Report on the First meeting of the Technical Expert Group on Comprehensive Risk Management under the Executive Committee of the Warsaw International Mechanism on Loss and Damage

Bonn, Germany, 29-30 August 2019
Summary

Climate change risks are multifold, and the spectrum of impacts can vary depending on the risk exposure, sensitivity and vulnerability of human and natural systems. A combination of extreme weather, slow onset events (e.g. rising sea levels, ocean acidification and soil degradation) and socio-economic risks expose vulnerable populations, communities, ecosystems and assets to increasing risks to loss and damage from climate variability and change.

To effectively respond to the spectrum of climate risks, comprehensive risk management (CRM) approaches blending mitigation of climate change, adaptation, disaster risk reduction and risk transfer options would need be necessary. In light of adaptation limits, potential maladaptation, existential risks and irreversible loss and damage, countries are advancing the application of CRM to avert, minimize and reduce risks related to climate change.

This report provides an overview of the first meeting of the Technical Expert Group on Comprehensive Risk Management (TEG-CRM) under the Executive Committee of the Warsaw International Mechanism on Loss and Damage. The meeting took place 29-30 August 2019 in Bonn, Germany. The meeting brought together sixteen technical members of the TEG-CRM consisting of government, private sector, civil society, academia and other stakeholders.

The report concentrates on the key technical discussions of the TEG-CRM during the meeting that resulted in the development of a Plan of Action to further implement the strategic workstream (c) of Excom’s five-year rolling workplan. The meeting outlined the importance of science to inform the actions of the TEG-CRM across a spectrum of CRM actions including risk assessment, risk reduction, risk transfer, risk retention, including social protection instruments and transformational approaches.

The meeting discussions highlighted the need to move beyond identifying needs and gaps to methodologies and pioneering transformations in CRM to address systematic, interconnected and cascading risks and impacts in the context of climate change. Collaborative CRM is needed to build long-term resilience of countries, vulnerable populations and communities. The report which follows provides background information on the TEG-CRM, a summary of proceedings and discussions, and concludes with a brief overview of the next steps.
I. Introduction

A. Background

1. The Warsaw International Mechanism (WIM) was established under the United Nations Framework Convention on Climate Change (UNFCCC) and is the main vehicle under the Paris Agreement to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change, in a comprehensive, integrated and coherent manner. The Executive Committee (Excom) of the WIM guides the implementation of the functions of the Warsaw International Mechanism through its five-year rolling workplan (hereafter the ‘workplan’). The Excom comprises twenty members from the Parties to the Convention.

2. The COP, at its twentieth session, decided that the Excom may establish expert groups, subcommittees, panels, thematic advisory groups or task-focused ad hoc working groups1 to help execute the work of the Executive Committee in guiding the implementation of the Warsaw International Mechanism, as appropriate, in an advisory role, and that report to the Executive Committee. Further to this, the COP, at its twenty-third session, welcomed the report of the Excom, which contains, inter alia, the workplan of the Excom. At Excom 7 (March 2018), the Executive Committee established three expert groups on slow onset events, non-economic losses and comprehensive risk management approaches, guided by the terms of reference.

3. Strategic workstream (c) of the five-year rolling workplan focuses on enhanced cooperation and facilitation in relation to comprehensive risk management (CRM)2 approaches (including assessment, reduction, transfer and retention). Activity 1 of the strategic workstream (c) mandates the establishment of a Technical Expert Group (TEG-CRM) to enhance knowledge and understanding of CRM, including issues related to finance, data, technology, regulatory environments and capacity building.

4. The current TEG-CRM is composed of eighteen members3 representing a mix of geographical diversity, technical areas and transdisciplinary expertise of which sixteen were present at the meeting (thirteen face-to-face and three virtual participants; see annex 1).

B. General objective and approach for the meeting

5. The WIM Excom, at its ninth meeting (April 2019), requested the Secretariat to organize the first meeting of the TEG-CRM. This first meeting of the TEG-CRM focused on initiating the work of the TEG-CRM and finalizing a plan of action under the strategic workstream (c).

