

LIMITS TO ADAPTATION, LOSS AND DAMAGE: ECONOMIC AND NON- ECONOMIC ASPECTS

Sitanon Jesdapipat, Ph.D.
Vice Dean for International Affairs
College of Social Innovation, RSU
30 August 2013
Westin Grand Hotel, Bangkok

Session III: Key Questions

- What is the climate-science related origin of loss and damage associated with climate change?
- What are the exact gaps in using the available climate information for future impact assessments and how these gaps can be overcome?
- How to address the uncertainty issue involved in climate projections so that the available climate information can be effectively used for decision making?
- Will designing and delivering climate information tailored to the end-users would enhance the proper climate information use?
- What all the above means for designing and implementing effective adaptation strategies?

Information source

- Secretariat report on loss and damage:
- http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600007316#beg
- Origin seen in Article 4:

E.g., Limits to adaptation

- Lack of compelling scientific evidence to convince people to adapt to CC
- Lack of feasible and implementable options
- Geographical, technological limits
- Poverty– economic constrain being main barrier
- **Lack of policy support, displace– regulatory**
- Risk lover – social, innate adaptability
- **Multi-stakeholder tasks**, not exclusive to one party and it requires great effort in coordination– which implies high transaction costs if not efficient– main implications for designing data and information systems for CC adaptation

The challenge for economics

- Average changes (temperature, sea level)
 - Easiest to model – and least important for now??
 - Bad for coral reefs, polar bears; survivable for humans
- Variability of weather (extreme events)
 - Hurricanes, heat waves – increase in variance
 - Causation: variance was not zero before climate change
- Risks of abrupt, irreversible change of state
 - Chaos/complexity theory, limits of useful modeling
 - Probabilities low but endogenous, rising
- “Priceless” (unmarketed) externalities
 - What is the income elasticity of the value of a life?
- Long lags, discounting, and uncertainty
 - What is the present value of a sustainable future?
 - New policies are needed now, decades before results will be visible, and long before all uncertainties are resolved

CC are key long-term issues

- CC is long term concept, politics short-term
- Risks vs uncertainty
- Actions incur additional financial costs
- Impacts on competitiveness of economy
- Impacts are asymmetrical, social costs
- **Science does not define danger, politics does**

UNFCCC Reminders

- “to achieve ... **stabilization** of greenhouse gas **concentrations** in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.
- “Such a level should be achieved within a time-frame sufficient to allow ecosystems to **adapt** naturally to climate change, to ensure that **food production** is not threatened and to enable **economic development** to proceed in a sustainable manner.”

How to overcome?

- Getting the information out to complement and enable ***adaptive*** local knowledge– by targeting public sector investment on information systems
- Well planned, well versed, well exercised, well executed
- Learn from others– learning platform & sharing information through regional institutions (e.g., MRC)
- Redesign policies and redirect (additional) funding for information systems
- Pick the low-hanging fruits!! Maximize the avoided costs!!!
- Leadership and team work!!!

What do limits mean?

- Need a radical change in paradigm, including recognizing the importance of information systems
- Preventive costs are lower
- Precautionary Principle, a must

How to overcome?

- Evidence-based knowledge shared
- Pro-poor policy, conducive environments
- Enhanced transition towards ecologically sensitive practices, as an immunity
- Planning and effective implementation