International Conference on Climate Risk Management

Conference Notes
5-7 April 2017

Day 1

Opening & Welcome

A. Process: A series of speaker set the scene for the conference including Idris Ahmed (Kenya Red Cross), Debra Roberts (IPCC WGII co-chair), Hans Otto Poertner (WGII co-chair), and Maarten van Aalst (Red Cross Red Crescent Climate Centre).

B. Key Outputs:
   1. **We are currently facing real problems** - the Red Cross is currently responding to the ongoing drought in Kenya. This meeting will help to capture some of the needs of the most vulnerable people.
   2. **We have entered into a second phase of the IPCC**: There will be closer coordination between the IPCC and UNFCCC including periodic stocktake against the mitigation and adaptation goals of the Paris Agreement.
   3. **The AR6 WGII report will need to answer the adaptation questions from the ground** around areas such as urban development – how will it look in the rapidly developing African countries? It will follow a different model than that of developing countries.
   4. **This meeting fits into the IPCC process as a "pre-scoping"** meeting that will feed into the upcoming official IPCC meeting in Addis Ababa.
   5. **The process for the IPCC**: IPCC approves outline, author selection process coordinated with govs, zero order, 1st order, 2nd order, review of govts, final order draft, develop summary for policymakers, final distribution and govt review, publishing
   6. **Why are we here:** informing scoping of AR6, informing research agenda (there are knowledge gaps that affect the quality of the IPCC assessment report – especially for the most vulnerable), identifying ways to connect climate knowledge to decision-making (We are in a different world, IPCC 2.0, climate is a pervasive issue that affects people all over the world, most vulnerable people are looking to the IPCC to inform their decisions)
   7. T**his meeting will be be interactive, engaging**, and potentially take participants out of their comfort zones in order to enter a space "where the magic happens"

The Climate Risk Management Narrative

A. <u>Process</u>

- A panel discussion to frame the climate risk management narrative. The panel included Allan Lavell (in person)(DRM), Debra Roberts (in person)(local decision making), Zinta

Zommers (in person)(early warning systems), Saleemul Huq (Remote)(needs of the most vulnerable), Stephane Hallegate (remote)(key risks and economics)

- Each panelist gave a 5-10 min presentation of their thoughts on their given topic, moderated by Maarten who also asked specific questions to in-person participants to guide their presentations.
- Questions were then taken from the floor, to which each panelist responded

B. Outputs

Overall, the (under)development-related root causes of risk were a key focus of the session

A number of sub-themes emerged from the discussion, detailed below:

The role of building resilience in risk management strategies

- Stephane Hallegatte presented a report published recently by the World Bank/GFDRR called Unbreakable – Building the Resilience of the Poor in the Face of Natural Disasters.
- The report recommends a fourth building block to the classic risk assessment framing of Risk = Hazard x Exposure x Vulnerability . The fourth block is called socio-economic resilience and at risk of adding another definition to the field, is defined as the ability of a population to cope with loss of assets and to recover from loss of assets (e.g. through savings, social safety nets, insurance)
- The purpose of this new framing is to include a measure of loss of wellbeing into risk assessment rather than the traditional 'loss of assets' view. This makes it possible to account for the higher vulnerability of poor people, and ensure that economic analysis does not lead to investing mostly in rich areas (where the high-value assets are located).
- This provides space for multi-dimensional risk management – in particular at a national/sub-national policy level - that can include initiatives focusing on social protection and financial inclusion. It makes it possible to also connect better the challenges of disaster risk management and climate change adaptation with the development process: many interventions implemented to promote development and poverty reduction (for instance social safety nets) are powerful ways of building resilience of the population, if these development interventions are designed taking into account risk and climate change.
- We can't do either reducing risk or building resilience of population – must do both in a combined strategy. Without risk reduction, resilience-building instrument - such as financial tools and social safety nets - will not be sustainable. Without resilience-building, people will suffer from the disasters that cannot be avoided.

Risk management that is relevant to people at the local scale

- Saleemul Huq provided overall recommendations on how the IPCC process can better target the needs of the most vulnerable
    - Need to focus on information and guidance that is focused on adaptation activities and the efficacy of these that is focused on groups of vulnerable countries classified by the UNFCCC including LDCs and SIDS. These

practitioners and communities will be looking to IPCC to what works in community context.
    - Need to capture and present available information on Community-based adaptation and local scale risk management strategies – practitioners and communities will be looking to the IPCC for guidance on what works and this needs to be reflected. This is mostly in the developing country context, but it is also important to reflect recommendations for vulnerable groups in developed countries (for example, Hurricane Katrina highlighted disproportionate vulnerability related to poverty in New Orleans)
- Zinta Zommers outlined USAID's work and the UN SG's A2R initiative launched in Paris. A key pillar of the A2R is anticipating risk and she highlighted a number of key challenges for which research and publications are required:
    - How to issue warnings on different time scales – e.g. days to seasonal to decadal.
    - How can we give effective warnings at a local scale such as household? This scale is most relevant to the most vulnerable but currently, it is easier – technically and institutionally to issue warnings at the scale or regions.
    - How can we effectively build MHEWS – particularly that are useful at the local scale
    - How to connect top down with bottom up EWS and in-particular, there is more attention needed to the last mile of climate services and helping communities to build their own EWS
    - Even where we have sound warnings, getting people to undertake early actions is a significant challenge
    - Comes down to how to build local capacity to act

- Allan Lavell recommended a framing of risk that includes balancing opportunities with hazards and a more holistic perspective of risk that is not specific to disaster or climate risks.
    - A key challenge that both Allen and Debra identified is that often, climate risks are of low priority to the most vulnerable because everyday risks related to current development challenges are of highest priority.
- Communicating risk to communities is a key challenge – for example, communities will often ask for support to rebuild in the same place following a disaster, but how to communicate long term risks and that 'normal' is no longer there?

<u>Governance</u>

- Debra Roberts identified that the extent to which climate change is recognized in policy and practice is different depending on geographies of development. In the face of gross inequality and poverty, climate risks can be low priority for people and local priorities are often related to issues of development and in particular, governance. The cause of many of the risks are governance and leadership issues further up the chain.
    - A key focus therefore needs to be on tacking leadership issues leading to inequality – in the absence of this it is difficult to effectively deal with climate risk
    - Effective risk management might require transformative governance away from the status quo of thinking about development primarily as infrastructure
    - An example was given from the floor about current El Nino impacts in Peru

versus Ecuador. In Ecuador far fewer people are adversely affected although physical processes of the event are similar because of consistent government and strong public planning.

- Overall recommendation was to give more attention to vulnerability in risk assessment and management and in particular, to recognize that risk is endogenous to development in the framing, as that will guide the principles of analysis
- A key opportunity is that there is a rich literature on governance that is 'fodder' for the IPCC. However, there is a need to better engage practitioners and communities in developing publications

Limits to adaptation

- Saleem recommended that AR6 gives sufficient space to Loss and Damage – or, in the parlance of UNFCCC "residual risk", particularly ways in which considerations of L&D can be 'localized- - he cited the example of development of a national L&D mechanism in Bangladesh.

