Welcome Note International Scientific Conference on Climate Risk Management 5-7 April 2017

Welcome!

We are delighted to welcome you to Nairobi, along with about 80 other participants representing over 35 countries. Below you can find further information on the purpose and key outputs of this pre-scoping meeting meeting.

Purpose

Process and outputs

Rapporteuring & Remote Participants

Background: IPCC framing climate risk management

Recommended reading

- 1. Vision paper by the IPCC chairman on AR6
- 2. A background paper on climate risk management in the IPCC
- 3. The Summary for Policy Makers of the AR5 WGII report:
- 4. The Summary for Policy Makers of the AR5 Synthesis Report

Purpose

Our international scientific conference, co-sponsored by IPCC, aims to inform the AR6 just ahead of its formal scoping meeting, taking place in early May 2017 in Addis Ababa.

Increasingly, the audience for information on vulnerability, impacts and adaptation has broadened far beyond just the policymaking community associated with the UNFCCC. There are opportunities to better organize the next IPCC assessment to respond to the needs of a much wider set of decision-makers dealing with climate risk, and while doing so also better serve the UNFCCC. Over the coming days, our aims are to

(1) identify *key frameworks, metrics and formats* in which researchers can present existing research and other types of climate risk information in a way that will better inform climate risk management for the most vulnerable,

(2) identify *key areas of research* that are needed to inform climate risk management for the most vulnerable (and which may still be implemented ahead of the cutoff of the AR6)

(3) *inspire commitments* for research or research-policy interfaces that will address these needs.

Process and outputs

This conference will convene a participatory dialogue between humanitarians, development actors, scientists, and adaptation practitioners on the use of climate information in policy and practice, with a particular focus on managing risks facing the most vulnerable groups.

Outcomes of this conference will include a mapping of information needs by policy makers and practitioners; this will spur research that can later be assessed by the IPCC AR6 Assessment Reports. In addition, existing experience relevant to AR6 will be documented as an output of the conference.

Specifically, we intend to produce the following outputs:

- 1. Meeting outcomes will be documented in participatory exercises, including the collection of crowd-sourced information from the participants. This will be summarized in:
 - a. An infographic on the key highlights of the meeting
 - b. An interactive report of meeting discussions that allows for comment and input by the reader.
- 2. A report on the metrics and formats that can be used to present climate risk information to inform policy and practice in support of the most vulnerable, including examples
- 3. A document with research priorities to support climate risk management for the most vulnerable
- 4. Ideas for of collaboration to continue dialogue on the research and implementation of climate risk management for the most vulnerable.

We will submit a short summary document to the IPCC for consideration at the Addis scoping meeting for the AR6, and publish a journal article for a broader

audience, acknowledging all contributions. These documents will be overseen by a small steering committee, with options for inputs and review by others.

Rapporteuring & Remote Participants

Each session will have a rapporteur that will record key outputs from the session that will be consolidated into a <u>google document</u>. All remote participants and and in-person participants will have the opportunity to input comments to the google document after the close of each day. These comments will be integrated into the conference outputs and report.

Some remote participants will be calling in to present during particular sessions. In addition, after the close of Day 1 and Day 3, there will be a dedicated session for remote participants to reflect and provide key inputs into the content from the previous day. These inputs will also be integrated into the conference outputs.

Background: IPCC framing climate risk management

The IPCC Special Report on Managing the Risk of Extremes and Disasters to advance Climate Change Adaptation (IPCC, 2012) highlighted how **risk is determined by hazards, exposure and vulnerability**. This definition of risk, which helped bridge the gap between the climate change adaptation and disaster risk management communities of research, policy and practice, also found its way into the AR5 (IPCC, 2015), with a broader definition of hazards that also includes gradual trends and threshold effects.

This framing not only helped to advance our understanding of the role of climate in increasing the risks facing ecosystems and societies at large, but in particular also the most vulnerable groups. At the same time, it helped to start organizing some of the climate science information in ways that are more appropriate for decision-making about risk.

In the summary of the IPCC AR5 WGII report, these definitions were used to compile *information about key risks also by region and across timescales*. This exercise highlighted challenges of usefully combining information that is highly context-specific, and also raised questions about how much information from beyond the climate-specific literature would need to be assessed to do justice to the

exposure and vulnerability dimensions of climate risk, including options for better managing risk.

This framing subsequently spawned further work taking IPCC assessment findings to user groups, for instance in the case of the CDKN summaries of the IPCC SREX (CDKN, 2012), and later of AR5 assessment findings for policy makers in developing countries (CDKN, 2015). Other examples of such interfaces that draw from the risk management framing in the SREX include the growing work on attribution of climate extremes (e.g. National Academy, 2016). At the same time, it is clear that there are many gaps in making such information useful for decision-makers, and in ensuring decision-makers' needs feed research priorities and assessments (e.g. Coughlan de Perez et al. 2015).

