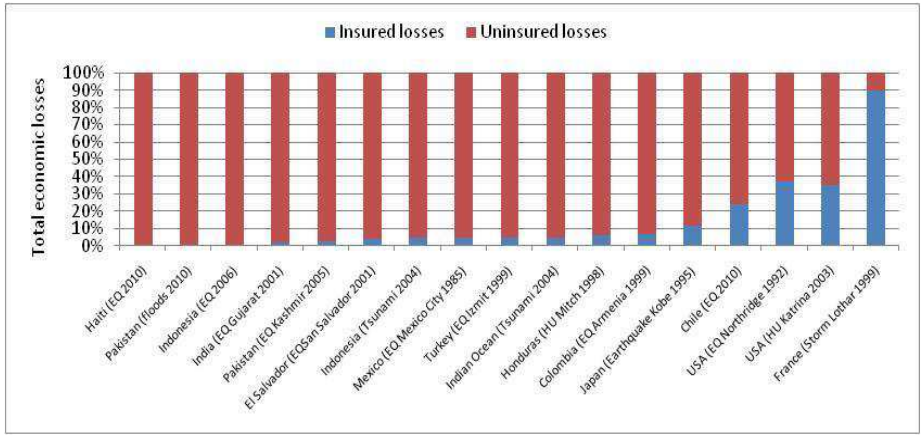
Message: Proven methodology for L&D assessment with elements of adaptation, which are being further enhanced.

IV. WB Products & Advisory Services for Disaster Risk Financing and Insurance

- closing the financial gap between economic and insured losses







Message: WB as honest broker & convener for informed decisions on Climate Risk Financing; direct experience on full range of products.

World Bank's Scope for Contribution to the Work Program on L&D

1. **Knowledge products**; EACC, Climate Portal, PDNA, Risk financing, others
2. **Technical expertise** through workshops, training sessions based on WB program and project experience in
   - Disaster/Climate Risk Financing e.g. El Salvador, Colombia, Costa Rica, Peru and Guatemala; Weather derivatives e.g. Malawi, etc.; Multi-cat – Mexico0
   - Assessment and mainstreaming of risk reduction policies and measures at the country level (WB/GFDRR/PDNAs)
   - Transformational climate resilience at scale (PPCR) e.g. Mozambique, Bangladesh, others
   - Urban cities, disaster and resilience
   - Other Bank Instruments e.g.

Summary of key messages:

- EACC methodology and analytical tool for assessment of L&D
- Climate Portal as Knowledge & Information base for L&D analysis
- PDNA as proven methodology for L&D assessment with elements of adaptation, which are being further enhanced.
- WB as honest broker & convener for informed decisions on Climate Risk Financing based on direct experience with full range of products in countries
- WB experience from a range of other programs and projects

Annex Slides

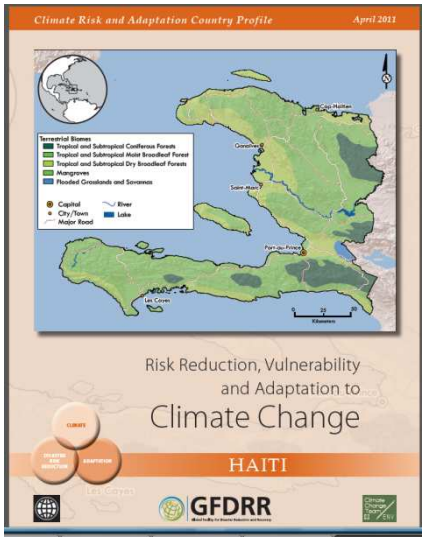
II. Assessment of Climate Risks and Vulnerability through the Knowledge Portals

- ***Climate Risk and Adaptation Country Profiles***

  The profiles synthesize most relevant data and information for Climate Risk Reduction and Adaptation to Climate Change and is designed as a quick reference source for development practitioners to better integrate climate resilience in development planning and operations.

  - *Done for all 31 GFDRR priority countries*
  - *Done for all CIF pilot countries*
  - *Partnership with AFRICA and MENA regions of the WB*

Example: Haiti



IV. Key WB Products on Disaster Risk Financing

Sovereign Disaster Risk Financing	
Technical Assistance in Budget Planning for Natural Disasters	• Analysis of fiscal impact of natural disasters (e.g., stress test) • Ex ante budget planning against natural disasters
Contingent Financing	• CAT DDO - a committed credit line for catastrophe risk • Contingent emergency response window in standard investment projects
Sovereign Catastrophe Insurance Pools	• Caribbean Catastrophe Risk Insurance Facility (CCRIF)
Insurance-Linked Securities	• Catastrophe bonds / catastrophe swaps • Weather hedges (IBRD and IDA)
Property Catastrophe Risk Insurance	
Property Catastrophe Insurance Pools	• Turkish Catastrophe Insurance Pool • Romania Catastrophe Insurance Pool • South East Europe and Caucasus Catastrophe Risk Insurance Facility
Agricultural Insurance	
Index-Based Agricultural Insurance	• Area-yield crop insurance programs • Weather based crop insurance schemes
Agricultural Insurance Pools	• Mongolia Index-based livestock insurance pool

