

Mainstreaming Adaptation Concerns in Development:

Options and Challenges for the Asia-Pacific

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Outline

1. Definition, concept and options
2. Examples of mainstreaming
 - Local (e.g., Bangladesh)
 - National (e.g., Kiribati)
 - Regional/International (e.g., UNFCCC, ADB)
3. Barriers & countermeasures
4. Article 6 activities in relation to mainstreaming adaptation
5. Suggestions and Conclusions



What is Mainstreaming?

Mainstreaming involves integration of policies and measures to address climate change in ongoing sectoral and development planning and decision-making,

- to ensure long-term sustainability of investments and
- to reduce the sensitivity of development activities to both current and future climate (Klein, 2002; Huq et al., 2003).



Mainstreaming vs. Integration

- Mainstreaming is referred to the consideration of climate change adaptation in decision making processes such as planning or budgeting.
- Integration is used when specific adaptation measures are added to design and implement strategies.

Source: AfDB, 2003



Potential Benefits of Mainstreaming

- More efficient and effective use of financial and human resources than designing and implementing climate adaptation policy separately from ongoing activities
- Ensures consistency between the needs of poverty eradication and adaptation
- Additional allocation of funds for adaptation



Approaches for Mainstreaming

- Developing country Governments
 - Incorporating adaptation concerns in PRSP, NEAP, NSDS, etc.
 - Integrating in national economic planning and budgetary processes
 - Strengthening coordination among sectors
- Development agencies and donors
 - Analyzing benefits of mainstreaming
 - Supporting priority adaptation activities identified by UNFCCC

Options for Mainstreaming

- Policy level vs. operational
 - National land use planning systems
 - Integrated water management strategies
 - River basin management plans
 - Building codes and infrastructure design
- Institutional vs. community-based
- Top-down vs. bottom-up

Scales/Levels:

Local, National, and International



Mainstreaming at Local Level

- *Integrating adaptation concerns in decision making through proactive micro-adaptation (PMA)*
- Anticipatory strategies, measures and means by engaging local communities, local governments and other stakeholders at the local level to minimize negative impacts and maximize positive impacts of climate change leading to sustainable development.



Key features of mainstreaming at local level

1. Community & NGO initiatives for assessment of V&A in relation to developmental goals at local level
2. Incorporating **traditional & local knowledge** in enhancing adaptation in critical sectors
3. Enhancing local coping capacity through education and outreach
4. Community-oriented private sector mechanisms (e.g., **community-based CDM projects** aimed at enhancing adaptation at local level – CDM for Household energy reduction CDM for community forestry projects)



Community-level V&A Assessment

- **Perceptions** of local people on vulnerability to climate change and key **indicators** in different sectors (food security, health, housing, quality of assets, livelihood, etc.)
- **Main coping strategies** and frequency of strategy use; Preferred adaptation options and their implications to reach their own developmental goals
- **Potential** for facilitating further adaptation through **policy and technology choices, and institutional arrangements**
- **Methodologies (Anthropological and Scientific)**
 - Historical matrix (Historical and contemporary coping strategies and frequency of their use)
 - Participants' observations (empirical)
 - Participatory rural appraisals
 - Focus group discussions, dialogues, semi-structured interviews
 - Mapping of local knowledge based on seasonal calendars/charts
 - Inter-generational dialogues



Historical matrix of coping strategies in times of flood, Manikganj, Bangladesh

Coping strategy	2002	1998	1988	1981
Promotion of housing techniques				
(a) raising the plinth of homes	OOO	OO	OOOO	OOO
(b) constructing manchans (hanging bamboo platforms inside houses)	OO	O	OOO	O
Taking shelter in elevated grounds	O	O	OO	O
Selling land	O		OOO	O
Fuel storage	OO	O	OO	OO
Storing dry foods	OOO	OOO	OO	OO
Reducing food intake	OOO	OO	OOOO	OOO
Banana plantation and bamboo propagation to be used as floating platforms and rafts for movements;	OO	O	OOO	OO
Catkin growing in sandy lands	OOO	OO	OO	OO

