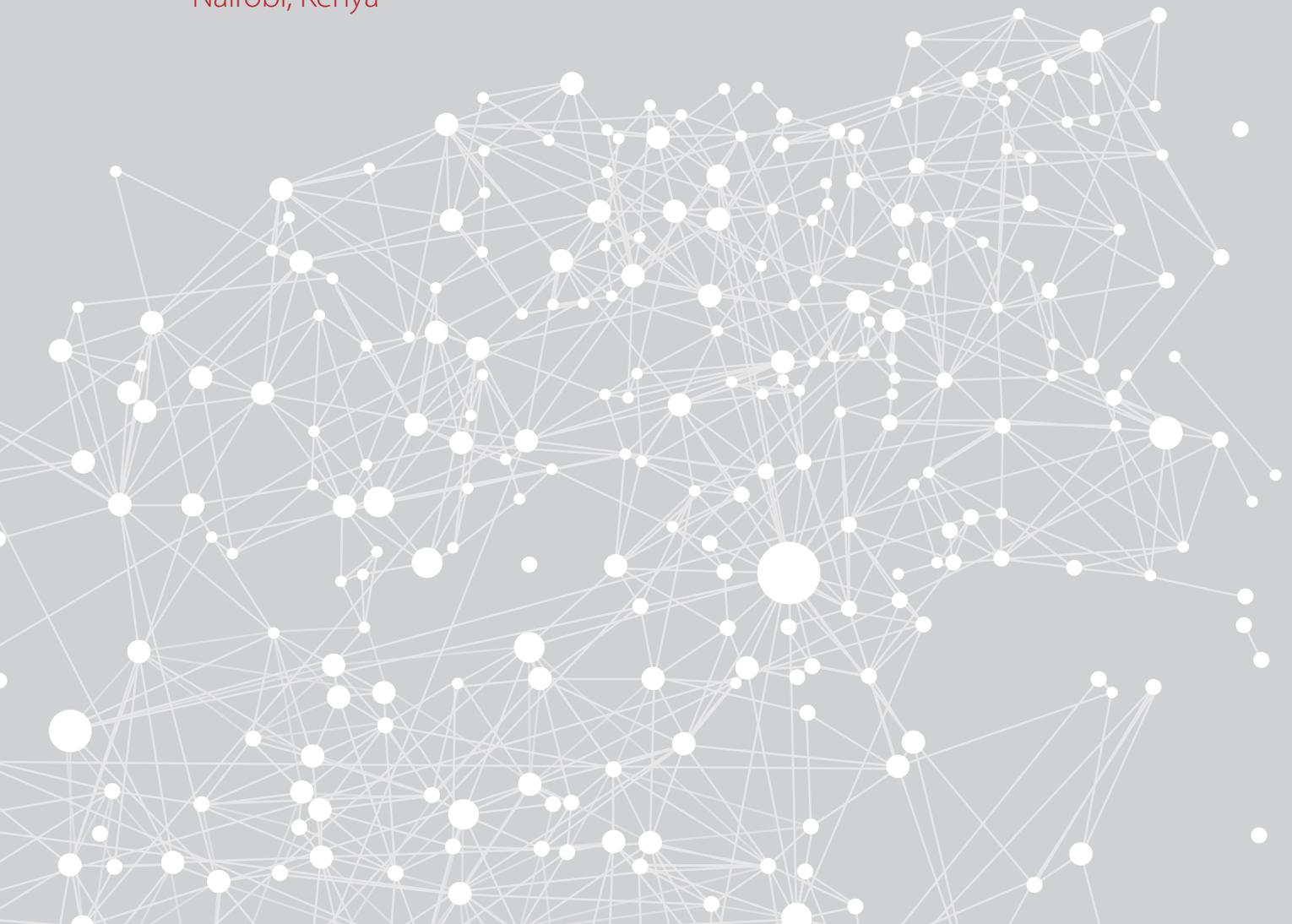


Bridging Climate Science, Policy and Practice

Report of the International Conference on
Climate Risk Management

Pre-Scoping Meeting for the IPCC Sixth Assessment Report
5–7 April 2017
Nairobi, Kenya







Bridging Climate Science, Policy and Practice

Report of the International Conference on
Climate Risk Management

Pre-Scoping Meeting for the IPCC Sixth Assessment Report
5–7 April 2017, Nairobi

Scientific Steering Committee

Maarten van Aalst, Red Cross Red Crescent Climate Centre
Richard Jones, UK Met Office
Allan Lavell, Latin America Social Science Faculty
Hans-Otto Pörtner, Alfred Wegener Institute (and co-chair of IPCC WGII)
Debra Roberts, Sustainable and Resilient City Initiatives Unit, eThekweni Municipality,
Durban, South Africa (and co-chair of IPCC WGII)
Arame Tall, Senior Climate Change Specialist

Organising Committee

Maarten van Aalst, Julie Arrighi, Erin Coughlan de Perez, Ahmed Idris,
Bettina Koelle, Eddie Jjemba, Roop Singh, Pablo Suarez, and Olivia Warrick.