The Great Risk Framing Debate

Risk Framing	**For**	**Against**
Hazard, Vulnerability and Exposure (central figure of previous IPCC AR5 WG2 report)	It's already been agreed upon, it's embedded in the SREX and AR5 – so why would we pursue anything different? It captures the three reasons why 'things go wrong' and shows that the climate events can be the trigger for problems but not the entire cause of problems. The framing shows that we have choices about what continues to go wrong	The framing is static and not flexible enough to reflect reality It is not solutions orientated Misses the risk profile Does not reflect well the dynamic interactions and feedbacks between the various elements i.e between vulnerability and capacity or even the relevance of susceptibility and sensitivity in a clear way.

	It brings the concept of vulnerability central to the IPCC The challenge is how to make AR6 focus more on the conditions that make people vulnerable	
Burning embers (also features in AR5 WGII and SYR)	It helps natural scientists to understand risk, which is necessary to make science relevant to policy makers. It puts the risks in different systems in the context of long term global emissions reduction goals laid out in the Paris agreement It gives us an idea of what is at stake at different levels of warming. Shows us how risk in different systems changes due to degrees of warming	Not solutions-orientated Doesn't reflect human systems – humans inhabit natural systems there is a risk that we will obsess over different thresholds of global climate change rather than consideration of local implications – because we know very little about implications at local scale about difference between 1.5 and 2 degrees A better framing is to start with impacts you want to avoid and then work out the climate thresholds that might cause those impacts
Climate Services (managing risk making better use of climate information across timescales)	Absolute necessity of framing risk management in climate services Climate services means putting climate	Climate services is simply a piece that fits in the 'hazard' part of the Hazard x Exposure x Vulnerability framing, rather than being an risk framing unto itself.

	information in hands of decision makers and is about empowering communities and policy makers Climate services framing enables risk to be considered over a range of timescales, not just long term but seasonal, weekly etc. For AR6 we need to look at two elements – institutional elements (because acting on risk does not occur in a vacuum but rather in a social system impacted by governance) and finance (because if there is no finance there is no adaptation) Climate services by it's nature enables collaboration between stakeholder groups	Climate services only brings information. It doesn't provide the next step on how to act on that information
Economics	Economics fundamental for understanding down-side risk (preventing risk), but also helps to think about gains and co benefits of risk management There's a need to understand risk evaluation The field of economics have good	Many factors that generate vulnerability (distribution of power, unfair and unrepresentative governance) cannot be effectively quantified or 'monetized'.

	established methods Socio-economic risk evaluation builds on physical-financial risk identification to help understand risk tolerance of people, communities, business and states Economics fundamental for devising decision-tools: from Cost-Benefit, Risk-benefit to broader multi-criteria analysis It enables risk pooling and sharing risk that goes beyond market aspects There is a need to involve NGOs and civil society and to look more at how to deal with limits to adaptation and how to deal with the precautionary approach. Economics is fundamental doing this.	
Disaster Risk Management	Capability and capacity has been left out of the discussion so far. If we want to move forward in a solutions orientated way, we need to build on what is already there – people's capabilities Across the various global frameworks – DRM is the	A 'social science' approach suggests that adaptation can deal with any climate change but natural systems are showing us that there are clear limits

	central unifying approach	

General points

- There is a lot in the grey literature that needs to be published including: what works and doesn't work in the climate services space; local perspectives on risk and capabilities especially indigenous/traditional knowledge
- Different audiences may require different risk framings. There's a need to break down different policy communities that require risk management frameworks
- Different sectors have different understandings of the core risk framings because different communities interpret concepts differently

II. Sector Breakouts

A. Process

People grouped by pre-identified sectors to identify strengths and weaknesses of the risk framings from their sectoral view. Each insight was written on a card and pasted on a wall under the framing header. People then walked around to view other sector inputs.

Each sector group presented key insights in a plenary at the end of the session

B. Outputs

Wrap up of the plenary

Ecosystems:

- Too scientific/ not understandable for lay people.
- For some developing countries framings are very new
- Include ecological resilience in risk framework

Infrastructure:

- who is using these frameworks?
- Which framework can incorporate governance?
- Is communication of complex simple? Some frameworks need to be complicated

Water:

- Important to take frameworks forward
- Trade-offs between complexity and simplicity
- Frameworks should include better buttons, where decision makers can push
- Aspect of data – quality issues etc…

Disaster management:

- It would be good to have in the summary different sections with different languages and terms for different users.

Finance:

- Not clear how finance is positioned
- Risk allocation information essential
- Identify needs of communities and countries

Synthesis Session

B. Outputs

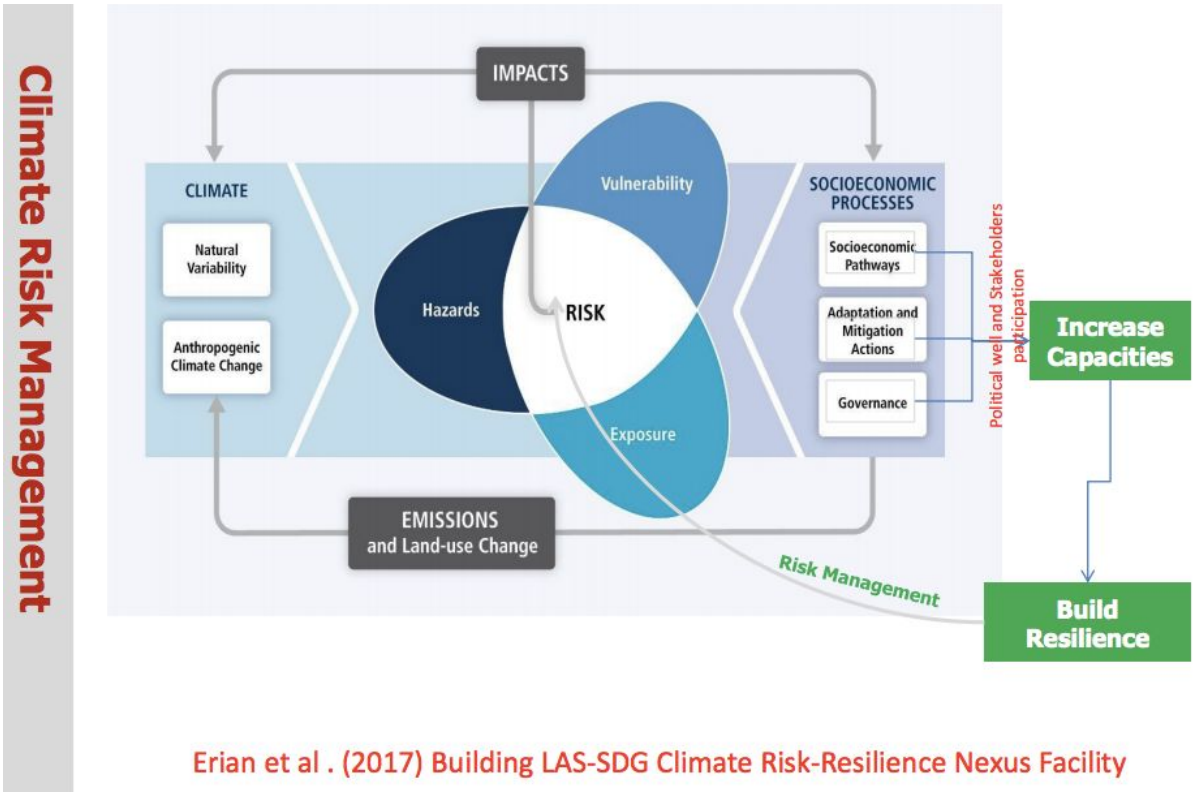
Recommendations to the IPCC:

- Incorporate the new social understanding of vulnerability and risk through case studies
- Add understanding of opportunities (risk as positive and negative) and governance structures
- Risk framing must consider the political dynamics
- Consider risk framing that can cater interests and needs of different stakeholders (local national, regional)
- Improve interface between the risk framework and wider audience
- Develop users perspectives to operationalize the framework e.g. for a small scale farmer in the the north of Ghana, this framework would be helpful in the following way…
- Move from risk framing to risk management - use or layer approaches and tools for decision making from the WB or business or policy makers
- There's a need to unpack risk at the country level and sector level
- Widen the audience through provision of specific summaries for different user groups
- Widen applications to include local scales, and identify new drivers
- Include adaptation AND mitigation in the illustrations
- Mainstream IPCC in different sector/frameworks addressing climate risk
- Make gender a more fundamental element of AR6 which also looks to adaptation capacities (beyond only vulnerability)
- IPCC: Infuse reports with digital possibilities. Animated graphs showing change over time. Tradeoffs. A report is not a piece of paper.
- IPCC with others: engage stakeholders with IPCC scientists to provide multimedia solutions with the help of artists, comms people ….
- Independent, multidisciplinary science communication working group with global reach.
- AR6 should consider tradeoffs between social and human systems
- AR6 cycle shall include guidelines and methodologies to quantify and measure climate risk and uncertainties by sector and their interlinkages
- Focus on implementation guidance on how to <u>interpret</u> the risk framing when implementing adaptation measures/risk reduction projects.
- Consult/invite stakeholders and practitioners in constructing this guidance
- Evaluate the use, uptake and success/failure of previous IPCC
- Is the IPCC redundant now? What about more regular thematic reports (e.g. urban issues, poverty etc.)

- Promoting Inter-disciplinary Dialogue: incorporate psychological, cultural, religious, social elements and literature into the AR6 cycle. Partly by bringing social scientists on board, and promoting cross-WG dialogues (more collaborative meetings and writing)
- AR6 cycle should take into account that the climate risk framework fo AR% is implemented by governments nowadays to develop NAPs and NDCs so if there is a completely different framework the investment made by governments would be lost.
- Economics and finance to be included in the framework
- AR6 should include in the framework loss and damage, conceptualising and giving scientific basis of Article 8 of Paris Agreement

Group proposing a new risk framing

Rather than proposing an entirely new risk framing, the group proposed to adapt the hazard, exposure, vulnerability model.



Erian et al . (2017) Building LAS-SDG Climate Risk-Resilience Nexus Facility

Day 2

Opening of day 2 by Olivia Warrick - to wrap up the outcome of the remote participation session. A few questions came out of this remote participation session for the participants.

Working with archetypes

Each group get the description of two people – archetypes.
The task is to talk about the archetypes and to imagine what are their aspirations and the things they would worry about.

Then, the groups work on identifying organisations and people that help the archetype in order to deal with the worries and aspirations. We have identified influencers and indicated which organisations and persons would use IPCC information.

Furthermore the groups had to identify similarities and differences between the networks of the two archetypes.

Many of the groups came to the same conclusions:

- Some archetypes rely more on informal organisations, others more on state-provided support
- The IPCC information is not commonly used by organisations in the network. In some cases, the IPCC information was even out of the picture.
- There is often one main influencer in the network. In some cases, this is even the only supporting organisation that is in touch with a broader network – that makes the archetype very vulnerable
- Aid organisations, national and international governments and the media are the organisations that were identified as making use of the IPCC information.

Then, we had the task to think about what climate risks are directly or indirectly affecting the archetype and what climate information they would need from the IPCC. This has resulted in several recommendations for the IPCC to take further.

Recommendations for IPCC

- Make science salient to different audiences
- Engage more directly people beyond sciences – professional communicators, marketers etc.
- Get other people to contribute – people manage that are already managing risks,

services providers, ….

- IPCC needs to move from assessment at global level to regional and local level in order to help taking actions on the ground
- Focus more on near time risks (current and near time) between now and 5 or now and 10 years.
- Involve churches etc to communicate, to influence the perceptions of risks
- We need broker kind of things – like service providers – otherwise there is no bridge between the science and the practice.
- Long term climate change as covered by IPCC should put in the context of climate variability
- In contrast to this: the need to generate new information on how long term climate changes are now actually already experienced – need to generate new science on this.
- IPCC – deliberative way to do things – stop working on the top down approach in order to make the IPCC framework more effective. To work from a bottom-up approach. Take IPCC out of this comfort zone
- Optimise the opportunities of the IPCC process – the challenge is not only to focus on the content, but also the process – to go to a more inclusive and participative process.
- IPCC processes at national level and below –ask governments of 195 countries to do assessment at the national and local level. And then – include the governance xxxxx[CI1]

Comments from the participants on the process of the group work

- Very impressed by this process that looks completely dissociated from the IPCC – that clarifies so much about the relevance of IPCC.
- Great pleasure to see how the groups came up with so much detailed information.
- Relevant exercise to build methodologies on how information goes into decision making – using the methodology to do this.
- Usability to go from these issues to issues that are more general related to IPCC.
- We disagreed on the mandate of the IPCC. Difficult discussion. The people on the ground – being a broker/bridging – it is the job of these workshop participants to translate the IPCC info to the ground.
- As practitioner in climate science –participated in different IPCC activities – this group is different from the group in Mexico (IPCC group) the IPCC group need to refresh. Here are people who are outside the process. Here lot of social science aspects are covered– one of the recommendations is to see how the IPCC should add people in that area of social sciences.

Reflection of IPCC representatives:

IPCC – is for the first time approached by practitioners – IPCC is working very hard to bring these practitioners in the process. The problem is the selection processes.

National governments are nominating. You need to put pressure on your government to nominate social sciences as well. IPCC processes what the national governments provide. Raise the point: we need to communicate our practitioner's knowledge in a way that the IPCC can make use of it. We need to document why there is a need for different timescales etc… This is a two way application – we (practitioners) need to put our materials into forms that the IPCC can use – we need to develop a new ways on how to provide the info to the IPCC. Develop a new value chain. We need to take responsibility to feed the process. Need to develop a new ecology.

IPCC is not a bunch of climate scientists. In working group 2 – is a strong social science focus – maybe we need another type of social sciences – to be more precise. I would like to feedback to the community – to do the type of research that is necessary to support the IPCC.