Key for frequency: OOOO very high OOO: High OO: Moderate O: low
Blank: not used

Community-based Flood Management & Adaptation Strategy in Bangladesh

Goal: To enhance adaptive capacity and improve the quality of life “through establishing linkages of community-based collective self-help initiatives with institutional mechanisms and policy regime under an **integrated, people-centric flood management framework**”

Objectives: To establish local community-led processes with a view to enhance **proactive adaptation to floods** through

- Enhancing individual and collective safety measures
- Responding collectively to flood warnings
- Safeguarding livelihood opportunities
- Streamlining relocation, if necessary
- Strengthening micro-management of shelters
- Fostering rehabilitation

Source: Bangladesh Unnayan Parishad, Jan. 2004

Examples of bottom-up mainstreaming from other parts of **Asia & the Pacific**

- Flood & drought preparedness projects in Bihar & Andhra Pradesh, **India**
- RVCC project in northwestern **Bangladesh**
- Drought mitigation pilot project in **Sri Lanka**
- CACC Project in Thua Thien Hue Province, **Vietnam**
- Mangrove reforestation program, **Vietnam**
- Flood risk reduction in the Pampanga River basin, **Philippines**
- CIDA's Community Adaptation Project in **Cook Islands, Fiji, Samoa & Vanuatu**
- ADB-sponsored community-based adaptation studies in **FSM & Cook Islands**



Mainstreaming at National level

Bangladesh

Kiribati



08/04/2003

Bangladesh – Interviews on mainstreaming adaptation concerns in development

- **Ignoring:** No traces of integration of adaptation concerns in sectoral planning
- **Rejecting:** Active decision not to integrate adaptation concerns
- **Negative symbolic policy:** a deliberate strategy for non-action
- **Low marginal cost policy:** Selective integration and limited to “picking the low hanging fruits”
- **Support policy:** Integration of adaptation concerns only used as a support for other policy areas
- **Positive symbolic policy:** Mainstreaming as a result of strong external hindrances
- **Structure for national policy making:** several stakeholders working together with the government
- **Independent political actors:** in addition to, or in absence of national climate policy to integrate adaptation concerns



Mainstreaming adaptation in Bangladesh

Sector/Activity

Status on integrating adaptation

- Coastal Resource Management
 - Fresh water resources Mgmt
 - **Agriculture**
 - Human health
 - Ecosystems and Biodiversity
 - Research
 - **High level policy makers**
- Integrated Coastal Zone Mgmt – Yes
 - Disaster mitigation schemes - yes
 - Agreed to incorporate CC adaptation into the 25-year water sector plan
 - **Research level – Yes**
 - **Extension – No**
 - Not yet
 - Sunderbans – Yes
 - Other ecosystems – Not yet
 - Yes
 - **Least concerned**

Source: BUP, BCAS, 2003

Kiribati National Adaptation Programme

- National consultation process
- Social assessment of perceived climate changes over past 20 years
 - *Coastal Erosion: Affecting 1st and 2nd rows of coconuts*
 - *More Intense Sunlight: “The sun is coming closer to my island”...*
 - *Sea Level Rise: More intense storm surges - sea water from the lagoon entering taro and banana pits*
 - *Declining Fish Stocks: changing currents, sedimentation and over fishing*
- Prioritizing hazards and adaptation strategies
 - *Representatives from each island identified key hazards over the past 20-40 years, and proposed coping mechanisms to deal with them.*

<i>Hazards</i>	<i>Impacts</i>	<i>Adaptation Strategies</i>
High storm surge	Inundation – water becomes brackish	Wood embankment
	Coastal erosion	Plant mangroves; limit sand mining
Drought	Death of Crops, Diseases	Manage water reserves

- **Ranking adaptation options**
 - *Island representatives ranked adaptation options and classified them into four categories*
 - A - Urgent options which can be done by communities
 - B – Urgent options for which communities need assistance from the Government
 - C – Options that are less important/urgent
 - D – Adaptation options that are not yet needed
- **Allocating responsibilities to ministries**

