



DRR and Climate Change

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Dimensions to vulnerability



Dependence on agriculture & climate sensitive sectors

- 70% of population
- 2/3 population on monsoons
- 275 million dependent on natural resources

Geographical considerations

- 7500 km coastline with 300 million people
- 70 million hectares forests (rich in minerals)
- 200 million sq km of degraded land

Exposure to climate related disasters

- 65% of India is drought prone
- 12% flood prone
- 8% susceptible to cyclones



Threats

- **Human development tipping points**
 - **Reduced agricultural productivity**
 - Esp. cereals though productivity of some cash crops may increase (Coconut)
 - Sharp fall in land productivity of 17% farmers
 - **Heightened water insecurity**
 - **Increased exposure to extreme weather events**
 - Monsoon floods & storms in 2007 displaced 14 million people
 - **Stressed ecosystems (forests & biodiversity)**
 - **Increased health risks**
 - Incidence of malaria by opening of transmission windows



Threats

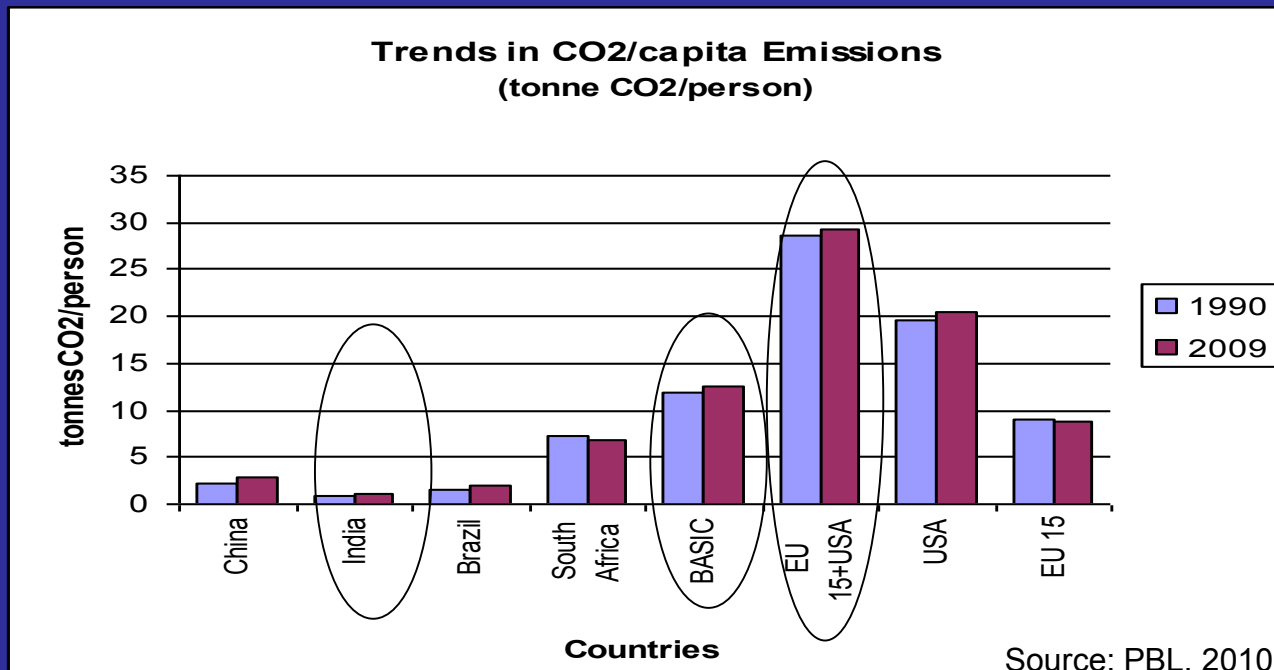
- **Low human development traps**
 - **Climate related risks force people into downward spirals of disadvantage that undermine *future* opportunities**

Long-term consequences are much worse for poor people. Their lives, livelihoods, education and health are often affected across generations, trapping them in cycles of poverty.

Policy environment

- Positions

- *Per capita emissions will never exceed those of developed countries*
- To reduce “emission intensity” by 20-25% of 2005 levels by 2020
 - Intensity declined by >30% between 1994-2007





Policy direction

- 12th FYP: focus on low-emission growth strategy
- National Action Plan on Climate Change (NAPCC)
- Preparation of State Level Action Plans on Climate Change (SAPCC)



National Action Plan on Climate Change (NAPCC)

National Action Plan on Climate Change (NAPCC)



- Inclusive & sustainable development strategy sensitive to climate change
 - *Directional* shift in the development pathway
 - Enhancing current and planned programmes
 - Appropriate institutional mechanisms
 - Building effective linkages with civil society, local govt. institutions & public-private partnerships
- Effective and sustained implementation
 - Involvement at all level of decision making and actions



State Action Plan on Climate Change (SAPCC)

Role of States: The need for SAPCC



- Translating national policy into action esp. at local levels
- Decentralizing NAPCC objectives into local context
- In line with NAPCC, SAPCC can help states address climate change issues
- SAPCC would be prepared under the overarching NAPCC
- A common framework for SAPCC would harmonize national & state level actions