6. The objective of the first meeting of the TEG-CRM is to engage in discussion, exchange ideas and co-develop its plan of action on enhanced cooperation and facilitation on comprehensive risk management. More specifically the meeting has focused on the following:

(a) Introduce experts and learn from their experience/work in relation to strategic workstream (c) on CRM;
(b) Stocktake the UNFCCC processes on the WIM, the WIM Excom workplan and CRM outputs to date;
(c) Engage in discussion and exchange ideas on a plan of action, potential contributions from experts and available resources; and

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1 Decision 2/CP.20, paragraph 8.
2 Examples include (but not limited to): Emergency preparedness, including early warning systems; measures to enhance recovery and rehabilitation and build back/forward better; social protection instruments, including social safety nets; and transformational approaches.
3 List of technical members of the TEG-CRM is available on the UNFCCC website
(d) Consider the agenda for the stakeholder engagement workshop on capacity-building for enhanced risk assessment and observation in the context of loss and damage scheduled to take place in late October 2019.

7. In the lead up to the meeting, the TEG-CRM members were requested to prepare for oral presentations on the following questions:

(a) What relevant activities and events are being planned by your or other organizations for 2019-2021 which the TEG-CRM could synergize its work?

(b) Based on your experiences, what challenges, opportunities and lessons learned do you/does your organization see when implementing CRM approaches, including risk-informed action for groups vulnerable to the adverse impacts of climate change?

8. The agenda of the meeting was structured around six sessions:

(a) Setting the scene and introduction of the technical members of the TEG-CRM

(b) Overview of science and policy related to CRM and loss and damage

(c) Work planning by the TEG-CRM

(d) Finalizing a draft plan of action and identifying priority events/milestones for TEG-CRM plan of action

(e) Finalizing an agenda for October 2019 workshop on capacity-building for observation and risk assessment in the context of loss and damage

(f) Next steps and close

II. Summary of proceedings

9. The first meeting of the TEG-CRM was held at the German Development Institute/Deutsches Institut für Entwicklungspolitik in Bonn, Germany and was co-facilitated by the members of the WIM Excom and CRM Champions:

(a) Ms. Le-Anne Roper, Ministry of Economic Growth and Job Creation, Jamaica

(b) Mr. Christoph von Stechow, Federal Ministry of Economic Cooperation and Development, Germany

(c) Mr. Nedal Katbeh-Bader, Environment Quality Authority, Palestine

10. To increase accessibility, the meeting was also available by skype to expert members of the TEG-CRM.

11. At the opening, the WIM Excom members welcomed the technical members of the TEG-CRM to the first meeting. They reminded the members on the objective of the meeting (see paragraph 5 above). The WIM Excom members underscored the importance of the TEG-CRM in supporting the implementation of the WIM Excom workplan and providing advisory support to the WIM Excom. They further emphasised the importance of the mandate defined in the five-year-rolling workplan, particularly workstream (c): comprehensive risk management approaches.

12. Dr Steffen Bauer, Head of Klimalog Project, German Development Institute, in his welcome remarks highlighted the importance of focusing on loss and damage beyond economic aspects, governance and risk management tools. He highlighted the links between theory and practice, development and environment and assessment and observations.

13. Dr Koko Warner, Manager, Adaptation Programme, the UNFCCC Secretariat expressed her appreciation of TEG-CRM champions and the TEG-CRM and noted the opportunity to expand understanding of risk management approaches commensurate with transboundary climate impacts. She explained that the role of the secretariat to facilitate the mandates of the WIM Excom and the process of developing the plan of action.
14. Ms. Le-Anne Roper in session one of the meeting presented the goals of the WIM, the work of the Excom, and the workstreams of the five-year rolling workplan. She discussed that at its first meeting, the TEG-CRM was expected to develop a plan of action, identify key actions for 2019–2021 and facilitate CRM approaches. She reflected on the key accomplishments of the WIM, particularly in raising the visibility of the issues of loss and damage in multiple domains and in international policy processes and research/academia. She noted that the review of the WIM in late 2019 would provide further guidance to enhancing and strengthening the WIM and associated technical working groups and their plan of actions.

15. Session two, co-facilitated by Mr. Nedal Katbeh-Bader and Dr. Adelle Thomas, Climate Analytics, provided an overview of the key findings from the IPCC Assessment and Special Reports by three lead authors, Dr. Reinhard Mechler, Dr. Zinta Zommers and Dr. Maarten van Aalst. Presentations discussed trends and scientific findings on the impacts of global warming of 1.5 °C and 2 °C, value add of transformational risk management approaches, land being part of the climate solution, different socioeconomic pathways and cascading risks, and increased emphasis on risk management. The panel followed with a discussion with the TEG-CRM on strengthening risk management, addressing key knowledge gaps and how scientific information can inform climate action.