Participants

Maarten van Aalst, Salem Afeworki, Nand Kishor Agrawal, Idris Ahmed, Myles Allen, Joseph Ejike Aloyie, Monica Altamirano, Mohamed Aly, Julie Arrighi, Elizabeth Carbine, Arthur Chapman, Shazia Chaudhry, Ingrid Coninx, Declan Conway, Erin Coughlan de Perez, Serge Djohy, Wajit Eriam, Hicham Ezzine, Marco Follador, Laura Fontaine, Tim Forsyth, Oscar Guevara, Benjamin Gyampoh, Stephane Hallegatte, Ailsa Holloway, Saleem Huq, Eddie Jjemba, Richard Jones, Cheikh Kane, Ambani Maurine Kasuvu, Joyce Kimutai, Eli Kintish, Bettina Koelle, Laurent Lambert, Allan Lavell, Shuiab Lawasa, Sangchan Limjirakan, Crispino Lobo, Offei (Bob) Manteaw, Michael Mbogga, Reinhard Mechler, Liliana Miranda, Said Mohamed, Daniel Morchain, Hannah Nissan, Sarah O'Keefe, Friederike E. L. Otto, Alberto Pascual, Leisa Perch, Hans-Otto Pörtner, Tabassam Raza, Debra Roberts, Halima Saado, Kai Uwe Barani Schmidt, Greg Schreiner, Vanessa Schweizer, Sonia Seneviratne, Ali Tauqeer Sheikh, Roop Singh, Awneesh Singh, Pablo Suarez, Amadou Taal, Arame Tall, Madaka Tumbo, Bart van den Hurk, David Viner, Coleen Vogel, Shem Wandiga, Olivia Warrick, Rosalind West, Galine Yanon, Carlos Nicolas Zambrano Sánchez, Maria Fernanda Zermoglio and Zinta Zommers

Acknowledgments

The International Conference was made possible thanks to generous support from partners and supporters. We appreciate the support of the Partners for Resilience and the Netherlands government, PLACARD (the PLATform for Climate Adaptation and Risk reDuction) supported by the European Commission, and the Norwegian government and the Norwegian Red Cross who each contributed 20K to this effort. We also thank the Climate and Development Knowledge Network (CDKN), the Building Resilience to Climate Extremes and Disasters (BRACED) Knowledge Manager, both supported by the UK government, and the National Adaptation Plan support program supported by the Danish Red Cross and the Danish government for their 10K contributions to this conference.

Our warm thanks also go to the International Center of Humanitarian Affairs (ICHA) at Kenya Red Cross, which hosted this International Conference, as well as the University of Nairobi for convening a high-level event with the next generation of researchers and practitioners. This event would not have been possible without the support of the Organising Committee, including Zoe Vokes and the Kenya Red Cross operations team. We also thank Arthur Chapman for preparing the background report.

This meeting report

This report was prepared by the Organising Committee with inputs from the Steering Committee and many of the participants and designed by Eszter Sarody. A draft version was shared for review with all participants, and with participants to the IPCC AR6 scoping meeting held in May 2017 in Addis Ababa. This final version contains minor refinements in light of comments we gratefully received on the draft version.

The International Conference was co-sponsored by the IPCC. However, IPCC co-sponsorship does not imply IPCC endorsement or approval of these proceedings or any recommendations or conclusions contained herein. Neither the papers presented at the International Conference nor the report of its proceedings have been subject to IPCC review.

While this report is intended to carefully reflect the outcomes of the meeting, it does not necessarily imply full endorsement of the contents by the organising partner organisations and networks, or individual participants to the meeting.

Any questions or suggestions to this report are most welcome and can be communicated to IPCC@climatecentre.org.

Suggested citation:

van Aalst, M., Jones, R., Lavell, A., Pörtner, H., Roberts, D., Tall, A., Ahmed, I., Arrighi, J., Coughlan de Perez, E., Koelle, B., Jjemba, E., Singh, R. K., Suarez, P., and Warrick, O. (2018) Bridging Climate Science, Policy and Practice. Report of the International Conference on Climate Risk Management, Pre-Scoping Meeting for the IPCC Sixth Assessment Report. Red Cross Red Crescent Climate Centre, The Hague, The Netherlands.