WB Experience on Range of climate/disaster risk financing instruments

1. Catastrophe Draw Down Options (DDOs) **

- contingent credit line, disbursed upon the declaration of a state of emergency, but which are premised upon an acceptable Disaster Risk Management Framework.
- El Salvador, Colombia, Costa Rica, Peru and Guatemala)

2. Weather derivatives

- the World Bank approved mediation for the weather risk (drought) management derivative
- First in Malawi and there are pilots now under development in Cameroon, Ethiopia and Kenya

3. Multi Catastrophe Programs

- Catastrophe bond issuance platform that gives governments and other public entities access to international capital markets to insure themselves against the risk of natural disasters.
- Developed for Mexico – the first utilizing a WB platform

4. Caribbean Catastrophic Risk Insurance Facility

- First multi-country risk pool in the world and first insurance instrument to develop parametric policies backed by both traditional and capital markets.
- Designed to limit the financial impact of devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered

Message: WB direct experience with full range of products in a range of countries

Catastrophe Deferred Drawdown Option

At a Glance

- Provides immediate liquidity (bridging funds)following a natural disaster, in the form of a contingent loan
- Focuses on developing countries' ex-ante capacity to manage natural disaster risk
- Must be part of a broader DR preventative strategy

Key features

Purpose	To enhance/develop the capacity of borrowers to manage catastrophe risk. To provide immediate liquidity to fill the budget gap after a natural disaster. To safeguard on-going development programs.
Eligibility	All IBRD-eligible borrowers (upon meeting pre-approval criteria)
Pre-approval criteria	Appropriate macroeconomic policy framework. The preparation or existence of a disaster risk management program.
Loan Currency	EUR, JPY and USD
Drawdown	Up to the full loan amount is available for disbursement at any time within three years from loan signing. Drawdown period may be renewed up to a maximum of four extensions
Country Limit	Maximum size of 0.25% of GDP or the equivalent of US$500 million, whichever is smaller. Limits for small states are considered on a case-by-case basis.
Repayment Terms	Must be determined upon commitment and may be modified upon drawdown within prevailing maturity policy limit. Revolving Features: Amounts repaid by the borrower are available for drawdown, provided that the closing date has not expired

Ecosystem Based Adaptation

❑ Ecosystem-based adaptation (EBA) contributes to:

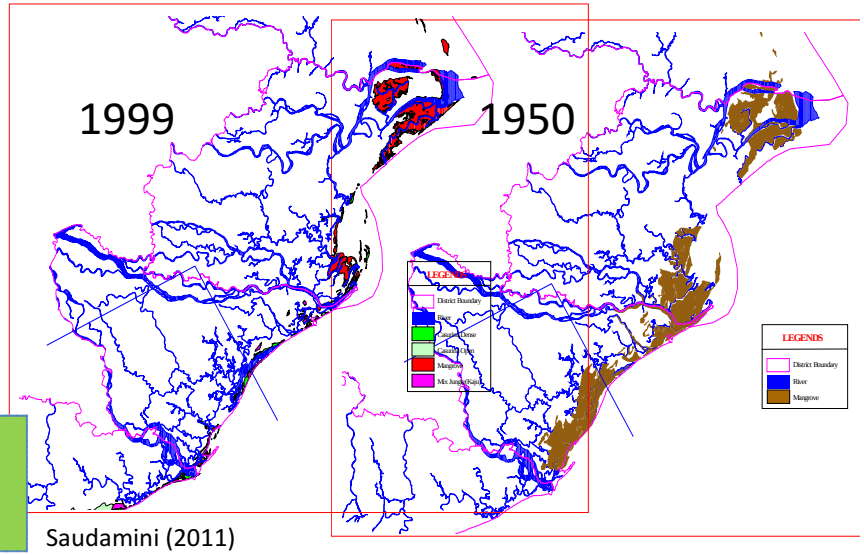
- ➢ Maintaining and restoring natural ecosystems and their goods and services and physical assets.
- ➢ Protecting and enhancing vital ecosystem services, such as water flows & water quality.
- ➢ Maintaining costal barriers and natural flood control and pollution reduction mechanisms.
- ➢ Reducing land and water degradation through actively preventing, and controlling, spread of invasive alien species.
- ➢ Managing habitats that maintain nursery, feeding and breeding grounds for fisheries, wildlife and other species

Message: EBA is a critical strategy for prevention and rehabilitation associate with L&D

Proven, cost-effective protection against CC

Actual death due to super cyclone in 1999	392
Predicted deaths if there were no mangroves	603
Predicted deaths if current mangroves were at 1950 level	31
Averted deaths under assumption 1 (603 – 392) = 211	211 (54%)
Averted deaths under assumption 2 (392 – 31) = 361	361 (92%)

Storm protection value (3 assets) = $4335/ha



Saudamini (2011)