16. Mr. Christoph von Stechow co-facilitated session three of the meeting with a focus on developing a plan of action by TEG-CRM that aligns with the strategic workstream (c) of the workplan, with more specific attention to activities 2, 4 and 5. Mr. von Stechow introduced the breakout group session and highlighted that the Excom was looking for actions and products that can be used practically in the expert and practitioner communities. The TEG-CRM was then requested to draft a plan of action, closely aligning with the mandate, tasks, expected results and possible approaches defined in the five-year rolling workplan.

17. Three working groups during session three focused on defining milestones and steps to implement strategic workstream (c) of the workplan. The groups identified priority actions, closely matching with organisational experiences, while articulating ways to develop tools and bridge science and policy gaps discussed in session two of the meeting. Taking stock of existing knowledge gaps on CRM approaches, experts proposed action, outlined partnerships with external stakeholders, and identified opportunities to develop linkages with National Adaptation Planning.

18. Following an evening working session on further fleshing out the plan of action, co-facilitated by the CRM champions and group rapporteurs, session four on day two of the meeting finalized the draft by the TEG-CRM. Ms. Roper and Mr. von Stechow presented the three working groups’ outcomes and the draft plan of action, co-facilitated a plenary discussion on minimising overlaps and discussed interlinkages across actions. The co-facilitators clarified questions and the TEG-CRM emphasised that actions should move beyond identifying gaps while bringing together a range of transformational CRM approaches and partners.

19. Mr. Nedal Katbeh-Bader and Mr. James Douris, World Meteorological Organisation (WMO) presented the proposed scope and agenda of the October 2019 workshop on capacity-building for observation and risk assessment in the context of loss and damage. The TEG-CRM agreed to conduct the stakeholder engagement workshop “Strengthening the capacities for observation and risk assessment in the context of loss and damage associated with climate change impacts” on 28-29 October 2019 in Bonn, Germany. The objective of the workshop will be to enhance the capacity for observation and risk assessment in the context of loss and damage.

20. An indicative list of type of participants and stakeholders from relevant backgrounds was identified by the TEG-CRM. In a discussion on next steps for the workshop, technical members and potential participants will be approached via an invite to further inform and engage them. In terms of the agenda, the indicative focus, outputs and session (co)leads were identified, and it was agreed that the WMO, UN Office for Disaster Risk Reduction, the CRM Champions and the secretariat will further develop the agenda for the workshop and send the invitations.

21. The CRM Champions congratulated and thanked the TEG-CRM for its first meeting and developing a plan of action. The CRM champions summarised the key discussions at the workshop, emphasising that

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4 Owing to logistical needs of the workshop, the revised dates for the workshop is 29-30 October 2019.
the first meeting of the TEG-CRM brought together a range of experts with different backgrounds on CRM approaches that will be a vital to further implementing the strategic workstream (c) of Excom’s five-year rolling workplan.

22. Furthermore, the CRM Champions reinforced the overall **importance of science and partnerships as the foundation that supports the work under the WIM Excom.** They underlined the importance of bringing together different communities to ensure comprehensive risk management is more widely used by practitioners on the ground to avert, minimize and address loss and damage associated with climate change impacts. In moving forward, the CRM champions underlined that the next review of the WIM planned in 2019 will further guide the work of the Excom and TEGs.

23. The next steps agreed by the CRM Champions, in consultation with the TEG-CRM, include finalization of the plan of action. The TEG-CRM would also conduct a stakeholder engagement workshop (see paragraph 14) from 28-30 October 2019⁵. The TEG-CRM agreed to meet at least once a year though means of virtual or back-to-back meetings.

24. In their closing remarks, the CRM Champions thanked the expert members of the TEG-CRM for their engagement, the panellists, rapporteurs, German Development Institute and the secretariat. Ms. Roper emphasised that the TEG-CRM is a useful way to identify cross-boundary partners through its plan of action.

**III. Summary of the sessions and general discussion**

1. **Session 1: Setting the scene and introduction of TEG-CRM members**

25. Ms. Le-Anne Roper, opened this session with a presentation on introduction of the WIM, Excom and an overview of relevant work of the Excom to date.

26. She started the presentation by pointing out that the WIM for Loss and Damage, established at COP19 in Poland, is the main vehicle under the Paris Agreement to promote the implementation of approaches to address loss and damage in a comprehensive, integrated and coherent manner. She underlined that the five-year rolling workplan of the Excom implements the functions of the L&D Mechanism through strategic workstreams, and that the strategic workstreams are not sectoral but look at different types of climate risks, nature of losses and potential impacts, associated approaches and support aspects.