ISBN 9789081866804



Photo: Alberto Pascual

Executive summary	9
Introduction	11
Process of the conference	12
Risk framing	13
Metrics	17
Research priorities	19
Supporting the IPCC process and objectives	22
Conclusion	24
Appendices	25



A discussion on "The Role of Developing Countries in Climate Change Adaptation Dialogue"

The aim of this dialogue is to collect issues that are important to developing countries with regards to climate change adaptation that will inform the scoping process for the upcoming Intergovernmental Panel on Climate Change Sixth Assessment Report (IPCC AR6)

Venue	Date	Time	Networking Event
University of Nairobi, Institute of Climate Change and Adaptation, Cherono Campus, Millennium Hall	6th April 2017	2:30 pm - 4:30 pm	4:30 pm - 6:00 pm

Panelists

Prof. Shem Wandegga Director, Institute of Climate Change University of Nairobi	Dr. Samwel Mwangi Kinglet's IPCC Focal Point
Dr. Debra Roberts Head, Environmental Planning Climate Protect Department	Dr. Maarten van Aard Director, Climate Centre Red Cross Red Crescent Movement

Photo: Alberto Pascual

Executive summary

Scientists, practitioners and policy-makers from 32 countries gathered in Nairobi, Kenya, for the International Conference on Climate Risk Management from 5 to 7 April 2017 to inform the scoping process for the IPCC 6th Assessment Report (AR6). The International Conference incorporated methods for intense interaction between participants in order to reflect on the knowledge base on climate risk management as well as gaps therein and generate ideas for how the assessment can specifically address the needs of the most vulnerable.

Participants at the International Conference appreciated the use of a risk framing by the IPCC in AR5. The International Conference endorsed the core elements of the risk framing used in AR5, i.e. the central figure decomposing risk into hazard, vulnerability and exposure. They recommended that a similar risk framing be taken forward as a basis for AR6, as a good starting point for more systematically exploring options for responding to the changing risks and noting its adoption by many governments in national processes such as National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs) and its use in subsequent research and assessments.

The International Conference acknowledged that current risk frameworks also have several important gaps and challenges, including how to represent the dynamic nature of risk, as well as threshold effects and assessing the capacity of adaptation measures to reduce risks. Two critical additions to these risk frameworks would be to more explicitly reflect the role of *governance* in negatively creating, and positively managing vulnerability and exposure, and to reflect the *capacities* of the actors who manage these risks.

The International Conference further recognized the importance of appropriate metrics for informing risk management and climate change adaptation. First, it recommended that, at the beginning of the AR6 assessment process, authors from Working Groups II and III gather for a dialogue with authors from Working Group I to define relevant metrics for climate variables of interest (e.g. various spatial or temporal averages, distributions of extremes, including rates of change and uncertainties, in climate characteristics such as temperature, precipitation, wind, sea level, combinations such as storm surges, but also CO₂ concentrations, degree of ocean acidification, etc.). Second, the International Conference recommends that the IPCC reviews and selects several metrics in relation to risk (capturing the degree and likelihood of diverse impacts, combining hazard, vulnerability and exposure) that can be used to compare and communicate risk to different audiences. Ideally, these metrics would be the same as used for the monitoring and evaluation of climate change adaptation and its capacity to reduce risk (typically informed by IPCC Working Group II), but also be relevant for assessing implications of different emissions pathways (typically informed by IPCC Working Group III). Metrics might be linked with emissions pathways in ways similar to the combination of the so called “burning embers” (as in the synthesis report of AR5, cf. [O’Neill et al., 2017](#)), but more attention would be needed for capturing vulnerability and exposure (and the factors that determine trends in those aspects of risk), adaptation options and limits to adaptation, and uncertainties.

The International Conference also developed several recommendations for the research, policy and practitioner communities. In the coming years, it will be critical for scientists, policy-makers and practitioners to collaborate in developing and co-producing the literature base on topics relevant to climate risk management. Co-developing research agendas will ensure researchers are tackling the questions that are most relevant to decision-making and implementation and that are most pertinent to climate change adaptation. This is essential as it will also ensure that the knowledge of policy-makers and practitioners on other key factors determining exposure and vulnerability (often of greater importance than the changing climate hazard) is used to shape and inform the research. Interactive engagement processes between scientists and practitioners should continue and expand in the coming years, shaping research agendas and communication products to focus climate risk management on those who are the most vulnerable. A critical research agenda highlighted at the International Conference relates to the integration of risk information across timescales, including past, current and near-term risks that are relevant to efforts of increasing resilience now, as well as future risks to which it will be necessary to adapt over time.

Finally, the International Conference identified several entry points for climate risk management policy makers and practitioners to engage in the IPCC process, including as authors and expert reviewers in AR6. Participants at the International Conference offered to facilitate a discussion between authors from Working Groups I and II at the beginning of the assessment process, specifically to discuss metrics and timescales of interest to the practitioner and policy-making communities. Beyond the IPCC itself, boundary organizations (such as think tanks, application-oriented departments within academic institutions, and especially science-oriented units within operational institutions and networks) should be encouraged to facilitate such interfaces between the assessment process and policy and practice.

Photo: Steve Mwenge/KRCS



Introduction

The world's most vulnerable people and the ecosystems they depend on are confronting a changed climate, and society is tackling existing climate risks in a growing awareness that these risks are changing rapidly. The International Conference on Climate Risk Management, held in Nairobi in March 2017, convened scientists, policy-makers and practitioners in climate risk management from around the world to discuss how the upcoming IPCC 6th Assessment Report (AR6) could best address the needs of the most vulnerable people.