Another perspective of climate risk, more explicitly connected to the discussion on mitigation pathways, is currently framed through the so-called "burning embers" figure, displaying "key reasons for concern", originating already from the third assessment report. This way of identifying risk, while challenging, did offer the opportunity to connect to mitigation pathways in the AR5 synthesis report.

The AR6 is expected to build on the risk framing of the AR5, but with an even stronger focus on solutions, and an aspiration for even more integration between working group II (vulnerability, impacts and adaptation) and III (greenhouse gas mitigation).

Recommended reading

We recommend a review of the following documents:

1. Vision paper by the IPCC chairman on AR6

This paper focuses on a solutions framework, included particularly in the following paragraphs:

"In the AR5, the climate change impacts and responses were essentially viewed through a risk- based framing approach, developed mostly by WGII. This approached conceptualized the risks arising from the overlapping of climate hazards, exposure and vulnerability, leading to impacts that provide feedback to socioeconomic processes and the climate system. The AR5 assessed the potential for reducing the risks through both adaptation and mitigation. The concept of risk in the AR5 was derived from a rich set of literatures on risk, risk perception and risk management, and these are entirely compatible with a solution-based framework and indeed derive from similar motivations. **The integration of the risk framework with the solutions- focused, problem-solving frameworks should be the overarching framing of the AR6**."

and

"It is crucial to remember, when scoping for the AR6, that it will be communicated to non- specialists. In this regard, the structure of the report, as logical and focused as possible, as well as a consistent use of terminology across the AR6, will go a long way in improving its readability and comprehensibility. This is why getting the framing of the report right, through the double risk and solution-based approach, is essential: a consistent framing throughout the report will enable a coherent assessment across WGs and chapters."

Our discussion is not only about identifying ways to frame climate risk over time, but about ways to *manage* climate risk – a strong focus on decision-making.

The WGII contribution to this vision paper goes into further detail on this topic.

In addition, also note at least two of the cross-cutting issues identified for AR6 (from page 45)

"2. Risk assessment I-II-III

Risk assessment provides a common framework, going beyond cost-benefit analysis, for addressing responses to climate change. Due to the interactions of climate change as well as environmental and human factors involved in exposure, vulnerability and adaptive capacity, a harmonised approach across Working Groups is desirable. More specifically, this theme covers the assessment of risks associated with progressive climate change, i.e. caused by slow onset events such as ocean acidification or sea level rise, as well as fast onset events such as extreme weather and climate events (including compound and cascading events). This theme also covers the risks of abrupt and/or irreversible changes and risks of crossing thresholds in ecosystems or socio-ecological systems. Risks can be reduced by implementing adaptation and/or mitigation options. At the same time, some mitigation options, and solar radiation management, carry their own risks. Assessments of risk perception and the social acceptability of such options, their economic costs and impacts on equity are carried out across Working Groups. "

and

"8. Decision making II-III

Climate change mitigation and adaptation responses entail risks; decisions about their adoption are made under conditions of uncertainty. Climate change decisions are complex since the pros and cons of alternatives need to be evaluated against multiple criteria and the outcomes may be realized in the distant future. Besides, climate change decisions involve numerous decision makers with diverse objectives and levels of understanding of the science and the complexity of analytical tools. There is a common 47 need across Working Groups II and III need to address institutional aspects of decision - making across all scales. Decision making methods and tools can support transparent and informed choices from among alternatives by structuring decision problems, identifying alternatives, quantifying uncertainties and risks and valuing outcomes. An integrated and interdisciplinary approach that addresses all dimensions and scales of decision making is essential for generating a comprehensive, policy relevant narrative across Working Groups II and III. "

2. A background paper on climate risk management in the IPCC

https://docs.google.com/document/d/1e2N3J3qsGzUxR4b9hGppl3UuIXrj-EKLh-2--Z M6Qbg/edit?usp=sharing

This was prepared for this meeting, including a discussion of evolution of risk framings in subsequent IPCC reports. We welcome comments on this paper from meeting participants.

3. The Summary for Policy Makers of the AR5 WGII report:

https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5 wgII spm en.pdf

Please see particularly

- Figure SPM.1 (page 3-4) and SPM.8 (page 26)
- Assessment Box SPM.1 (page 12-13)
- Assessment Box SPM.2 (page 21-25)

4. The Summary for Policy Makers of the AR5 Synthesis Report

https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf

Please see particularly

- Assessment Box SPM.8 (page 14)
- Assessment Box SPM.10 (page 18)
- Table SPM.3 (page 27)