Common Framework for the SAPCC



- Understanding purpose & content
- Incorporate regional/site specific variations
 - Impacts and vulnerability assessment
 - Develop climate profiles
 - Identify mitigation & adaptation strategies
 - Assess & prioritize options
 - Identify, sequence & combine financial & policy options
 - Integrate climate change into development planning of the state



Approach and methodology



SAPCC: Principles

- Understand climate data & its limitations
- Assess climate change interaction with existing vulnerabilities
- Go beyond risk management
- Consider both top-down & bottom-up approaches
- Reach out to a large number of sectors and actors
- Build broader stakeholder engagement ensuring inclusion & gender considerations
- Address state priorities while creating enabling environment for implementation of NAPCC
- Set effective institutional mechanism for implementation (monitor, review & refine)



Logical framework

Partnership & coordination mechanism

- Identify key players
- Identify tools & criteria for decision-making
- Set up a coordination and collaboration structure

Climate profiles

- State profile
- GHG emissions inventories & scenarios
- Climate Change scenarios
- Assessments of vulnerabilities (sectors, groups)

Climate Change strategies

- Regional & 2 analysis
- Identification & assessment of options (mitigation & adaptation)
- List of prioritized options (time horizon, resources)'A

Financial & policy requirements

- Assessment of cost implications
- Identify, sequence & combine policy & financial options

Climate Change Action Plan

- List of measures with time frame & allocation
- Climate change policy and investment roadmap
- M&E system
- Integrating in state policy



Methodology

- Focus is both on *process* & *product*
 - **Workshops:** districts/agro-climatic zones/sectoral levels
 - farmers, pastoralists, fisher folk, forest dwellers
 - Industrial and other productive sectors
 - Marginalized and other user communities directly dependent on natural resources;
 - **Coordination and consultative meetings:**
 - Policy makers, regulators and PRIs
 - Line agencies of government at state/district level
 - Business and industries
 - Civil society
 - **Inputs** from experts and organizations
 - scientists, academicians, activists, cultural leaders.



Flow chart: the process

Steering Committee (SC)

Chair: Chief Secretary

Formation of Advisory Group &/or Core Groups

Identification [and capacity building] of key Agency

Stakeholder Consultations

Formulation of SAPCC by Key Agency

*** Finalization of SAPCC by Advisory Group**

***Validation by Steering Committee**

***Adoption of the SAPCC**

***Dissemination & implementation**

Approval Process at the national level



- Expert Committee
 - Chair: AS/JS (CC), Advisor (CC) + experts
 - Technical review
 - 5 meetings have considered 19 plans + 3 more under consideration (22)

Approval Process at the national level



- National Steering Committee
 - Chair: Secretary (MOEF)
 - Secretary of relevant Ministries, Chair Expert Committee and AS/JS (CC)
 - Approve SAPCCs based on advice by Expert Committee and Monitor
 - 2 meetings (may 1, 2012 and april 3, 2013)
 - Approved 9 plans: Arunchal Pradesh, MP, Rajasthan, Sikkim, Tripura + Andhra Pradesh, Manipur, Mizoram, West Bengal



Indicative structure and contents

SAPCC: Structure



- Statement of issues or problems
- Assessment ongoing initiatives
- Identification of key actors
- Identification of major gaps in existing initiatives and delineation of strategies needed
- Prioritized list of actions (short & long term) to implement strategies
- Listing of key elements needed: institutional structures, funds, expertise, policy/legal measures, monitoring, etc
- Specific project proposals
- Time frame for implementation

Part A: Climate Profile



1. Context: Statement of issues

- Régional développement issues & priorités vis-à-vis national priorities & NAPCC
- Baseline assessments: socio-economic & ecological data for analyses and scenarios building
- Identification of main local stakeholders
- Past & ongoing climate change trends & related risk management actions
- Possible future climate scenarios
- Knowledge gaps



2. GHG emissions and energy needs inventory

- GHG emissions inventory by sector/sub-sectors
- Assessment of energy needs on a time series basis

3. Vulnerability Assessment

- Climate Change scenarios (at relevant spatial & temporal scales)
- Assessment of physical & economic impact in vulnerable sectors
- Assessment of impacts on vulnerable groups

Part B. Climate Change Strategy



- Review existing CC and sectoral policies
- Sectoral analysis: Entry points, opportunities, trade-offs (incl. bet adaptation & mitigation priorities)
- Possible options to achieve policy objectives & identified sector/regional priorities
- Identification of criteria to assess identified options
- Cost benefit analysis of options
- Assessment of adaptive capacity and feasibility of implementing the options
- List of prioritized mitigation and adaptation options (costs; timeframe, political and social acceptance, regulatory needs, capacities & financial options)

Part C. Climate Change Action Plan



- List of measures needed (short & long term), indicating timeframe & sequence for implementation
- List of (public & private) ongoing and planned initiatives (who is doing what, where, how)
- For each option, identification of existing financial instruments and matching policy instruments
- Cost implications for the implementation of SAPCC
 - What are existing allocations, additional resources to be mobilized + potential sources for resource mobilization.
- M&E system (indicators, etc.) & structures
- Institutional implementation arrangements & capacity needed to implement identified measures

Standard Annexes



- Detailed emissions inventory
- Vulnerability maps
- List of proposals and project summaries
- Survey of public opinion



THANK YOU