Adaptation Option	Category	Rank	Lead Ministry
<i>Awareness raising</i>	B	1	MELAD MCTTD/MEYS
<i>Water Resources</i>			
Protect water wells	B	3	MPWU
Assess available water	B	4	MPWU
Water pumps & pipes	B	2	MPWU
<i>Inundation management</i>			
Forecasting	B/A	12	MCTTD
Sluicing gates	B	43	MPWU
Planting mangroves	B	29	MELAD

Assessing the Type of Response Required

Adaptation options were then divided into five categories according to the nature of the response:

1. Changes to government policies/strategies
2. Changes to laws and regulations/ enforcement
3. Extension and information to communities
4. Formal engineering and construction works
5. Informal engineering and construction works by households and communities



Matching Adaptation Priorities with Ministerial Operational Plans

<i>Adaptation Option</i>	<i>Rank</i>	<i>Lead Ministry</i>	<i>Type of Response</i>	<i>Applicable Program</i>
<i>Awareness raising</i>	1	MCTTD MEYS	Ext/Infor.	Meteorological information Curriculum development
<i>Water Resources</i>				
Protect water wells	3	MPWU	Formal Eng. works	Water systems in Outer Islands
Assess available water	4	MPWU		
Water pumps & pipes	2	MPWU		
<i>Mng of Inundation</i>				
Forecasting	12	MCTTD	Ext/Infor.	Meteorological information
Sluicing gates	43	MPWU	Eng. Works	Civil Engineering Services
Plant mangroves	29	MELAD	Ext/Infor.	Conservation & protection

Mainstreaming at regional/international level

- UNFCCC/Kyoto Protocol
 - Current provisions on adaptation
 - Buenos Aires Plan of Action
 - *Is there a need for a separate **Adaptation Protocol to the UNFCCC?***
- Development Agencies and Donors
 - UNDP (Adaptation Policy Framework)
 - GTZ, JICA, SIDA, etc.
 - World Bank
 - Asian Development Bank

Adaptation Provisions in the UNFCCC and Kyoto protocol

- The terms “adaptation”, “adverse impacts of climate change” and “vulnerability” are mentioned at least 20 times in the UNFCCC - Articles 3, 4, 11
- References to adverse impacts: Article 7 of COP; Article 9 of SBSTA and Article 10 of SBI (implicit)
- Article 10 of the Kyoto Protocol – Mandates the collection of a share of proceeds from CDM activities

A comparison of the mitigation and adaptation regimes under the UNFCCC

Mitigation

- Clearly defined
- Clearly stated objective
- Standard measures and objectives (emissions and concentrations)
- Baseline (1990 emissions)
- Global environmental benefits
- Incremental costs calculable
- Clear financial arrangements
- Legal instrument (Kyoto)

Adaptation

- No clear definition
- No objective stated
- No standard measures (hardly any measures at all)
- No baseline
- Absence of/limited global environmental benefits
- Incremental costs not possible or very difficult to calculate
- Multiple, inconsistent and insufficient funding
- No legal instrument

Informal responses to the proposal on Adaptation Protocol to the UNFCCC in selected Asia-Pacific Countries