27. She introduced the TEG-CRM strategic workstream (c) of the five-year rolling workplan that focuses on enhanced cooperation and facilitation in relation to comprehensive risk management approaches (including assessment, reduction, transfer and retention) to address and build long-term resilience of countries, vulnerable populations and communities to loss and damage, including in relation to extreme and slow onset events. She outlined that the overarching mandate of technical expert groups under the Excom, is to help execute the work of the Excom and guide the implementation of the WIM, as appropriate, in their advisory and technical capacities.

28. Ms. Roper reflected on the following key accomplishments of the WIM:

(a) Raising the visibility of the issues of loss and damage in multiple domains and levels, whereby, loss and damage has gained traction in international policy processes, government, research and academia;

(b) The WIM/Excom has facilitated knowledge creation and a drive for a paradigm shift in how governments can think of climate risk management and adaptation;

(c) Convening a range of stakeholders on issues related to averting, minimizing and addressing loss and damage;

(d) Launching of the Fiji Clearing House for Risk Transfer in 2017⁶; and

(e) Development of a UNFCCC Roster of Experts of the WIM

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⁵ See above change to dates.

⁶ Decision 1/CP.21, paragraph 48.
29. Noting the regional diversity, technical areas and transdisciplinary expertise of the TEG-CRM (see figure 1), she highlighted that the TEG-CRM membership reflects the scope of work envisioned under the current five-year rolling workplan of the Excom.

**Figure 1**
Regional expertise of technical members of the TEG-CRM

30. Ms. Roper encouraged the sharing of experiences on CRM approaches among the technical members of the TEG-CRM, and opened the floor for each of the sixteen experts to reflect on the question: What relevant activities and events are being planned by your or other organizations for 2019-2021 which the TEG-CRM could synergize its work? The second part of the session was an introduction of the technical members, their organizations, their expertise, and relevant activities and events along the three overarching themes (see annex 2):

(a) Knowledge and understanding of CRM approaches (activity 2 of workstream c);
(b) Capacity-building for observation and risk assessment in the context of loss and damage (activity 4 of workstream c); and
(c) Development and dissemination of guidance on user-friendly CRM tools, e.g. risk profiles (activity 5 of workstream c).

31. Other members also discussed (though electronic submissions and oral exchanges) challenges to implementing CRM approaches for groups vulnerable to the adverse impacts of climate change: lack of internationally agreed standards; shifting from ex-post disaster responses to ex-ante approaches; need for multiple and often complex public/private partnerships to provide access to a suite of risk services; lack of financial education requires continued investment in awareness raising at individual and institutional levels; markets are highly regulated and often provide little (or no) concessions for insurance products targeting low-income and vulnerable communities; segmentation between humanitarian/civil defense/disaster response, long-term planning/development and climate change; lack of synergy between different institutions and financing streams; misalignment of incentive structures for effective and efficient CRM across scales; and lack of good data (sharing) on exposure and vulnerability, especially of most vulnerable groups and contexts.

32. Experts exchanged preliminary views on opportunities for fostering CRM approaches through development of a plan of action, including but not limited to: more systematic use of data across timescales; ensuring data informed decisions on early action (from more effective response to long-term risk reduction), with a special focus on vulnerable communities; forecast-based financing to organise data
in ways that directly inform decisions (early action) across timescales and link to capacity for action to reduce and manage risk; focus on risk-informed early action partnership to be launched at the Climate Summit; linking TEG-CRM to IPCC processes on adaptation and risk management to inform the assessments of risk, including a more comprehensive understanding of capacity for (and limits to) risk management; and focusing on the climate vulnerability of people living in fragile and conflict prone areas.

33. Mr. Gernot Laganda, Climate and Disaster Risk Reduction Programmes, the World Food Programme and Mr. Soenke Kreft, Munich Climate Insurance Initiative discussed the utility of insurance and social protection for vulnerable groups. Discussions pointed out that globally insurance penetration is extremely low, particularly in developing and emerging market economies. While noting a growth in savings and credit schemes for the poor, insurance is yet to be coherently linked to disaster risk reduction policies and microfinance. Similarly, Mr Laganda shared that smallholder agriculture is the engine of developing countries and global food security and CRM solutions are needed to protect agrarian investments in the context of changing climate.