The first IPCC report in 1990 generated a climate assessment that brought the issue of climate change to the world's attention and led to the establishment of the United Nations Framework Convention on Climate Change (UNFCCC). The main stakeholders for IPCC assessment reports were and still are the UNFCCC and international climate policy-makers. More recently, interest has widened substantially, to include policy-makers and practitioners working on climate change adaptation, sustainable development and risk management from global to local levels. The UNFCCC process has also substantially evolved, especially since the Paris Agreement, and the AR6 process is positioned to inform the first global stocktake of the Agreement.

In light of IPCC's current ambition to generate assessments relevant to solutions (rather than just characterising the nature of the problem), this International Conference on Climate Risk Management was convened as a "pre-scoping" meeting to feed into the upcoming AR6 Scoping Meeting in Addis Ababa in May 2017. Participants discussed the scientific research agenda for the coming years, the framing and structure of the AR6 and methods to connect climate knowledge to decision-making. The following pages detail recommendations from these discussions, for consideration by the IPCC at the Scoping Meeting and beyond, and by the broader research, practice and policy communities.

Process of the conference



The International Conference brought together 65 scientists, policy-makers and practitioners for three days of participatory discussions on climate risk management. Participants attended from 32 different countries and engaged in an innovative agenda that included elements of human-centered design and applied improvisation in order to actively engage all those present throughout the meeting. This included debate-style sessions in which risk framings from previous assessment reports were presented alongside new proposals, with audience members actively asking tough questions of the debaters. In order to bring the perspectives of the most vulnerable people and decision-makers into its discussions of the IPCC assessment process, the International Conference applied human-centered design approaches - a design and management framework that develops solutions to problems by involving the human perspective in all steps of the problem-solving process (Giacomin, 2014). A high-level event hosted at the University of Nairobi by the Kenya Red Cross brought young future leaders together with conference participants to talk about the role of developing countries in the climate change adaptation dialogue.

Risk framing

Key messages

- Practitioners welcomed and encouraged the use of risk framing by the IPCC AR5 (especially the central figure explaining risk as resulting from climate hazards interacting with vulnerability and exposure determined by socio-economic factors); it has been successful at promoting dialogue across disciplines.
- Governments have adopted the risk frameworks currently in use in national processes such as National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs). They have also been used extensively in subsequent research. Therefore, this core framing should be retained in the AR6.
- The static representation of a dynamic system of risk does not capture some of the challenges associated with climate risk *management* (e.g. the capacity of actors who are managing risk) making it difficult to adequately apply it.
- Risk framing should acknowledge the crucial role of governance in creating and distributing risk; any adaptation activity needs to take this into account.
- The IPCC should develop a diversity of approaches to frame and communicate its risk assessments to different audiences.

The most recent IPCC assessment (AR5) and its preceding special report on extremes and disasters (SREX) have chosen a risk perspective to frame their climate assessment, particularly the hazard-vulnerability-exposure framing (see Figure 1 below, cf. O'Neill et al., 2017) Another presentation of this risk framing applied in the AR5 (originating from the Third Assessment Report) is the “burning embers” diagram (see Figure 2 below).

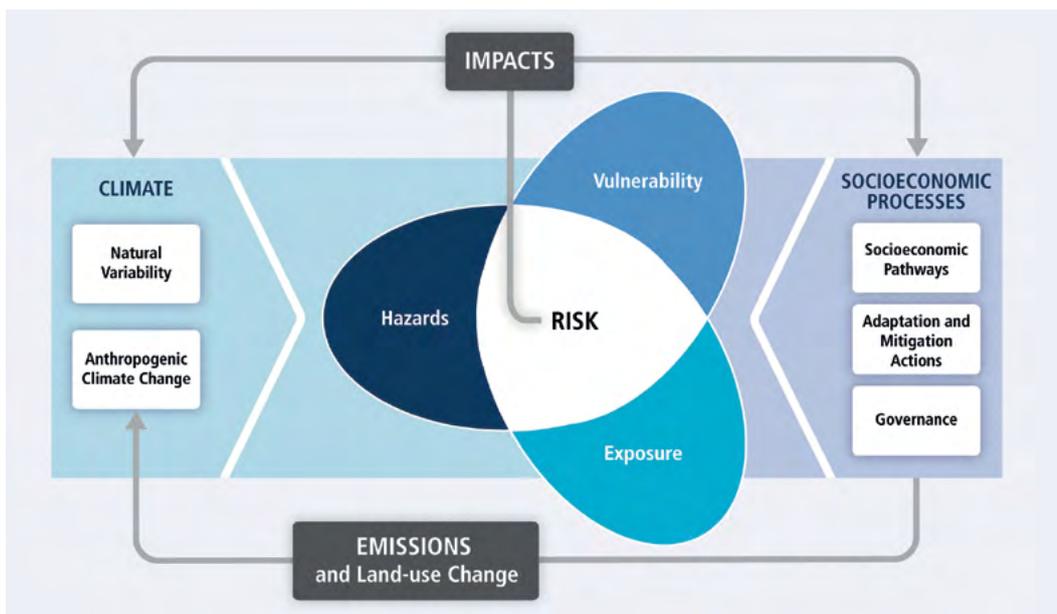


Figure 1: the central risk framing used in the AR5 WGII report [Figure SPM.1 from the Summary for Policymakers of the WGII contribution to the IPCC AR5, originally developed in the special report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) Chapter 1]