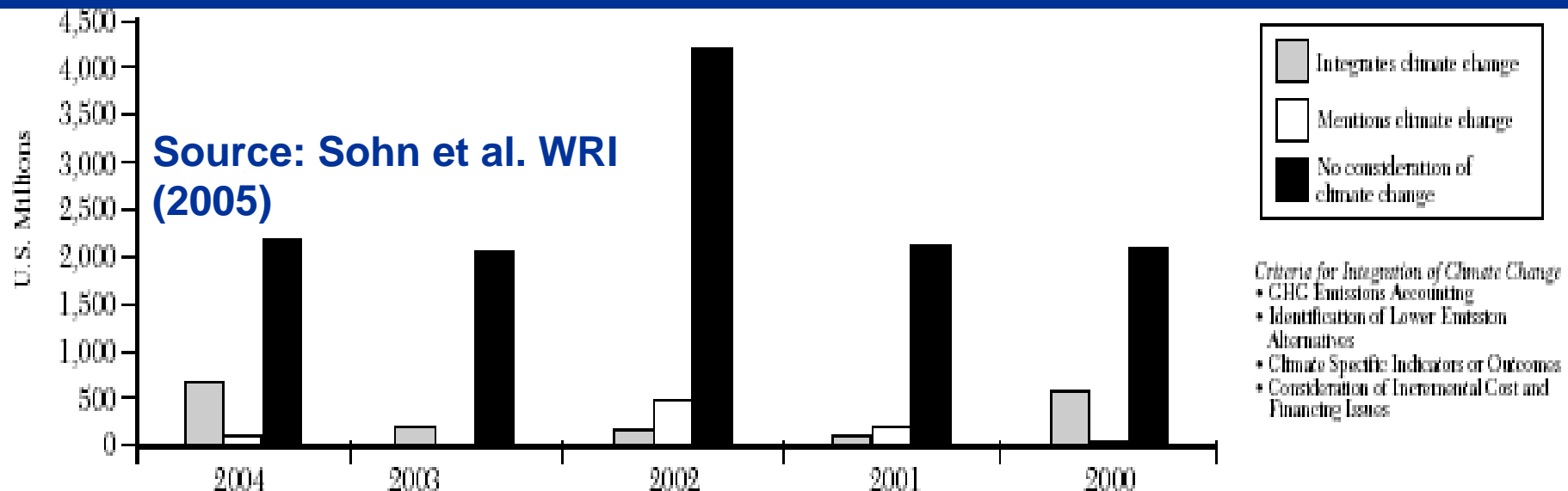
- India – Some positive; Many negative
- China – Neutral
- Indonesia – Strongly positive
- Korea – Negative
- PIC – Strongly negative



Mainstreaming Adaptation in Development Assistance

- GTZ – Pioneer in looking at the issue
- CIDA, SIDA, DANIDA, USAID, JICA, etc. are beginning to look at.
- World Bank and ADB
 - WB Projects: Mainstreaming Adaptation to Climate Change (MACC) in Caribbean
 - Kiribati National Adaptation Programme

Volume of World Bank lending that does not consider Climate Change Concerns



Adaptation Mainstreaming at ADB

- ADB's Climate change adaptation program in the Pacific
 - Guidelines for Adaptation Mainstreaming
 - National Climate Risk Profile and Project Adaptation Brief
 - Pilot projects:
 - “Climate proofing” the infrastructure, human health and environment components of the FSM National Strategic Development Plan
 - “Climate proofing” the Cook Islands National Development Strategy



Barriers for Mainstreaming

- Information and knowledge gaps
 - limited awareness on options for mainstreaming
 - lack of knowledge on synergies between adaptation and sectoral development
- Weak human and institutional capacity
- Inappropriate policy context – Fragmented role of ministries & lack of coordination
- Lack of experience in planning and implementing adaptation measures



What needs to be done?

- Practical demonstrations on promising mainstreaming options, rather than theoretical approaches
- Building support for more detailed vulnerability & adaptation (V&A) assessments in priority sectors
- Translating climate change and adaptation into easily understood issues – e.g., fires, storms, coastal erosion
- Building capacity
- Strengthening institutional frameworks
- Streamlining financial mechanisms
- Improving governance