Day 3

Opening

The two co-chairs of WG2 overviewed the mandate of the IPCC and the key entry points for influencing the process

IPCC mandate

- The role of the IPCC is to assess information relevant to understanding the scientific basis of risk of human induced climate change, the impacts and the mitigation and adaptation options
- The contents of the IPCC must be policy neutral. Otherwise there is a risk that countries might block certain information that doesn't serve their interests
- Governments ultimately approve the text by way of negotiation of the IPCC in a plenary
- The authors of the chapters must come up with a consensus view of the science as much as possible because the IPCC must prepare reports in a way that policy makers can understand
- The primary stakeholders are the negotiators in the UNFCCC process. IPCC reports primarily target information that can be used in that space.
- The IPCC reviews literature to develop its reports. Peer reviewed, scientific literature – including on adaptation, vulnerability and resilience – is fundamental. A breadth of scientific literature is lacking in that space.
- The IPCC also has a process for reviewing grey literature but quality and accessibility is highly variable. A key recommendation is pairing practitioners with researchers to bring grey literature and non-documented experiences into the peer reviewed literature. Working group 2 is particularly dependent upon the grey literature. They need access to grey literature, but strong desire to have peer reviewed literature.
- In AR6, risk assessment is intended to be cross cutting across the working groups. 'How do we do this' is a question yet to be answered.

Points of Entry

- Governments decide – or not – to undertake another assessment report and also decide upon which special reports might be required. During the most recent government review, it was decided
    a) To undertake a sixth assessment report
    b) To undertake three special reports: 1) the 1.5 degrees report 2) land 3) oceans and cryosphere
    c) That the working groups would be more closely integrated than in the past
- Then, there's an election to select the bureau, the chair and co-chairs of the working groups. Candidates are put forward by governments and governments vote
- Then there is a scoping meeting to identify bullet points that will guide the chapter outline

for the assessment report and the special reports. Governments put forward appropriate people to be involved in the scoping
- Governments review and approve the chapter outlines
- When approved, governments put forward authors. Following September 2017 (when the chapter putline is going to be approved) there will be a call for authors . Selected authors are generally those who have a strong scientific track record in the peer reviewed literature.
- Authors include: coordinating lead author; lead authors; contributing authors
- Reviewers are also identified

Metrics: Key recommendations for IPCC

1. Assessment should do justice to the fact that we are already in a changed climate today (including using historical data to show this)
2. Human impact metrics will be critical, alongside metrics for natural systems or economic impacts
3. Critically review literature on risk metrics and risk assessments; do not reinvent the wheel
4. Consider the purpose of the metric that you are using: climate risk management? increasing resilience?
5. Translate risk levels into the currency of the target audience (e.g. communicate impacts in the currency used by the target audience)
6. Use a multi-hazard approach to measure and quantify risk
7. Consider non-climate contributors to vulnerability, and put climate change in that context
8. Clearly communicate how the experts are defining high/low risk
9. Consider metrics that will speak to a more diverse audience
10. Identify metrics that are relevant to the specific policy/question you are addressing
11. Include metrics about consequences of decisions and tradeoffs (especially on vulnerable groups)
12. Be clear on who are the intended audiences of the IPCC when you select metrics; look into sectors, link up with risk community
13. When you talk about social systems, need to include norms, values, and economics
14. The meat of IPCC is in mapping
15. Map out not only averages (e.g. average water consumption) but also demonstrate the inequalities (e.g. some people have drastically more/less water consumption)
16. Produce indicators/metrics that really talk to decision-makers (e.g. currency evaluations rather than graphs) - consider purchasing power parity approach, which is already used by decision-makers
17. Link these metrics to indicators that are used to monitor adaptation options

Synthesizing recommendations

Participants formed subgroups around the themes below. From a distilled list of

recommendations pulled from previous days, each group synthesized their recommendations and developed a two minute pitch for a panel of judges. The judges then provided feedback on the strengths and weaknesses of each pitch, in particular how to improve the recommendation to put to the scoping meeting

Recommendations:

Timescales

Putting the weather back into climate:

1. WGII review the literature that relates decisions with appropriate timescales and add this information to the table outlining adaptation options.
2. WGI: Use WGII output on relevant timescales for decision-making to motivate review of the literature on climate variability and evaluation of models on these timescales. Consider putting climate projections in the context of important modes and mechanisms of variability.
3. WGII: Set climate change information from WGI in the context of past and current climate risk to better enable decision-makers to manage climate risks today, for tomorrow.

What should be assessed?

1. Assessment to target risk management using impact-based climate data and engage more "whitened" grey literature from respected sources that cover various sectors.
2. Recommend (or develop) social-natural methodologies that countries could use for standardization to stock take not just impacts but hazards, exposure, vulnerability, risk

Metrics

Two recommendations for how the IPCC can improve what it already does:

1. Better consider what and to who the risk metrics are communicating
2. Monitoring and evaluation of adaptation - both what works and what does not work

"Then What?"

1. Need to include scale as used in the ecosystem assessment - local, regional, and global (nested approach)
2. Embrace of grey literature in the risk assessment
3. Implementation: need guidelines for the various clientele: private sector, policy, communities

Communication, outreach and interfacing with decision makers - inside of IPCC

Making the IPCC Report also as a trigger for transformative change in managing risks

- Linking the solutions development process to real-life examples and examples of costs of inaction vs. cost savings action - guidance to authors, etc.;
- Thinking beyond and planning for policy influences and not just policymakers;

- Communicate clearly on the IPCC focal points and their roles: reinforcing engagement with various communities at the national and local level including for comments
- Connect the dots between the issues: between the focus of the groups, the links to practical action e.g. mechanisms within the UNFCCC where funding is already available but is under-utilized - guidance for the whole process and also how you tackle issues early for impact. Frame the assessment as an opportunity for instance to access other types of funds.
- Make the communication process and the link to external communication and uptake at the national and sub-national level

Communication, outreach and interfacing with decision makers – outside of IPCC

The message heard in the pre-scoping meeting in Nairobi (April 2017) is very clear: IPCC wants to move from a 1.0 to a 2.0 version, where its message is more relevant to, applicable to and representative of people's lives. This will require new voices and stakeholders to play a fundamental role in the AR6 cycle and beyond. In order to do so there are a number of things the IPCC as well as the community of stakeholders can do.

In relation to the IPCC, we propose that it promotes change from within, such as in encouraging the participation of non-traditional stakeholders (such as civil society, NGOs and other international organisations, private sector) in the process. The IPCC could encourage active dialogues with Climate Change Adaptation practitioners and civil society in the events it organises – one example could be to take time when AR6 authors get together to directly connect some of them with non-traditional stakeholders in the place where the meeting takes place.

Our commitments as external stakeholders and knowledge brokers include:

- Promote better alignment of NGOs, CSOs, private sector and others with the AR6 process; e.g. building on the space that the RCRC has opened. This would promote effectiveness, but also distribute responsibility beyond the IPCC (push the agenda on implementation) and bring new views into the report itself.
- Facilitate and take advantage of a trend of increasing multi-disciplinary and interdisciplinary work, as a way to validate previously excluded or misrepresented knowledge to the standard of what IPCC considers rigorous.
- Promote stakeholder dialogues across sector and geographical landscapes that are linked to the IPCC and/or to institutions connected to the IPCC.
- Bring to fruition the ideas of Working Groups conceptualised during the Nairobi pre-scoping meeting.

We intend to start working along these lines and bring other stakeholders on board. We understand that IPCC has budget restrictions, therefore we suggest a voluntary, semi-structured group (including participants from the Nairobi meeting) to coordinate efforts with IPPC and external stakeholders.

