Climate Change Impacts, Vulnerability and Adaptation Assessment: Methodological Issues

UNFCCC Asian Regional Workshop on Adaptation
Beijing, China, 11–13 April 2007

Xianfu Lu

National Communications Support Programme (NCSP)
UNDP-UNEP-GEF

Xianfu.lu@undp.org

National Communications Support Programme

UNDP, through its HQ, RCUs and COs, undertakes a comprehensive suite of technical and policy support on adaptation:

- Assistance in formulating and implementing enabling activities (e.g., NCs, NAPAs);

- Support for the preparation of NCs (NCSP);

- Assistance in formulating and implementing adaptation projects;

- Policy advice on integrating climate change adaptation into national development policy decision and sectoral planning

National Communications Support Programme

(http://www.undp.org/adaptation)

In the next *10-12 minutes* or so...

1. Introduction - development of CCIAV methodological frameworks

2. Good practices – guidance on the selection of methods and tools for policy relevant CCIAV assessments

3. **Major gaps** – limits and barriers to the application of appropriate methods and tools

4. Ways forward - thoughts on practical measures to address the gaps

1. Introduction

- **UNFCCC** coming into force
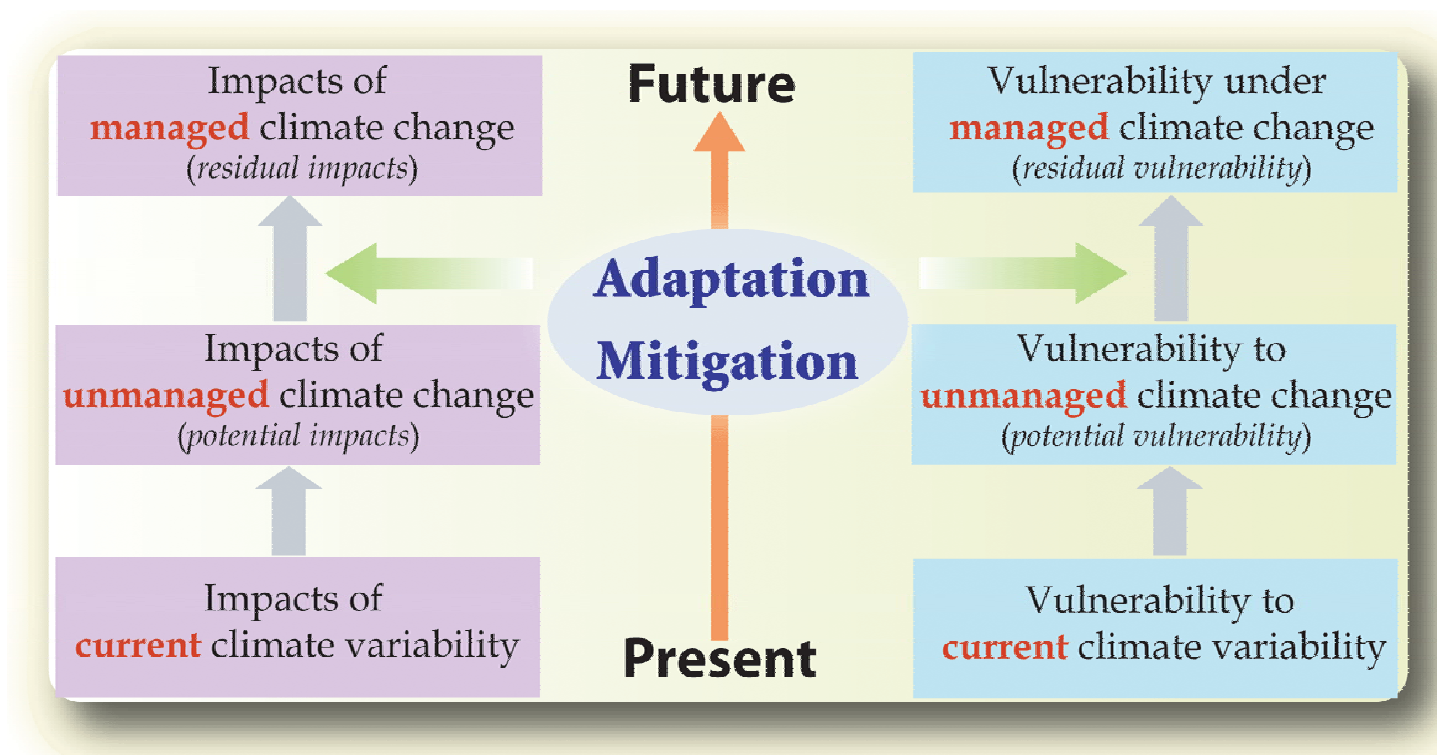- IPCC **1st** and **2nd** Assessment Reports