34. Experts concluded from their exchanges that a diversity of transdisciplinary expertise, regional experience and best practices exist within the TEG-CRM. They added that there is no blueprint, nor ‘one-fits-all’ approach to CRM and an understanding of scale and context is key to its successful implementation. Effective CRM approaches require flexibility, adaptability to contexts and backed with robust monitoring systems to inform decisions. Experts outlined that the key focus of the TEG-CRM could be on building the capacity of national stakeholders and vulnerable communities.

2. Session 2: Science and Policy related to Climate Risk Management and Loss and Damage

35. Mr. Nedal Katbeh-Bader and Dr. Adelle Thomas, Climate Analytics, introduced the session objectives and panellists. They emphasized that the session was an opportunity to share scientific findings and hear from co-authors of Fifth Assessment Report of the IPCC and Special Reports from the Sixth Assessment Cycle, identify knowledge gaps and use climate science and risk information to inform the development of the plan of action.

36. Dr. Reinhard Mechler, International Institute for Applied Systems Analysis, showcased the results of IPCC 5th Assessment Report (AR5) and Special Report on Global Warming of 1.5 ºC, emphasising that comprehensive climate risk perspective requires integration of disaster risk reduction and climate adaptation. He outlined the increasing evidence on and confidence in attribution to observed climate-related impacts addressing adaptation/risk management challenges requires a shift from incremental to transformational adaptation in the context of 1.5 ºC global warming. Dr. Mechler further indicated that soft and hard limits in the context of 1.5 ºC and 2 ºC of global warming will be further discussed in the IPCC 6th Assessment Report and risk management can be viewed with an integrative potential to address loss and damage.

37. Dr. Zinta Zommers, UN Office for Disaster Risk Reduction (UNDRR) showcased the findings of the IPCC Special Report on Land and Climate Change indicating that land is part of the solution. She presented on potential global contribution of response options to mitigation, adaptation, combating desertification and land degradation, and enhancing food security (see figure 2), emphasising the following key points

(a) 23% of total GHGs originate from agriculture, forestry and land use;
(b) Risks to land-related human systems and ecosystems from global climate change and socio-economic development;
(c) Impacts across all processes at current levels of GMST and risk increase rapidly with GMST increase; and
(d) The special report identified cascading and severe and irreversible risks with limited capacity of all systems and processes to adapt under a 3ºC GMST increase;
Figure 2
Potential global contribution of response options to mitigation, adaptation, combating desertification and land degradation, and enhancing food security

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<thead>
<tr>
<th>Response options based on land management</th>
<th>Mitigation</th>
<th>Adaptation</th>
<th>Desertification</th>
<th>Land Degradation</th>
<th>Food Security</th>
<th>Cost</th>
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<td>Increased food productivity</td>
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<td>Improved livestock management</td>
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<td>Agricultural diversification</td>
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<td>Improved grazing land management</td>
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<td>Integrated water management</td>
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<td>Reduced grassland conversion to cropland</td>
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<td>Forest management</td>
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<td>Reduced deforestation and forest degradation</td>
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<td>Increased soil organic carbon content</td>
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<td>Reduced soil erosion</td>
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<td>Reduced soil salinization</td>
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<td>Reduced soil compaction</td>
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<td>Fire management</td>
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<td>Reduced landslides and natural hazards</td>
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<td>Reduced pollution including acidification</td>
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<td>Restoration &amp; reduced conversion of coastal wetlands</td>
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<td>Restoration &amp; reduced conversion of peatlands</td>
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<tr>
<th>Response options based on value chain management</th>
<th>Mitigation</th>
<th>Adaptation</th>
<th>Desertification</th>
<th>Land Degradation</th>
<th>Food Security</th>
<th>Cost</th>
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<td>Reduced post-harvest loss</td>
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<td>Dietary change</td>
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<td>Reduced food waste (consumer or retailer)</td>
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<td>Sustainable sourcing</td>
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<td>Improved food processing and retailing</td>
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<td>Improved energy use in food systems</td>
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<tr>
<th>Response options based on risk management</th>
<th>Mitigation</th>
<th>Adaptation</th>
<th>Desertification</th>
<th>Land Degradation</th>
<th>Food Security</th>
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<td>Livelihood diversification</td>
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<td>Management of urban sprawl</td>
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<td>Risk sharing instruments</td>
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Options shown are those for which data are available to assess global potential for three or more land challenges. The magnitudes are assessed independently for each option and are not additive.

