

# Mainstreaming adaptation into developmental plans

---

**Sreeja Nair**

Centre for Global Environment Research  
Climate Change Division, TERI

IGES - TERI Asia Pacific Policy Dialogue, 22- 23 October 2009

Sustainable Low - Carbon Development in Asia: Prospects for a Successful Future Climate Regime

## Overview

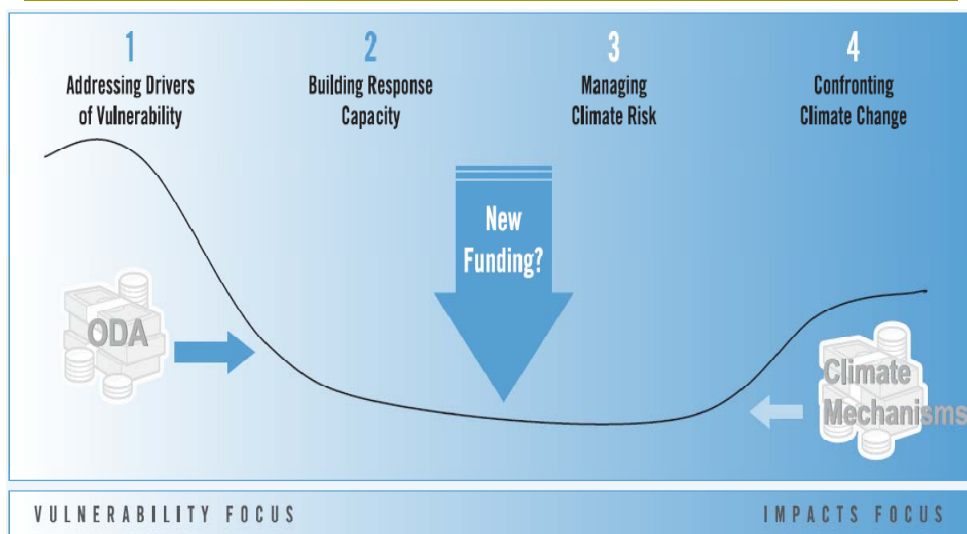
---

- Development and adaptation: synergies
- Concept of mainstreaming
  - Debates and concerns
- Case study: Climate Risk Screening
- Barriers to action
- Ways forward

## Development and Adaptation

- While development can enable adaptation; adaptation efforts can safeguard developmental investments.
- Clear distinction between adaptation and development often nebulous. What defines the boundaries of their overlap?
  - Serendipitous adaptation
  - Climate-proofing
  - Discrete adaptation (WRI, 2007)

## Adaptation- development continuum



World Resources Institute (2007)

## The concept of Mainstreaming

---

- Integration of climate change related policies and measures into developmental planning and decision-making (Eriksen et al, 2005).
- Broadly two ways (Huq and Ayers, 2008)
  - Ensuring that future climate projections are considered in decision-making; 'climate-proofing' of development.
  - Development efforts that are specifically targeted towards vulnerability reduction by addressing underlying factors influencing vulnerability.

## Why mainstream at different levels?

---

- Differential vulnerability; need to juxtapose with developmental aspirations
- National level
  - Highest level of decision-making
  - Can be integrated within policy formulation, planning, resource allocation, implementation stage (OECD, 2009)
- Local level
  - Impacts manifested locally,
  - Vulnerability at the local level may be masked by macro- assessments at the national level,
  - Robustness of adaptation efforts best observed at the local level; offer feedback.