CCIAV assessments	Questions of investigation	Assessment frameworks	Climate scenario needs
First generation	Does climate change matter?	Sensitivity analysis	Synthetic scenarios
Second generation	What are the likely impacts of climate change?	Impact assessment	Analogue or climate model-based scenarios
Third generation	How to manage climate change-induced risk?	Risk management framework	Model-based projections with uncertainties quantified

- **Second** National Communications from NAI Parties
- IPCC **4th** Assessment Report

- **Initial** National Communications from NAI Parties
- IPCC **2nd** and **3rd** Assessment Reports

Driven by demand for policy relevant information, CCIAV has evolved in the focus and scope of investigations.

1. Introduction *(cont.)*
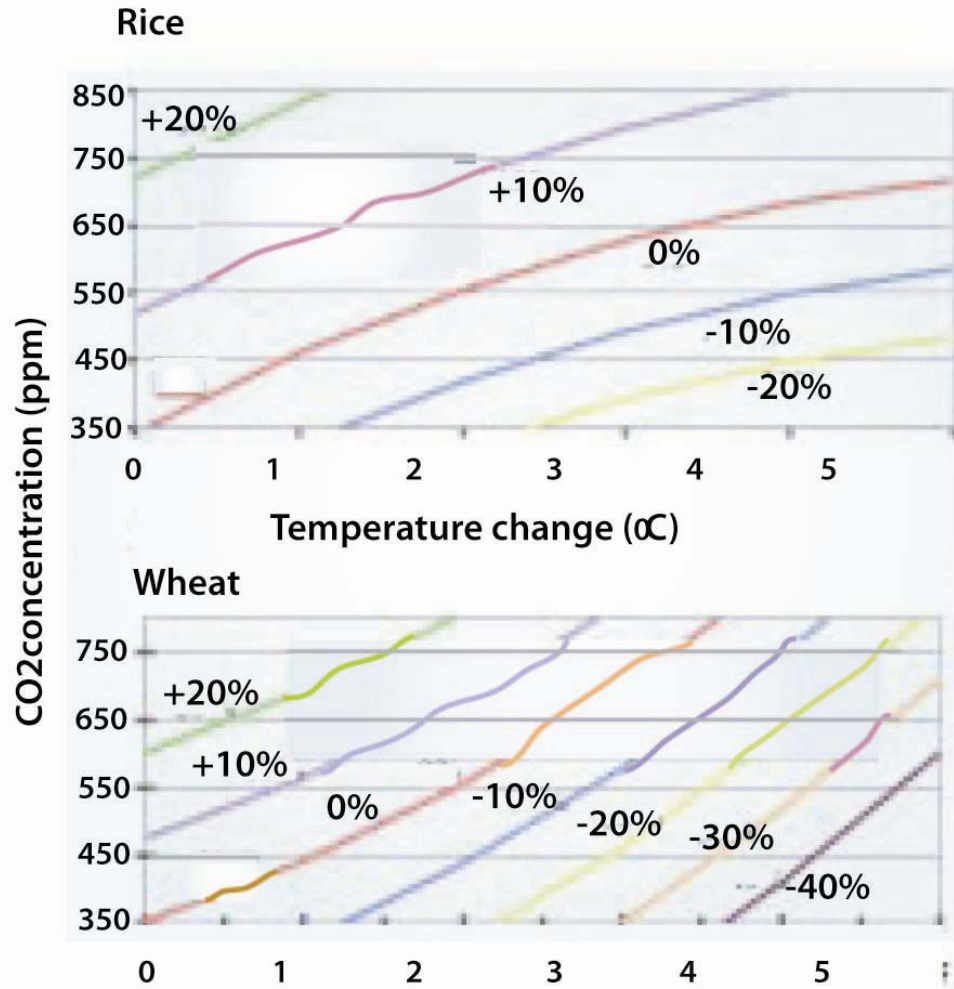

CCIAV needs to shift from research-driven agendas to assessments tailored towards decision making related to the policy options of climate risk management.