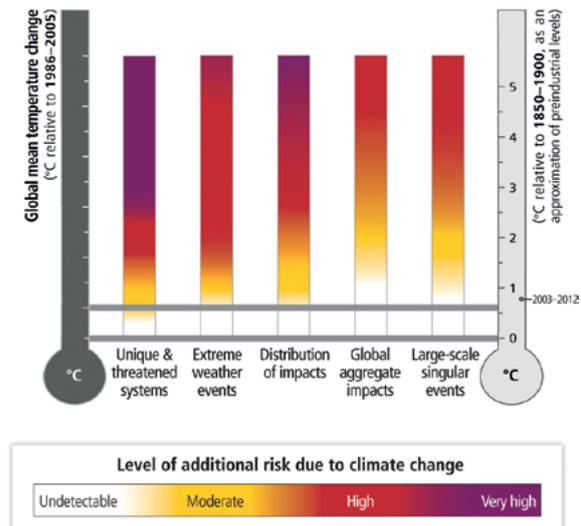


Figure 2: the “burning embers” depiction of changing risks in the AR5 WGII report (also adopted in the Synthesis Report) [Assessment Box SPM.1 Figure 1 from the Summary for Policymakers of the WGII contribution to the IPCC AR5]

The practitioner and policy communities welcome these framings, appreciating the way in which risk links to the fields of sustainable development and disaster risk reduction. The central risk framing, figure 1, have been integrated into national processes (NAPs and NDCs) and it is recommended to continue this in AR6.

The use of risk framings has had several key policy outcomes. First, the acknowledgement that climate-related impacts are not inevitable, but rather occur only in the intersection of hazard, vulnerability and exposure, has been key to spurring efforts in adaptation. It has encouraged a focus on those who are the most vulnerable to climate change. Second, the risk framing has opened discussions on how to manage “residual risk”, with the understanding that it is not possible to eliminate all vulnerability and exposure.

However, the practitioner community voiced several strong critiques of the risk framings currently in use. The figures above are static; they represent a snapshot of the world that fails to portray the dynamic nature of risk, or the way different risks evolve across timescales. In addition, assessments derived from the framing do not explicitly reflect the capacities of the people who are managing and engaging with risk. Users and policymakers perceived that any assessment using these framings is not solutions-oriented, and does not acknowledge the underlying reasons why many of those who are most vulnerable are unable to reduce climate-related risks, or to cope with impacts.

To some extent, these dimensions were addressed in the “regional key risks” table in the Summary for Policymakers of Working Group II (SPM Assessment Box 2, see *Figure 3* below).

Climate-related drivers of impacts										Level of risk & potential for adaptation		
Warming trend	Extreme temperature	Drying trend	Extreme precipitation	Precipitation	Snow cover	Damaging cyclone	Sea level	Ocean acidification	Carbon dioxide fertilization			
Africa												
Key risk	Adaptation issues & prospects				Climatic drivers	Timeframe	Risk & potential for adaptation					
Compounded stress on water resources facing significant strain from overexploitation and degradation at present and increased demand in the future, with drought stress exacerbated in drought-prone regions of Africa (<i>high confidence</i>) [22.3-4]	<ul style="list-style-type: none"> Reducing non-climate stressors on water resources Strengthening institutional capacities for demand management, groundwater assessment, integrated water-wastewater planning, and integrated land and water governance Sustainable urban development 						Very low	Medium	Very high			
						Present						
						Near term (2030-2040)						
						Long term 2°C (2080-2100)						
						4°C						
Reduced crop productivity associated with heat and drought stress, with strong adverse effects on regional, national, and household livelihood and food security, also given increased pest and disease damage and flood impacts on food system infrastructure (<i>high confidence</i>) [22.3-4]	<ul style="list-style-type: none"> Technological adaptation responses (e.g., stress-tolerant crop varieties, irrigation, enhanced observation systems) Enhancing smallholder access to credit and other critical production resources; Diversifying livelihoods Strengthening institutions at local, national, and regional levels to support agriculture (including early warning systems) and gender-oriented policy Agronomic adaptation responses (e.g., agroforestry, conservation agriculture) 						Very low	Medium	Very high			
						Present						
						Near term (2030-2040)						
						Long term 2°C (2080-2100)						
						4°C						
Changes in the incidence and geographic range of vector- and water-borne diseases due to changes in the mean and variability of temperature and precipitation, particularly along the edges of their distribution (<i>medium confidence</i>) [22.3]	<ul style="list-style-type: none"> Achieving development goals, particularly improved access to safe water and improved sanitation, and enhancement of public health functions such as surveillance Vulnerability mapping and early warning systems Coordination across sectors Sustainable urban development 						Very low	Medium	Very high			
						Present						
						Near term (2030-2040)						
						Long term 2°C (2080-2100)						
						4°C						

Figure 3: A selection from the “regional key risks” table in the AR5 WGII report [from Assessment Box SPM.2 Table 1 from the Summary for Policymakers of the WGII contribution to the IPCC AR5]

During the International Conference, a set of three major recommendations on how risk framings could be used and adapted in the AR6 report were identified.