Research Priorities

Research Priority	**Votes**
Assessment of past climate-related disasters and drivers of and responses to these.	**5**
How to monitor and predict which climate pathway we are actually on.	**1**
Linking WGII framework with findings on observed impact and assessed risks.	**0**
Further investigate local-scale dynamics of climate change especially in non-Annex 1 cities and agricultural areas where micro-climates are particularly marked.	**3**
Mitigation of waste materials	**1**
Atlas of past, present and future climate risk	**4**
Climate change related to current variability	**1**
Impacts of changes in temperature with the distribution of large herbivore in East Africa - winner and losers	**0**
How does the likelihood of particular thresholds being exceeded change as a function of time? (where thresholds define consequences that we most want to avoid)	**2**
Assess the vulnerability of African Great Lakes to climate risks and its implications to - human system dynamics, water resources, crop production, poverty	**1**
Projected increase in temperature and rainfall and its impacts on highland malaria in the Lake Victoria Basin	**1**
Role of decadal variability in decision-making	**3**
Inter-sector trade offs	**1**
Emphasis on validating variability of climate models across timescales relevant for decision-making	**2**
Synthesis of assessment of experiences to date using early warning systems - and predictability/confidence in science/limits	**0**

Transdisciplinary research approaches - and participate in this way in the IPCC process	**3**
Framework for incorporating expert judgement/confidence based on model validation in the generation of future climate scenarios. (stop counting models to arrive at likelihood!)	**1**
Development of regional framework for assessing the uncertainties associated with hydrological impacts of climate change and how to communicate uncertainty results - to policymakers and practitioners.	**5**
Develop methodologies, guidelines and formulas to operationalise a multi-risk framework ___ good governance decisions	**6**
Consistent method of assessment of risk and mitigation/adaptation	**0**
Better understanding of attribution in real-time and for extreme weather events	**1**
Assess usage of weather and climate information by various stakeholders/user groups to inform development of appropriate early warning advisories	**2**
Relation between risk thresholds in natural and human systems.	**0**
Ecosystems	**7**
Mountain ecosystems and their impact on down streams	**1**
Rapidly urbanizing contexts, informal settlements	**2**
Metrics and indicators of real opportunities or conditions for risk management at national and local levels	**0**
Ways of understanding <u>how</u> physical changes nake real <u>risks</u> for different people. = Social, political, economic contexts of risks	**1**
Social barriers to adaptation. (social, political, economic, accesses to resources and land [land tenure])	**0**
Extremes and geographic implications	
Health and climate including malnutrition	**2**
Current state of adaptation countries: metrics/indicators, rolee found in grey literature	**2**

Extreme weather events and impacts on various timescales	**2**
Attribution of specific disasters/extremes (including vulnerability and exposure)	**0**
Extreme event indices using empirical evidence of realized impacts	**1**
Solar radiation management	**2**
Realized climate-related risks (drivers and determinants, effects and impacts, risk escalation)	**2**
Role of climate vs. non-climate drivers of recent high impact events.	**6**
Research attribution and linking with drought, groundwater depletion and heatwaves	**1**
Accumulated Risks (drought … flood … drought … = risk)	**5**
Security (national, displacement, migration)	**0**
Health (public health, vector disease, respiratory disease (PPM))	**0**
Risk Transfer/Risk Metrics/Risk Framework	**1**
Look at the extent to which it is possible to generate a generic climate risk framework and how approaches to risk assessment and communication can be derived from this.	**1**
Resilience at community level	**0**
Indigenous knowledge system, changes in reliability of ancestral methods for example in ag. sector	**2**
Strengthen importance of ecological resilience in the IPCC framework [localizing key biodiversity choices]	**0**
Understanding up and downside risk. Decisionmaking as follow: finance and investment, climate and non-climate decisions, risk transfer	**1**
Inter-generational collaboration for sustainable risk management	**1**
Enablers and inhibitors of climate risk management	**2**
Opportunities and Solutions: best practices, lessons learned, technology and innovation, synergies and co-benefits, local knowledge, indigenous and	**6**

scientific solutions)	
Risk transfer tools	**1**
Metric to assess impact and outcomes	**0**
Role of social protection in risk management and resilience building	**3**
Risk perception and behavioural thresholds/triggers	**4**
Effective and accurate communication of messages related to climate risk	**1**
Social vulnerability: ecosystem (mountain/dryland/basins), social vulnerability (conflicts, migration, displacement, equity, justice)	**3**
Metrics in support of action and choice (metrics as defining entry points for action), informing investment (information>institutions>investments) choice>priorities? >tradeoffs	**1**
How does media succeed in influencing ____ , getting people engaged in climate change + risk + other information providers	**1**
Greater use of behavioral sciences - existing insights and approaches (relevant to adaptation and mitigation)	**0**
How IPCC info can shape/drive action/decisions choice on risk/resilience	**2**
Social informatics: Analysis of social media (twitter, whatsapp, instagram . . .) in climate risk mgmt	**3**
Impact should be about “effect” and consquences of an event, or an defined “performance metric” which varies per stakeholder and society	**0**
Risk allocation	**0**
Focus by using system analysis on the “impact” of climate change and variability on: provision of services for successful ____ of society and taking into account (does not equal sign) _____ settings. In some countries (welfare states) the gov takes care of individuals in an extreme event, while in others individuals are more self-reliant (e.g. informal dissemination networks)	**0**
How do/can local resilience frameworks contribute to managing risk	**0**

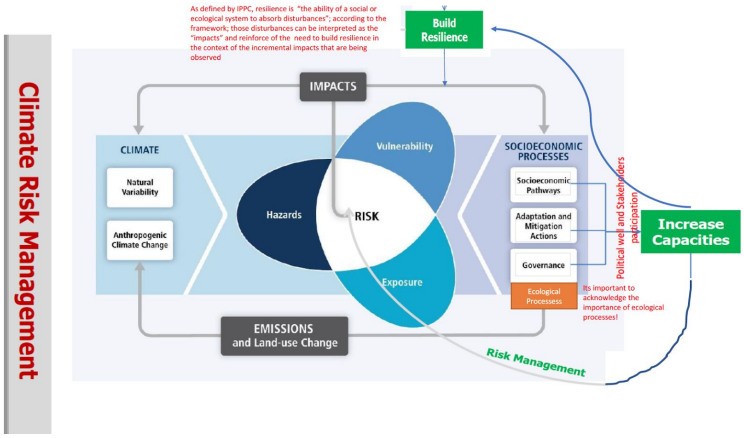
Improve hotspots-based approaches to assessing risk within and between sectors (territorial approach)	**2**
Economics/Finance	
To what extent should finance be decentralised to balance participation with accountability in managing risk.	**0**
Include finance as a cross-cutting element as part of the problem or solution as it creates additional incentives (more powerful than governmental interventions) and access to finance is key to implementation	**0**
Economic/environmental costing to be included to better guide policy making	**2**
Exploring ways of promoting an economic focus for adaptation rather than dealing with negative climate change impacts	**0**
Global framework and mapping for the social limits of adaptation and the motivation for transformational change	**0**
Need for research into social thresholds at different scales and in different contexts	**7**
Tipping points (env., social)	**1**
Study impacts of 1.5 and 2 degrees on food security, cropping patterns, nutrition needs, and dietary needs	**2**
Climate and human security	**2**
Explore social constraints to resilience (in urban and agricultural systems) and pathways to maladaptation	**2**
Give a framework of loss and damage, residual adaptation, policies and finance, that gives the scientific basis to operationalise article 8 of paris agreement	**6**
Explore in more detail the extent to which unfairness and inequalities in governance, power and gender dynamics exacerbate the impacts of climate hazards and risks … and how fairer systems would deliver benefits...	**2**
Governance	
Governance (adaptation, geoengineering)	**1**
Anticipatory and transformative learning approaches in adaptation	**0**