## Mainstreaming: Issues and Debates

---

### □ Push factors

- Development can assist overall reduction of vulnerability
- Overlooking adaptation needs can result in 'maladaptation' i.e. enhance risk rather than reduce
- Efficient use of available financial resources

### □ Pull factors

- How good is it to diverting resources from developmental pool to support adaptation?
- Adaptation commitment of developed nations vs. developmental aid



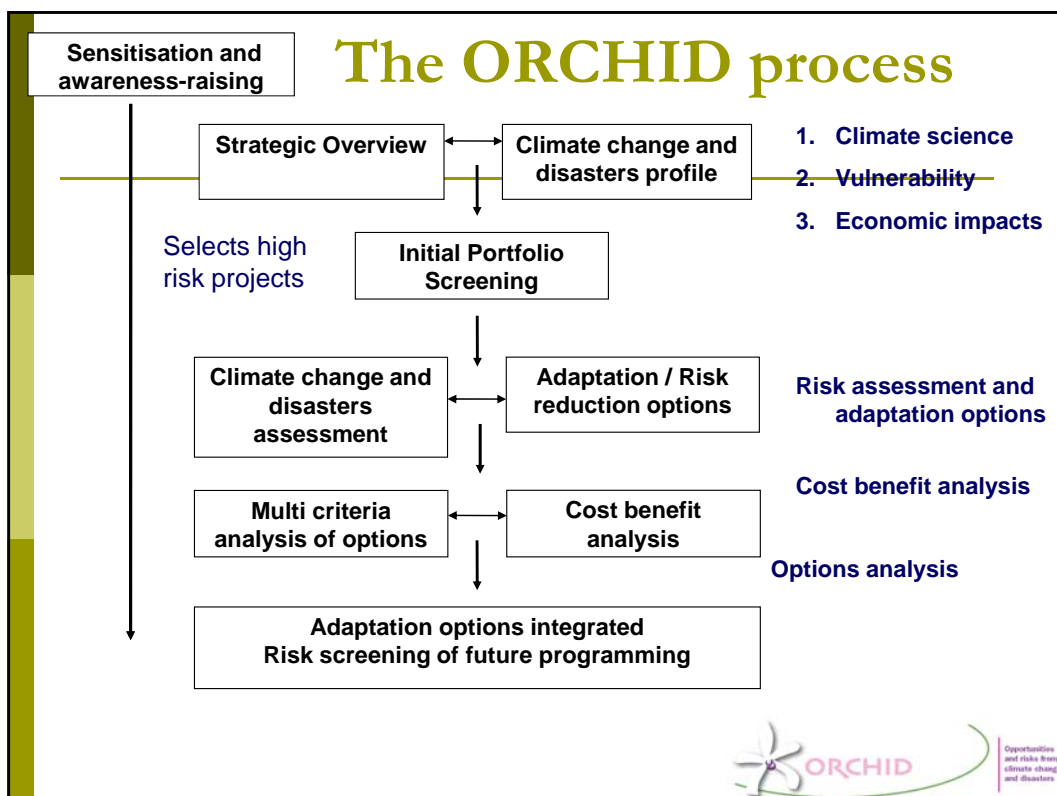
---

### **Case study discussion: Climate risk screening**

Climate risk assessment as a tool/approach for reducing climatic risks to developmental objectives and integrating adaptation options within developmental programmes at the national and sub-national levels

## Objectives of the screening process

- ❑ Risk assessment of high priority developmental interventions under DFID- India's portfolio
- ❑ Have the climate risk assessment approach and the multi criteria analysis led to a range of credible adaptation options?
- ❑ How does the analysis inform our understanding of adaptation to longer term climate change?
- ❑ What do we learn from the cost benefit analysis, and is it appropriate for adaptation decision making?



## Screening of high-risk programmes

---

DFID- I Programme Area	Programme for Assessment
National	Water and Sanitation Programme
	Sarva Shiksha Abhiyan - Elementary Education Programme
	Reproductive and Child Health Programme Phase II
West Bengal	Kolkata Urban Services for the Poor
	WB Support to Rural Decentralisation
	WB Health Systems Development Initiative
Andhra Pradesh	AP Rural Livelihoods Programme
Madhya Pradesh	MP Rural Livelihoods Programme
	MP Urban Services for the Poor
Orissa	Western Orissa Rural Livelihoods Project