First, the risk framing used for AR6 should cover the capacity of actors to manage risk. There were several initial ideas on how this could be done, including through modifications to the hazard-vulnerability-exposure diagram (see Appendix 7), or including an additional element relating to socio-economic resilience as suggested by Hallegatte et al. (2017). This should explicitly acknowledge both risks and opportunities related to climate conditions, which can have both positive and negative outcomes. Participants felt that such a modification could increase the focus on risk management and decision-making. Further, it would be helpful for risk framings to better describe the dynamic properties of the system (i.e. to define rates by which socioeconomic processes do respond to impacts). This means that instead of producing only snapshots for particular time slices (such as present, near-term and 2100 for $\Delta T_g = 2$ or 4°C), both the variability and long-term trajectories would be explicitly described.

Second, for a risk framing to be relevant to society, it should acknowledge the role of governance. Risk is often created during the development process itself; it is endogenously not exogenously generated. Therefore, endogenous development (e.g. through land-use planning or environmental management) is best placed to address inherent risk, and governance structures should support these processes in order to best respond to and prepare for a particular hazard. While the IPCC should not aim to produce an assessment of risk governance, it should point the reader towards understanding the critical role of governance in risk creation, distribution and management, and encourage appropriate adaptation choices that do not ignore this critical role.

Third, the International Conference encouraged the IPCC to adopt a central framing that allows for synthesis across chapters and working groups, but also allow for inclusion of a range of other approaches to represent risk, rather than attempting to develop one perfect framework that captures all literature and suits all audiences. The IPCC should involve policy makers and practitioners from different user communities to identify risk framings, use language that is most useful to those groups and provide several different interfaces for different users. This should include attention to stakeholders at the global, national and local scales, and practitioners working on short and long timescales. Specific recommendations were aimed at the climate services community, the economic community and the ecological research community.



Photo: Steve Mwenge/KRCS

Metrics

Key messages

- Working Group I should collaborate with Working Group II and Working Group III authors early in the process to collectively define relevant metrics for climate variables covered in the assessment.
- Risk metrics (combining climate hazards, vulnerability and exposure) are needed to compare risk, but a variety of metrics should be used to communicate to different audiences.
- Risk metrics should be linked to the metrics used for monitoring and evaluation of climate change adaptation.

The metrics used in the IPCC reports have far-ranging implications for policy discussions and adaptation decisions around the world. The use of standardized extremes indices rather than only average values, for example, has encouraged decision-makers to focus on avoiding catastrophic impacts to future infrastructure. Participants at the International Conference discussed the diverse range of metrics they used in their work and engaged in a [sociometric mapping](#) and debate based on their recommendations as to how the IPCC should frame risk metrics.

In AR6, it will be critical for all working groups to collaborate in the selection and definition of relevant climate metrics. The International Conference recommends that authors and scientists from all three working groups meet together shortly after the author selection process is completed to define the relevant metrics that will be used in AR6. Practitioners recommend that the authors start with the impacts that should be avoided, working from there to define the climate indices and thresholds that are relevant to those impacts. These selected indices can then be analysed first by Working Group I, to feed into Working Groups II and III. Metrics that are selected should be diverse, representing different timescales, spatial scales, sectors and distributional impacts.

Specifically, metrics to assess and communicate risk are needed in the AR6 report. Based on a general consensus that risk should be expressed in a diversity of metrics, rather than a single standardized risk metric, the International Conference recommends that the IPCC authors first identify specific audiences for risk information. The authors can then translate risk levels into the “currency” of each target audience. This should be based on an assessment of the literature, rather than the invention of a new risk metric, which the IPCC would undertake as being to specific policy questions. Relevant metrics that decision-makers already use range from economic assessments, such as purchasing power parity, to metrics for ecosystem services and the health of natural systems.