2. Good practices

- **Before going on the "fishing expedition" for methods and tools, be clear about the purpose, policy and research questions of the Assessment;** (e.g., the self-assessment process for the development of SNC project proposals, Uzbekistan, etc.);

- **Applied appropriately, simple methods** (e.g., sensitivity analysis) **can be very helpful in identifying critical thresholds and assessing future risks** (e.g., assessing impact on crop yield within India's INC etc.)

2. Good practices *(cont.)*

CCIAV assessment does not always have to be complex - **simple analysis can sometimes offer useful insights.**

An example of using synthetic scenarios to analyze the sensitivity of crop yields to key climate and environment parameters.
[Source: Government of India. 2004]

2. Good practices *(cont.)*

- **Before going on the "fishing expedition" for methods and tools, be clear about the purpose, policy and research questions of the Assessment;** (e.g., the self-assessment process for the development of SNC project proposals, Uzbekistan, etc.);

- **Applied appropriately, simple methods** (e.g., sensitivity analysis) **can be very helpful in identifying critical thresholds and assessing future risks** (e.g., assessing impact on crop yield within India's INC etc.)

- **Stakeholders to be fully engaged in the various stages of CCIAV assessments** (e.g., Bangladesh NAPA process, AIACC regional studies in Mongolia, Indonesia and the Philippines, Mekong River Basin, etc.)

3. Major gaps

- (Seemingly!) Too many options but lack of straightforward means to make the **"best" choice**;

- **Rigorous validation, testing and application of "imported" models and tools hindered by constraints of data availability and technical expertise;**

- **Lack of integration across sectors limiting the policy relevance of CCIAV assessments;**

- **Treatment of risk and uncertainties associated with the methods, tools and results of CCIAV assessment not sufficiently transparent and policy relevant**

4. Ways forward

The UNFCCC could play a major role in addressing these gaps by initiating and facilitating a wide range of supporting activities:

- **Compilation and dissemination of good practices and lessons learned (**e.g., through collaboration with key partners working at national level; learning mechanisms) **;**

- **Targeted training on selected methods and tools (**e.g., training on particular risk assessment tools etc.)

- **Providing tailored support to countries with special needs** (e.g., through the NAPA and SNC processes, bilateral and other multilateral initiatives etc.);

National
Communications
Support
Programme

For more details on the full range of support provided by the NCSP, visit
http://ncsp.undp.org

NCSP's Knowledge Network on V&A (http://ncsp.va-network.org) hosts a large number of reference materials and a discussion group.

Knowledge Network on Vulnerability and Adaptation to Climate Change

National **C**ommunications **S**upport **P**rogramme

UNDP UNEP GEF

Search

Welcome to the National Communications Support Programme (NCSP) Knowledge Network on Vulnerability and Adaptation to Climate Change!

The **NCSP** was funded by the **Global Environment Facility** (GEF) to provide country needs-driven technical and policy support for the preparation of Second, Initial or Third, as appropriate, National Communications (SNCs) from Parties not included in Annex I (NAI Parties) to the United National Framework Convention on Climate Change (UNFCCC).

Launched in June 2006, the NCSP has provided assistance to NAI Parties through a variety of support activities: analyses on the priority needs for assistance, organisation of initiation workshops and thematic training workshops, guidance on the design, planning and implementation of technical studies, development of guidance documents, and technical backstopping. As the vast majority of NAI countries are now starting the preparation of SNCs, the NCSP is expanding its support to include new activities and strength existing ones, in response to the increasing demand from countries.

Upon requests from NAI Parties, this online knowledge network is designed to be an integral part of the NCSP's support strategy. This web site will provide easier access to expertise, literature and information on V&A issues, and facilitate mutual learning among NAI SNC teams. This Network will support the work of the NAI teams through:

1. A resource centre, which contains a wide range of literature, models and tools, and sources of data for undertaking V&A assessments. The resource materials are organised around different thematic areas and by geographic region.
2. A network directory, which includes profiles of V&A experts and institutions from both NAI and AI countries who are in a position to provide assistance upon requests. Interested individuals from both NAI and AI countries are welcome to register to the Directory.
3. A moderated email discussion facility, where NAI experts can discuss technical and policy issues, exchange information and share good practices with their peers in NAI or AI countries.

The NCSP acknowledges the generous financial support from the Swiss Government for the development of this knowledge network.

Latest Messages

[NCSP Online Forum on V&A] discussion

National **C**ommunications **S**upport **P**rogramme

UNDP UNEP GEF