and planning	
Understanding the functioning of governance networks and exploring how best to reconfigure them for implementation of climate-smart technologies.	**2**
Understanding climate change mitigation and adaptation options with identified indicators to be used for control in terms of monitoring and evaluation and good governance	**10**
Enabling environment for governance	**2**
Role of governance mechanisms in a new world of security - entry points to collaboration & institutionality in a world of extremes	**3**
Different types of processes used to foster adaptation (national level, ____ level, local level)	**1**
Decisionmaking and implementation processes leading to real interventions on risk according to a typology of risk c__teats	**3**
Need research on climate change related decision-making a good governance	**5**
How does solution-making work?	**2**
Nexus of climate and development, governance lens on conflict and service provision in cities - roles and opportunity of climate risk?	**2**

Reflections from Remote Participants

Written comments throughout the meeting

Participant Name & Organisation	**Reflections**
Fredi Otto, Oxford University	Not reflections really, but questions: I think it is decided that the different working groups will be the same, in AR5 WG1 was about the hazard and WG2 about the risk but they didn't quite fit, what are the roles in AR6 of the WGs if risk framing is more comparable throughout? In the remote discussion we suggested that IPCC would be much more useful if it would provide an introduction to a data portal with localisable information on current risk. Could WG1 and WG2 provide the literature and data for different aspects of risk but the IPCC a platform in synthesising this for country risk profiles? Is what we need quantitative current risk assessments (in the form of country based event sets?) with qualitative uncertainty assessments? Does the risk framing in IPCC have anything to do with the SDGs and framing around development?
Saleemul Huq, ICCCAD, Bangladesh	I would like to add something which I did not speak about in my talk-namely the experience with capacity building on climate change adaptation. This is an issue in which considerable investment has already been made over the years and some experience has been gained. Also in Article 11 of the Paris Agreement it is highlighted as an important issue. So we need to collect good papers on evaluating experiences of what works and what doesn't in developing long-term capacities of stakeholders and countries to carry pour effective adaptation. Namely how to develop adaptive capacity most effectively?
Arthur Chapman	Modified Risk Framing: 1. Incorporate governance into the framework:

	Governance is the filter which directs decision-making and resource actions. AR6 is decision-focused but without an understanding of governance and application of risk framing comes to a halt, ie can't be applied through to implementation of adaptation. 2. Work on local scenarios. The focus must be regional and coordinated regionally. The global scenarios are too coarse to be meaningful at local levels where they are needed. 3. Understand local dynamics - sensitivity and practice.
Oscar Guevara	Modified Risk Framing: - Build resilience: “As defined by IPPC, resilience is “the ability of a social or ecological system to absorb disturbances”; according to the framework; those disturbances can be interpreted as the “impacts” and reinforce of the need to build resilience in the context of the incremental impacts that are being observed” - Ecological Processes: It's important to acknowledge the importance of ecological processes together with socio ecological ones!  Click link for full size image
Tabassam Raza UP-PLANADES and PSBA, Manila	In 2012 the IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX). - In its founding document, the SREX is framed as “taking a risk perspective in order to identify synergies to promote sustainable development.

	- Reduce the risk of climate related damages and take advantage of climate-related opportunities, and - Policy linkages with risk reduction. The approach reflected in the scoping of the SREX comes from the mandate of the UNISDR brought into climate policy. The UNISDR founding mandate states that the "Strategy is premised on an appreciation of the fact that the loss of life and destruction resulting from disasters are not inevitable and can be mitigated by reducing the vulnerability of communities to natural hazards. (...)(Reference: The recent SREX report and the UNFCCC loss and damage discourse – A starting point for the debate, 2012). The new framework presented in the SREX report (IPCC, 2012) and also the latest assessment report of the IPCC working group II (IPCC, 2014) (Figure 1) underscores that (disaster) risk is determined by the interaction between extreme weather events which are influenced by anthropogenic climate change and climate variability on the one hand and the vulnerability and exposure of societies influenced by socio-economic development processes on the other hand. (Reference: J. Birkmann and T. Welle, 2015, Assessing the risk of loss and damage:exposure, vulnerability and risk to climate-related hazards for different country classifications). The Intergovernmental Panel on Climate Change (IPCC), in its Fourth Assessment Report (AR4), concluded that anthropogenic warming over the last three decades has affected many physical and biological systems all over the world. As a result, the resilience of many ecosystems is likely to be breached this century. In context to the above justification I tried my best to provide a modified framework which has incorporated most of the points discussed with the group that joined to provide new or innovation in the existing framework. The figure 3 shows a modified Conceptual Framework after frameworks provided in Figure 1 and 2. Fig 1: Click link for full size image

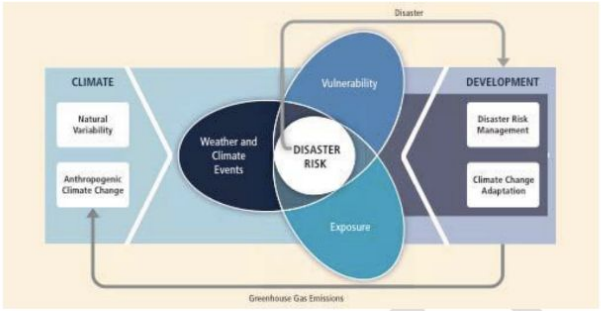


Figure 1: The conceptual model of the IPCC SREX starting from exposure and vulnerability highlighting the need to include Disaster Risk Management and Climate Change Adaptation within development processes. Source: IPCC (2012a: 2).

Fig 2: Click link for full size image

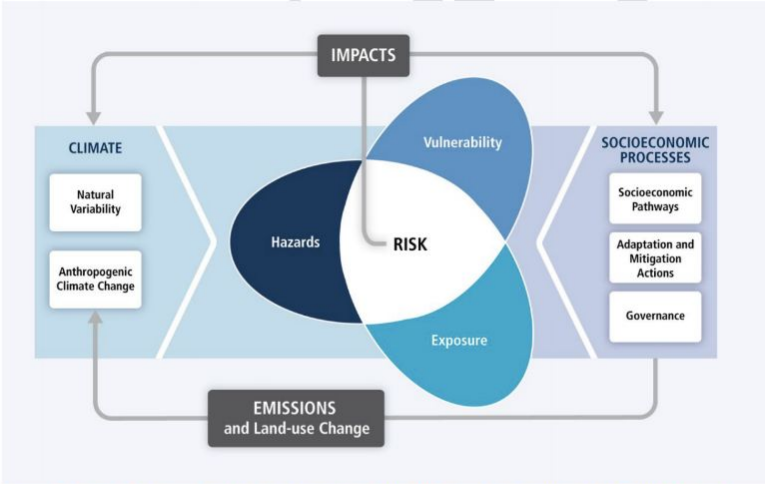
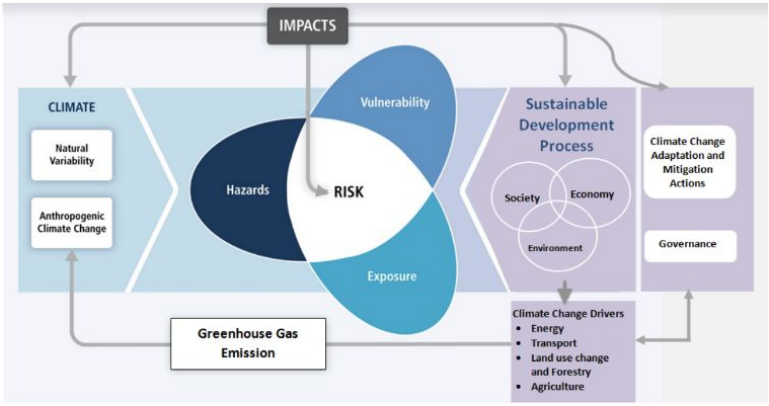


Figure 2: From the latest assessment report of the IPCC working group II (IPCC, 2014) and provided in the draft for comments document.