## Screening of projects

---

- Criteria for climate risk screening:  
comparison of scenarios
  - No programme scenario: without interventions
  - Programme scenario: partial risk reduction due to programme implementation
  - Programme plus scenario: risk reduction with additional components added within the present programme portfolio

## Evaluation Criteria

---

- Does the adaptation option,
  - address poverty reduction in light of climatic risks?
  - ensure consistency with existing activities and the ways current response to climate-related impacts is addressed?
  - demonstrate clear value for money from adaptation activities
  - focus on narrow range of future scenarios or allows flexibility of response?
  - manage any potential negative spin-off impacts?
  - demonstrate practicality and feasibility?
  - have opportunities for scaling up and replication?
  - incorporate the knowledge and certainty in projecting change and its impact?
  - reflect existing local and national disaster risk reduction and adaptation plans or studies?

## Case 1: National Level

### Reproductive and Child Health programme

---

Identified climate risks	Climate Risk management and adaptation	
	Current practices	Additional opportunities
<ul style="list-style-type: none"> <li>▪ Damage to healthcare infrastructure</li> <li>▪ Damage to drinking water supplies</li> <li>▪ Damage to communication networks and power supply</li> <li>▪ Spread of diseases</li> </ul>	Bolsters national health care programme, targeting at reducing maternal and infant mortality rates	<ul style="list-style-type: none"> <li>▪ Health facility mapping in vulnerable areas</li> <li>▪ Sensitizing policy makers to addressing health concerns in vulnerable regions</li> <li>▪ Convergence with programmes centred around water and sanitation</li> </ul>

## Case study 2: State- level Urban Services for the Poor

Identified climate risks	Climate Risk management and adaptation		
	Current practices		Additional opportunities
	KUSP	MPUSP	
Urban flooding	In- situ slum upgradation		<ul style="list-style-type: none"> <li>▪ Strengthening O and M</li> <li>▪ Comprehensive urban planning considering climatic risks</li> </ul>
Health risks due to contamination of water supplies	O and M of existing water supplies and drainage systems	Enabling ULBs to develop and follow environmental standards for sanitation and drinking water	<ul style="list-style-type: none"> <li>▪ Development of a spatial and temporal database for water quality surveillance</li> <li>▪ Raising plinth level of toilets</li> <li>▪ Better insulation of toilet pits to reduce seepage into the soil and groundwater</li> </ul>

## Costs- benefits of selected options

- Identification of the population at risk
- Valuation of past impacts
- Estimation of expected impact based on climate projections
- Identification of adaptation strategies
  - Estimation of present value of avoided cost (benefits)
  - Estimation of project cost
- Calculation of net present discounted values, benefit cost ratio and internal rate of return

## Barriers to action

---

- Adaptation versus developmental priorities
  - Diluting of purely adaptation activities; bypassing the need to provide new and additional funds; divert money from other critical developmental areas (Persson and Klein, 2008)
- Uncertainties
- Scale mismatch
  - Timescale of projected impacts vs. policy planning process
- Lack of awareness regarding potential risks, lack of access to relevant information on climate (access and usability), lack of capacities and resources.

## Ways forward

### bridging research and policy efforts

---



#### Research

- Need for integrated vulnerability assessments to identify suitable adaptation measures
- Establish appropriate baselines to evaluate efficacy of adaptation
- Piloting M&E tools for climate and developmental practitioners
- Development of cost-benefit tools for adaptation options
- Identify co-benefits of adaptation for developmental efforts



#### Policy

- Explore synergies between isolated efforts towards development and climate risk reduction
- Identify links with the existing policies and building scope for enhancing, modifying, strengthening in the light of unanticipated changes.
- District level adaptation plans to be developed in identified vulnerable regions.
- Successful examples can be custom-tailored and replicated elsewhere—role of experience sharing and 'learning by doing' (Folke et al, 2002; Moench and Dixit, 2004)

Thank you for your  
attention

---

[sreejan@teri.res.in](mailto:sreejan@teri.res.in)