### Climate Impact Studies in Support of Adaptation Planning and Practices

Perspectives from ADB Supported Activities

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# In the next 15 minutes...

- The wide context
- A diverse range of assessments supported by ADB
- Lessons learned and major gaps
- Opportunities

## 1. The wider context

	Mitigation	Adaptation
Focus	Cause	Consequences
Nature	Public health	Medical treatment
Benefits	Global, long-term	Local, immediate
Reason to act	Obvious	Not obvious
Cost	Low to begin with	Initial investment often high

But both are necessary!

### **Diagnosis** is the basis for effective treatment.

## 2. ADB supported impact studies But first of all, why?



"Other" includes Finance, Health and Social Protection, Industry & Trade, Public Sector Management, Unclassified

#### But first of all, why?

**ADB's Climate Change Strategic Priorities** 

**Scaling-up Clean Energy** 

Encouraging Sustainable Transport and Urban Development

Managing Land Use and Forests for Carbon Sequestration

Promoting Mimate-resilient Development

Strengthening Policies, Governare and Capacity

A wide range of assessments differing in purpose, approach and methods, determined by motivation, decision context and reality of access to data and capacity.

#### Three broad categories of assessments aimed at:

- Capacity building and sensitization;
- Informing development policy process;
- Supporting investment decisions at project level

Example 1: Community-based vulnerability mapping and adaptation planning



(Source: ADB, 2011

- **Purpose:** to engage and enable vulnerability communities to develop and implement practical adaptive measure;
- Approach: participatory (building on traditional knowledge);
- Methods: community vulnerability mapping, planning workshops;
- Outputs: climate vulnerability and risk atlases, community adaptation plans;
- Outcome: direct adaptation actions at individual, household and community levels triggered, community adaptation priorities integrated into government policies and programs



#### Example 2: Ho Chi Minh City Adaptation to Climate Change

#### (Source: ADB, 2010

- **Purpose:** to inform the adaptation priorities of the municipal authority
- Approach: standard scenario-impacts-adaptation assessment
- Methods: scenario development, hydrological modelling, economic analyses;
- Outputs: vulnerabilities of core infrastructure and economic activities, adaptation options;
- Outcome: priorities for adaptation identified and options evaluated

**Example 3: Strengthening the Climate Resilience of Water Sector Infrastructure in Kuhlna, Bangladesh** 



#### (Source: ADB, 2011

- Purpose: to "climate proof" the investment in water supply infrastructure
- Approach: standard scenario-impacts-adaptation assessment
- Methods: scenario development, in-depth hydrological and hydraulics modelling, economic analyses;
- Outputs: vulnerabilities of core components of the planned water supply structures, adaptation options;
- Outcome: climate risk management options integrated into the design of structures (e.g. location of water intake points, conveyance capacity of drains, size of impounding reservoirs, outfall capacity of outlet structures etc.)

### 3. Lessons Learned and Major Gaps

- Participatory approach to impact assessments is effective in sensitizing stakeholders and motivate sustainable adaptive responses;
- Access to data and information, and technical capacity are uneven across the Asia Pacific Region;

### 3. Lessons Learned and Major Gaps

- There is a double-edged challenge surrounding data and scenarios: there is certainly a deficit in good quality scenario data particularly at the scales relevant to adaptation planning; while a vast amount of available data have not been fully explored and "intelligently" made use of;
- Collaboration and communications among different communities of practices are desperately inadequate...

### 4. Opportunities

- User needs-oriented research approach is gaining attraction: co-production of knowledge, applied research, mainstreaming climate change adaptation;
- The emergence of knowledge brokers/boundary organizations: e.g., NIES;
- Opportunities for regional collaboration facilitated by key regional partners: e.g., AIM, ADB's Regional Consortium for Climate Scenarios initiative

### 4. Opportunities

ADB facilitating a regional consortium to develop climate information and scenario "library" for Asia and the Pacific

- User needs-driven;
- Consortium approach;
- Up to date science;
- Exploration of wide ranging uncertainties;
- Detailed documentation;
- User guide, training and help desk

### 4. **Opportunities**