Fig 3: Click link for full size image



Modified Framework

Tabassam Raza, UP-PLANADES & PSBA, Manila	Regarding the inputs provided by Mr. Oscar Guevara in the framework. The points were taken in account while modifying the framework (figure 3) above. For further, explanation i would like to state that the Climate Change Adaptation and Mitigation(CCAM) Actions (product of a process) provided in the extreme right rectangle of the modified framework (Figure 3) is a participatory process (it involves direct and indirect stakeholders and political will) that entails performance of inter connected activities. Basically, It includes ecological profiling of the area under climate scoping; climate related hazards characterization; impact of these hazards to different elements at risk; exposure, adaptive capacity (institutional, institutional personnel and individuals as part of the society), vulnerability and risk assessment; and expert judgement to identify the climate change related problems. Further, It also provides solutions in term of spatial strategies that allow the decision makers to formulate corresponding Programs, Projects and Activities (PPAs) that needs to be prioritised and implemented to achieve immediate, short term, medium term and long term objectives/goals such as to increase adaptive capacity and create resilient societies.
Vanessa Schweizer, University of Waterloo, Canada	***DAY 1 COMMENTS*** ● Hazard+exposure+vulnerability and Burning Embers framings are well established; may be foolish to abandon them ● Agreed there is room to unpack “vulnerability” to include adaptive capacity and resilience ● However, resilience needs to be better defined, as it has at least two meanings: ability to recover to a pre-existing state from damage/disaster (local resilience) and ability to transform to a ‘new normal’ (system resilience). IPCC authors can encourage the research community to advance conceptual clarity on resilience, as current ambiguities lead to criticisms that don’t entirely make sense. For instance, the natural system critique of the DRM frame says, “natural systems are showing us that there are clear limits [to adaptation]”. I understand what this means if species go extinct, but some novel ecosystems can retain previous functions in spite of significant changes from their historical baseline (meaning that they retain system resilience) ● Good observation from meeting participants that “A

	better framing is to start with impacts you want to avoid and then work towards the climate thresholds that might cause those impacts". This seems especially relevant for building political will. A challenge however is that political will for meaningful mitigation actions must be collective at the global level, while will for adaptation actions is generated locally ● Inclined to be skeptical of the argument against the economic framing, namely that "Many factors that generate vulnerability cannot be effectively quantified". Although I agree that many cannot be monetized, I wonder what factors the meeting participants had in mind. Many important factors can be analyzed quantitatively (e.g. social networks) or semi-quantitatively (e.g. impact networks between social, political, and technological factors). It will probably be important to retain the economic framing because many governments, businesses, and institutions make decisions for investing resources according to quantitative metrics. The "Unbreakable" report was an excellent example of how quantified factors could be re-analyzed and re-interpreted to better investigate vulnerability. ● Among proposed revisions to the hazard+exposure+vulnerability figure, I support the version proposed by T. Razza, as "Sustainable development" provides room for acknowledging ecological goods & services (while the phrase "socioeconomic processes" does not). However the right side of the figure could still be improved. ○ It seems useful to separate out climate change drivers as proposed, as this provides clues for climate change mitigation and adaptation actions. However, adaptation sectors go beyond mitigation sectors. Also I think of mitigation actions as being relevant to the bottom area of the figure, while adaptation actions are relevant to the top area. ○ Governance is all-encompassing; should there be a governance bubble around the society-economy-environment bubbles? ***Further DAY 3 COMMENTS (remote session)*** There was some discussion of scenarios that was not fully unpacked. Concerns that scenarios could appear 'cherrypicked' (i.e., not objective) are real, and scenario analyses are vulnerable to this criticism when a small number are considered. As noted in the background

	document, there are other ways to learn from a large number of scenarios (or ensembles), such as RDM. Improving our understanding of system resilience will probably require learning from scenario ensembles. There was also discussion about simulations of biophysical + socio-economic systems. Beware limits of building (and interpreting) ever more complex simulations. Much can still be learned from the outputs of existing models (even with their existing model boundaries) through appropriate study design looking for impacts under overlapping conditions, e.g. an emissions trajectory of RCP 4.5 combined with particular socio-economic developments (for instance a fractured, regionalized world (SSP3) rather than one united under sustainable development (SSP1)). There was a special issue of Climatic Change about how to start doing this (Volume 122 Issue 3 published in 2014). Nevertheless I agree that to understand local impacts and empower local adaptation planning, scenarios must be customized for particular places. The global RCPs and SSPs, however, provide the global context for such local scenarios. Global scenarios are still useful for local visioning exercises because local realities can be influenced by outcomes that happen elsewhere, e.g. the local effects of high/low global oil prices, or whether the global economy experiences a long-term slowdown.

Remote participation online discussion on Day 3

Most Vulnerable

- Look at hotspots – also in the physical climate system; hotspots in terms of natural system, can overlay this with vulnerability and exposure
- Boundary institutions can translate what the IPCC is saying and build political will: George Mason U working with TV broadcast meteorologists, reaching out to health professionals, specific sectors – helping those professionals connect the dots to climate. Encourage the IPCC to look for opportunities to do this in other countries

Metrics:

- Have WGII and WGIII define metrics first, and then WGI will use them
- Different indices for heat, for example – give a clear indicator of what is most relevant, and these could be assessed in the WGI report
- Ensure that WGII develops early on the metrics that they would like to see assessed in

WGI

- Metrics are usually very locally relevant; they vary very much from area-to-area and sector-to-sector; give information that could be used to derive locally-relevant metrics
- Have a workshop of WGII and WGI scientists who come up with metrics that could be useful on both sides. This could be relevant to hotspot idea as well.
- Metric that specifically measures the relevance of climate change relative to other drivers

Grey literature:

- Partnerships to help practitioners get their work into the scientific literature
- Are the right experts being brought into the process (e.g. development researchers)? These people do publish and can generate literature on impacts and practice – encourage white literature from the appropriate experts who are studying development

Communication:

- Consider the National Climate Assessment in the US that was done in several regions to both study changing climate impacts as well as document ongoing adaptation efforts – it is a report every 10 years, also an ongoing consultation process – we could look to this for ideas and inspiration for the IPCC process
- Consider a participatory processes convened outside of the IPCC – deliberative polls; have the same small group conversations across sites; could we have another body (e.g. a civil society organization) encourage cross-continental/global small group discussions
- Include storylines – not only about metrics but also probabilities of following different types of storylines. Illustrate different scenarios (this approach has difficulties in terms of choosing scenarios objectively)
- Encourage WGI to have a chapter on storylines – query the model outputs in a way that allows for impact modeling (this can feed into WGII)
- Engage non-scientists: journalists wait until the last day when the SPM and report is released; IPCC could allow embargoed access to the report – this gives people sufficient time to develop new ways to tell the story of what is in the reports. Up to now, this has not been allowed, but suggestion that this is worth the potential benefit. Could write a "The Way Things Work" book about the planet – would need to come out on the day that the IPCC report was published – if you have to wait to put the book out, IPCC would not get the benefit of public interest in the report that this could create – this would be for people who want to do truly ambitious large projects that would take a long time to prepare

Timescales

- This was done for some extent for extremes – defined based on current day variability and looked at how often these events would happen in the future; this happened more in SREX than AR5; we could have a chapter on extremes in AR6
- Note that you could adapt to these extremes over time so they are no longer extreme
- For most adaptation areas – you do not need clmate change to anticipate new conditions that you have not yet seen due to natural variability (including decadal timescales)
- Joint modeling – integrated approach between WGI and II; couple your climate models to impact models, include adaptation decisions/options
- Consider multi-variate hazards and compound events; perhaps have a workshop to

develop a joint WGI and WGII chapter that includes this joint venture – a storyline chapter could be a good option for this

Commitments and next steps

_____

DRAFT STATEMENT

We, the community of climate adaptation practitioners, researchers and policy makers that got together during the Climate Risk Conference in Nairobi (April 5-7, 2017), share the vision that people everywhere have the power to transform our current development pathways into a low carbon and climate resilient world now, and for future generations. We believe that this vision is nothing less than realizing the full potential of individuals, communities, institutions, organizations and governments to drive a new era of human security in harmony with nature.

To achieve that vision, it is our commitment to actively engage in all necessary actions needed to strengthen and highlight the role of adaptation practitioners in the IPCC-AR6 cycle, including, but not limited to:

- Strive to become leaders at connecting practitioners to the climate change scientific community.
- Drive a new process of co-production of knowledge and decision making, in benefit of the new climate agreement goals.
- Proclaim the findings and relevance of the adaptation field work to the IPCC, UNFCCC, policy and decision makers of the world.
- Implement partnerships with universities, research institutes, IPCC leading authors, and others, to improve the number and quality of peer reviewed publications, and therefore improving access of the practitioners community to the IPCC-AR6 cycle.
- Request the IPCC to consider including expert practitioners from public and private sectors in the writing and review process of the AR6 cycle, such as for key WG II chapters related to adaptation experience

We also suggest building a global network of adaptation practitioners, with the objective of:

- Bridging the gap between IPCC and local policy makers/practitioners
- Sharing opportunities, solutions, best practices and funding sources
- Increasing north/south and south/south collaboration among practitioners

Ideally, an online platform/forum will be developed to facilitate conversation across regions and exchange of best practices/lesson learned.

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Considering and supporting science for the discourse regarding risks beyond adaptation

Proposition emerging from break-out group, Nairobi 7.4.2017

Given observed and projected future impacts of climate change, over the last few years a discourse on the risks (limits) beyond adaptation has been unfolding. Originally focussed on physical limits, increasingly attention has been given to socio-economic limits to adaptation including the interaction of climate and non-climate drivers of change.

Part of this debate has been motivated and picked up by negotiations under the Loss and Damage Mechanism under the UNFCCC, institutionalised via the Paris Agreement; yet discussion is broader with relevance to mitigation (local levels of dangerous climate change vs. global danger as represented by the RFCs as motivation for the 1.5/2^{o} C targets), disaster risk management and adaptation (constraints to adaptation for current and future climate change).

Key issues under discussion among researchers, practitioners and policy-advisors refer to impacts on the most vulnerable communities and countries, well representing non-economic losses (using valuation methods where possible and relying on alternative techniques otherwise), climate attribution linked to extreme events, understanding migration in a changing climate, the scope of transformative approaches and an appropriate role of financial instruments, such as insurance.

The science on these issues is emerging, and will need to see further attention of the years to come including concerted efforts among scientists and practitioners to develop joint insight to help identify local limits to adaptation experienced by communities and households now and in the future and support the most vulnerable affected by climate change.

We think there is need to more strongly consider and support this field of scientific inquiry characterised by multiple lines of evidence, so it provides robust insight into relevant debates. Climate risk analysis and management in particular holds great potential for providing a solid basis to build on.

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April 07,2017, Nairobi

Idea title: Local government decision support framework for implementation of climate change adaptation and mitigation

Group: Monica A. Altamirano (lead), Leisa Perch, Amadou Taal, Bob Manteau, Tabassan Raza, Ingrid Coninx, Crispino Lobo
Target group: Local governments
Aims to: facilitate the implementation of the selected climate solutions, providing the right incentives for the right delivery in the right place
Problem observed: lack of local implementation of climate adaptation and mitigation plans; implementation of measures in a way that does not ensure sustainability in service provision

· The framework would serve as a guideline for local governments to "engineer" an implementation arrangement – choosing for a wide range of project delivery and finance options that vary from purely public governance options up to the creation of markets for private initiatives- that taking care into account
  - a) the transaction (e.g. type of good and project characteristics,
  - b) the level of service required over time and
  - c) the institutional setting (stakeholders, strengths of local government, private sector and community and the incentives created by formal and informal institutions)
  - would be the most effective in ensuring the financial and institutional sustainability of the service being introduced by the solution or measure that is being implemented.
· Following a number of steps and guided by the lessons learned in the past about which implementation arrangements work and which do not work given the criteria and factors mention above, local governments in close consultation with the community could decide what to do themselves, what to delegate and to whom.
· The guidelines would help them in answering key questions: a) How to fund the solution? (taxes, tariffs, transfers)- and who will fund it? b) How to finance, and who will finance it? c) Who will implement it? (e.g. "build" or install), d) Who will operate it and deliver the service? And e) Who will monitor.
· By answering the questions the main responsibilities, benefits and risks along the life cycle of the measure are explicitly assigned to governmental, non governmental (NGO's and communities) and private sector, in a way that ensure that their incentives are aligned so as to make them work together towards implementation and keep them motivated to use their strengths and keep cooperating to ensure the sustainable provision of the services introduced (e.g. flood protection) at the initial (or at least within the acceptable) Level of Service.
· Said in simple terms the framework will develop the capacity of local governments to decide how to steer the boat? Depending on the type of boat and the waters it should navigate.

· The research focus on the decision of "how"(to implement) not so much on the "what"(to implement) . Nevertheless we recognize that between the what and the how there is an iteration. If what has been decided to be implemented turns out to be not implementable, the one could redesign the what.

· Building blocks: typology of climate challenges, typology of (mitigation/adaptation) solutions, catalogue of governance modes and financing arrangements (preferably illustrated to show how they work and the power of different incentives).

Next steps:

1. A follow up Skype to come to a stronger and shared first concept of the framework
2. A joint quick needs assessment of local governments
3. Development of a joint project application