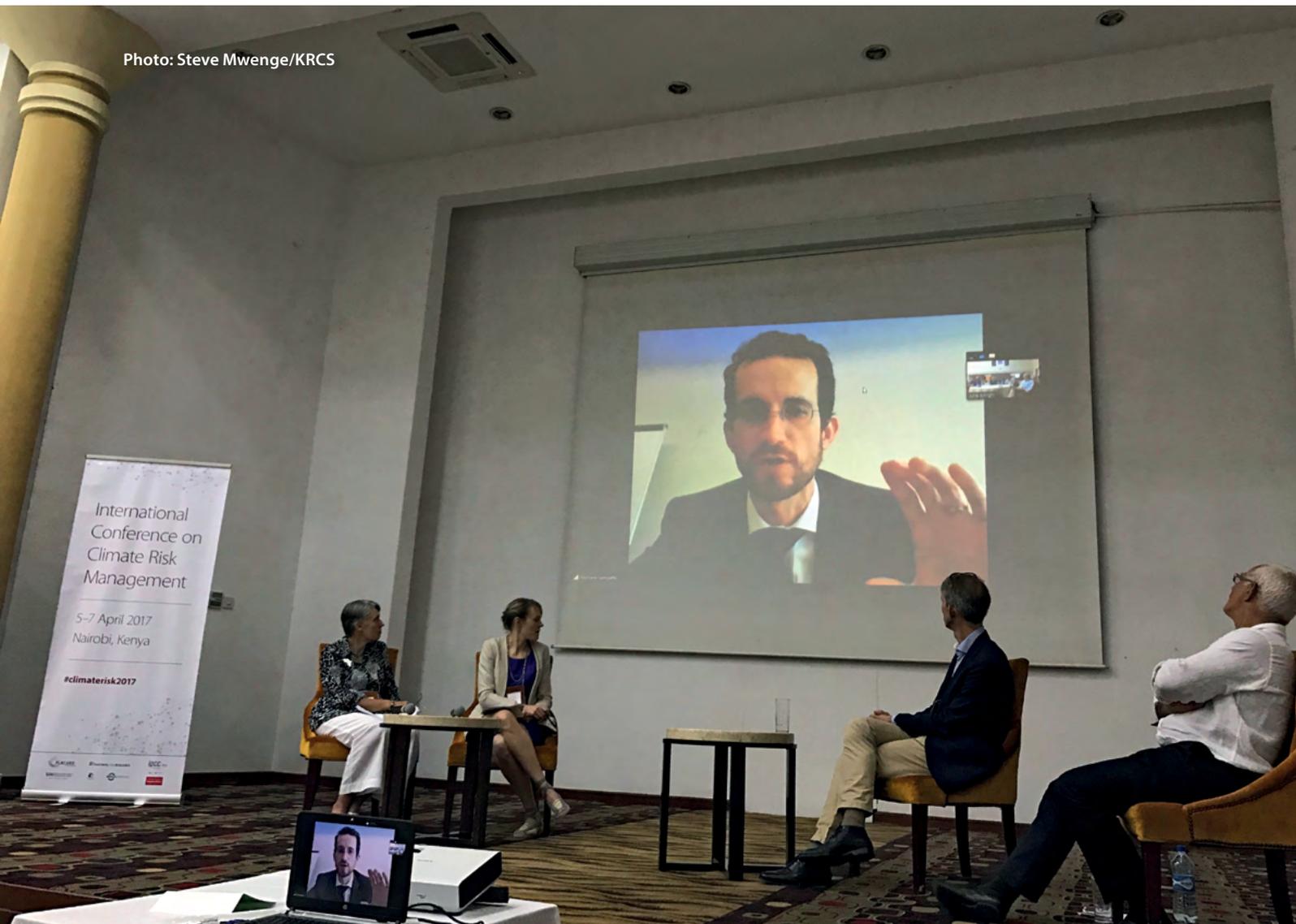
To ensure the metrics AR6 uses are relevant for policy and practice, the International Conference recommends that these be linked to those that are used for the monitoring and evaluation of climate change adaptation. Indicators that are used to monitor adaptation options are documented in the grey literature, which the IPCC authors should review as they decide on which metrics to use in AR6. The selection of risk metrics should entail consideration of the consequences of decisions and trade-offs and put climate change in the context of socially constructed contributors to vulnerability and exposure. In particular, these metrics should capture outcomes for the most vulnerable members of society, including the distribution of impacts to vulnerable groups.

Research priorities

Key messages

- Research agendas should be co-produced with practitioners and policy-makers to ensure they are relevant to decision-making and implementation and draw in the knowledge of these communities on factors relevant to the exposure and vulnerability elements of climate risks to have the biggest impact in terms of adapting to climate change.
- AR6 should have an increased focus on past, current and near-term risks and how they are changing across temporal and spatial scales.
- The AR6 report needs to include a review of transdisciplinary research at the interface of climate and society.

Photo: Steve Mwenge/KRCS



Research that the IPCC assesses and summarizes informs decisions that policy-makers and practitioners make about development, resource allocation, adaptation approaches and other areas that are directly and indirectly affected by climate. A wide-ranging research base that is driven by the questions coming from the ground is required to achieve the adaptation goals outlined in the Paris Agreement.

Participants at the International Conference explored the key, priority, research needs through individual brainstorming, small group prioritisation and conference voting to determine research priorities. The [full list of research ideas](#) (Appendix 4) represents the rich and nuanced research questions and topics coming from the practitioner community. These priorities need to inform research agendas in the near term in order to produce a relevant literature base for the AR6 report. A key emerging theme was research into governance, ranging from increasing understanding of enabling factors for good governance to developing indicators for monitoring, evaluation and good governance of various climate change mitigation and adaptation options.