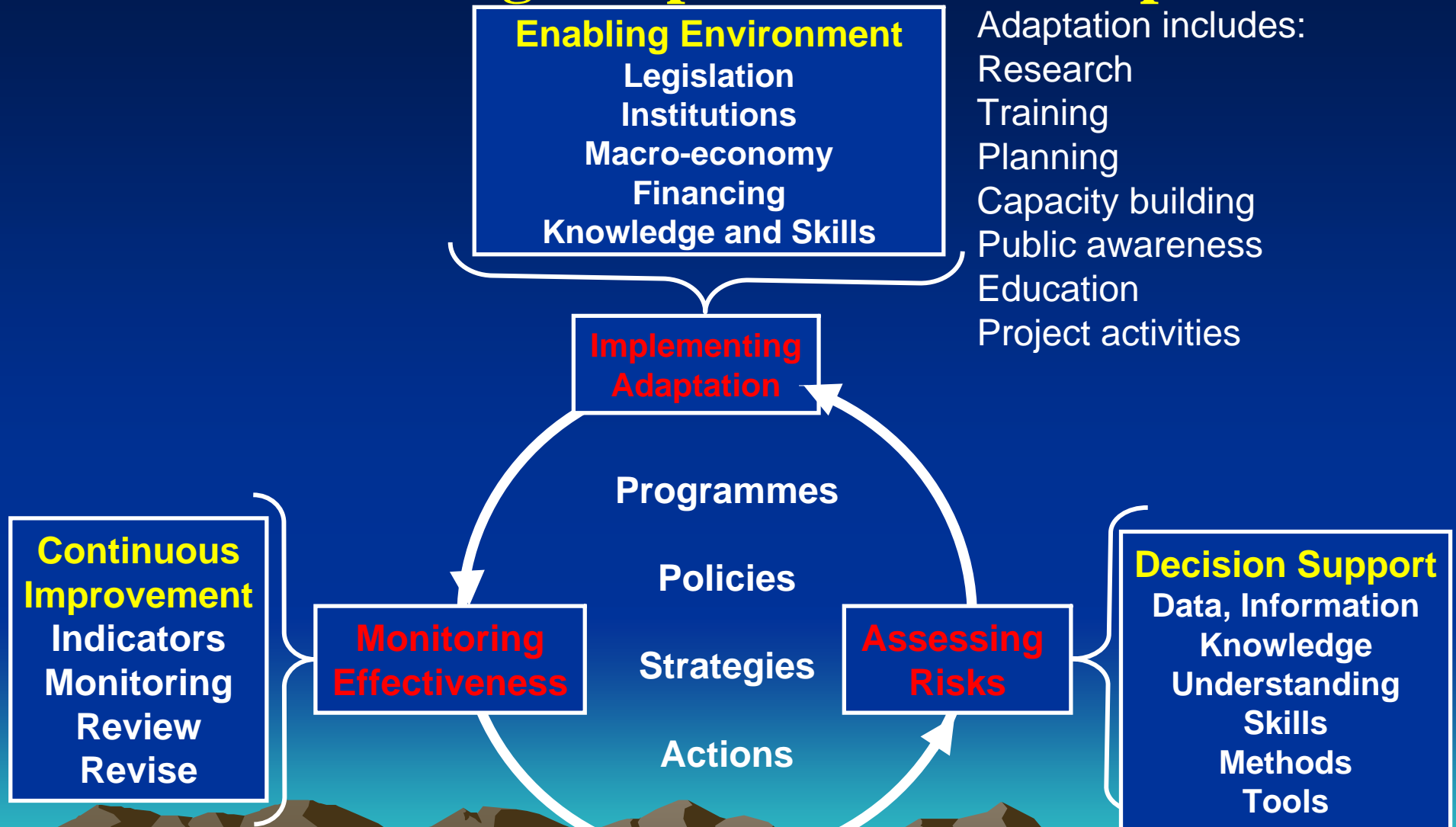


Mainstreaming Adaptation from the Article 6 Perspective

- Awareness and Education:
 - Conveying right information (e.g., impacts, vulnerabilities) in appropriate languages
- Stakeholder participation:
 - Engaging the right people (policy makers, civil society, etc.)
- Strengthening institutional frameworks
- Training of national specialists



Multi-Dimensions of Mainstreaming Adaptation in Development



Based on Hay, 2004 and others

Suggestions

- Raise the policy profile of adaptation
- Mainstream adaptation in all developmental programs, especially in climate-sensitive sectors by focusing on avoiding “mal-adaptations”
- Focus first on “no-regrets” adaptations and those with “co-benefits”
- Enhance the effectiveness of delivery of ODA on adaptation
- Create additional mechanisms and channels for facilitating learning and dialogue on adaptation



Concluding Remarks

- Adaptation must become an important focus of development at all levels. However, **necessary awareness, research, policy tools and finance are not yet available** for effectively integrating adaptation and developmental policies in Asia.
- **Local**: Policies for facilitating proactive micro-adaptation deserve immediate attention.
- **National**: Further research on, and assistance to mainstreaming SD in national development plans is important.
- **International**: Strong and inclusive global cooperation agreements to mobilize funding for mainstreaming adaptation in development plans are crucial.