Changes in past, current and near-term risks, including those associated with climate extremes, are most relevant to the decisions being made in developing countries. This includes investigating the role of climate and non-climate (vulnerability and exposure) drivers in recent high-impact events, and how those drivers are changing across time and spatial scales. Related research agendas include validation of variability in climate models, changes in return periods of extreme events over time and the role of decadal variability in decision-making. This research can then be linked to empirical thresholds and operational early warning systems. In addition, research on the impact of accumulated risks (when multiple, successive extreme events affect a community) and key risk modifiers such as conflict, migration and displacement is needed.

Climate risk management operates at the boundary between climate and society; the AR6 report should draw from an expanded research base at this interface. Transdisciplinary collaboration on climate risk is required that draws on expertise from behavioural science, communications, social science and indigenous knowledge and more is needed to explore subjects such as risk perception, behavioural thresholds/triggers, social vulnerability (conflicts, migration, displacement, equity, justice) and social informatics in climate risk management.

In highlighting the need for research that focuses on relevant decisions made at the national, sub-national and local level, the International Conference recommends “putting the weather back into climate” through a three-step process. First, Working Group II should review the literature that relates decisions to appropriate timescales and add this information to the table outlining adaptation options. Second, Working Group I should use Working Group II’s output on relevant timescales for decision-making to motivate review of the literature on climate variability and evaluation of models on these timescales. This process should consider putting climate projections in the context of important modes and mechanisms of variability. Third, Working Group II should place climate change information from Working Group I in the context of past and current climate risk to better enable decision-makers to manage climate risks today, for tomorrow.



Photo: Steve Mwenge/KRCS

Supporting the IPCC process and objectives

Key messages

- A key focus in the coming years should be on publishing research that can inform climate risk management.
- Climate risk management practitioners and policy-makers are encouraged to participate in the IPCC process as authors and reviewers.
- Beyond the IPCC itself, boundary organizations at the interface between science and policy play a key role in communication of the assessment results, and can facilitate interfaces between the assessment process and policy and practice.

As the audience for the IPCC reports continues to widen beyond UNFCCC stakeholders, there are a number of key entry points identified in which practitioners and scientists can support the IPCC process and objectives.

1. Publish literature

In light of the research priorities identified above, scientists and practitioners are encouraged to collaborate to research and publish information relevant to these topics. In particular, studies on both what works and what doesn't work in climate risk management would be welcome.

Climate change adaptation practitioners often publish grey literature, and there is a process by which authors of Working Group II can assess this. However, the International Conference recommends that practitioners work with academics to develop peer-reviewed research about many of the topics that are at present only in the grey literature.

2. Engage in writing and reviewing AR6

Governments are encouraged to consider author nominations of people who are connected to climate risk management on the ground.

As detailed in the metrics session, a cross-working group meeting on metrics at the beginning of the AR6 process could generate an opportune moment to gather input from practitioners on useful metrics for the AR6 assessment.

In turn, climate risk management practitioners are encouraged to become expert reviewers for AR6. After the 0-order draft is released, it could be relevant to convene a similar meeting of practitioners who are also expert reviewers to discuss and comment on the draft.

3. Work with boundary organizations to provide inputs to AR6 and/or sounding boards for interim assessment results

Boundary institutions are also encouraged to facilitate inputs to the AR6, and to organize platforms that can facilitate interaction between the formal assessment process and user communities (in a way similar to the meeting in Nairobi, but possibly more tailored by theme and perhaps region).

In particular, the International Conference offered to facilitate discussions between authors of Working Groups I and II, specifically to discuss timescales and metrics at the beginning of the assessment process.

4. Work with boundary organizations to communicate AR6

Boundary institutions play a critical role in translating IPCC reports for specific audiences. Further support and diversity of such initiatives would be a welcome method to increase engagement and uptake of IPCC assessments. This can include engagement of non-traditional groups such as local governments and religious institutions, which are often key players in the governance structures affecting the most vulnerable.

Conclusion

The International Conference on Climate Risk Management, was momentous in terms of its process and outcomes. Scientists, policy makers and practitioners from a wide range of countries and backgrounds jointly, actively and intensely debated the knowledge base, decision-making in practice, research questions, and the assessment process. This report highlighted the main conclusions, hopefully of use to the IPCC community as it embarks on the Sixth Assessment Report. Many participants also agreed to follow up with specific initiatives alongside that assessment process, as well as in their day-to-day research, policy and practice.

Given the immense challenges we face, but also the huge investment in climate research, much unrealised potential for better decisions exists. The intense and truly interactive engagement processes between scientists, policy makers and practitioners at the Nairobi Conference should be continued and expanded, informing research agendas and shaping science communication towards policy and practice, to ultimately benefit those most at risk.

Appendices

1. Participant list
2. Conference agenda
3. Notes of the meeting
4. Research priorities
5. Welcome note
6. Modified Risk diagrams
7. Side event at the University of Nairobi

The appendices for this report can found at the following webpage:
<http://climatecentre.org/IPCC-ICCRM>