Key for criteria used to define magnitude of impact of each integrated response option

<table>
<thead>
<tr>
<th>Nature</th>
<th>Mitigation</th>
<th>Adaptation</th>
<th>Desertification</th>
<th>Land Degradation</th>
<th>Food Security</th>
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<tbody>
<tr>
<td>Large</td>
<td>More than 3</td>
<td>Positive for more than 25</td>
<td>Positive for more than 5</td>
<td>Positive for more than 3</td>
<td>Positive for more than 1</td>
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<td>Moderate</td>
<td>0.5 to 3</td>
<td>1 to 25</td>
<td>1.5 to 3</td>
<td>0.5 to 3</td>
<td>100 to 100</td>
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<td>Small</td>
<td>Less than 0.3</td>
<td>Less than 1</td>
<td>Less than 5</td>
<td>Less than 5</td>
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<td>Negligible</td>
<td>No effect</td>
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Cost range
See technical option for cost range in US$ per ha or US$ ha⁻¹.

Source: IPCC, 2019: Climate Change and Land. An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Summary for Policymakers (SPM figure 3a). Panel A shows response options that can be implemented without or with limited competition for land, including some that have the potential to reduce the demand for land. Co-benefits and adverse side effects are shown quantitatively based on the high end of the range of potentials assessed. Magnitudes of contributions are categorised using thresholds for positive or negative impacts. Letters within the cells indicate confidence in the magnitude of the impact relative to the thresholds used (see legend). Confidence in the direction of change is generally higher.

38. Dr. Maarten van Aalst, Red Cross Red Crescent Climate Centre/The University of Twente continued the discussion on science related to CRM and provided a brief commentary on AR6 emphasis on risk management and adaptation. Dr. van Aalst further indicated that no Loss and Damage is considered in the outline of AR6. He also indicated that not all risk management is planned, and a deeper understanding is needed on how to cope with impacts though continuous risk assessment (emphasis on solutions-based risks and limits to adaptation), decision-making options, and evaluating development pathways.
39. Responding to questions from the technical members of the TEG-CRM about how to communicate risks, the target audience of IPCC reports and ways to promote adaptation, the panel suggested:

(a) Framing communication on benefits of risk management for governments, though information/literature on this topic is lacking;

(b) Consider how we can bring evidence on risk management to policymakers; and

(c) The information needs to be adjusted to the different target audiences who need different information such as communication to governments and financial institutions.

40. Following up on the above discussions, one expert made a remark that numbers (e.g. impact on budget) are needed to engage more constructively with governments and promote adaptation options. Other experts added that emphasis on communication of CRM could be on monetized values (e.g. recommendations for how much to spend on adaptation) to foster engagement with governments, decision-makers and policymakers. Dr. Zommers and Dr. van Aalst highlighted the challenge that monetized values and numbers are often limited or available at low confidence. Dr. Thomas raised the question on how to incorporate science in the discussion and preparation of the Plan of Action.

41. An expert sought clarification whether the CRM terminology is framed too negatively and asked how the approach could be used to strengthen the message on reducing risks via risk management. He suggested that experts not divide up different CRM approaches, solutions, because they all work together. Another expert raised the importance of having common agreed terminology among different CRM related platforms. Dr. van Aalst explained that both negative and positive framings of CRM can get people to act. Dr. Mechler added that the risk management framing appeared in the literature following the vulnerability framing and more focus on the benefits of adaptation, understanding of hard limits and importance of transformation within adaptation actions.

42. The panel discussion concluded by underlining that for addressing, minimising, averting loss and damage, CRM and risk requires communications in more positive ways. The TEG-CRM suggested the need for continued feedback from the group on CRM approaches to the IPCC processes.

3. Session 3: Work planning by the TEG-CRM

43. Mr. Christoph von Stechow in his presentation outlined the expectation of the WIM Excom for the TEG-CRM. He emphasized that that the TEG-CRM at its first meeting should aim to develop a plan of action, taking into account the mandate, tasks, expected results and/or possible approaches, as appropriate, defined in the respective activities of the five-year rolling workplan. Using a preliminary template, he indicated that ground work should focus on identifying specific objectives, lead/co-leads, indicative timeframes and associated actions and deliverables. He reiterated that the plan of action was subject to approval and, as appropriate, would be reviewed by the Excom prior to its implementation.

44. Mr. von Stechow highlighted that some actions were already underway by the Excom, such as the development of the draft CRM compendium and enhanced understanding and awareness of the user interface platform and other tools through the World Metrological Organisation (WMO). Similarly, the focus on activity 6 of the five-year rolling workplan had no specific actions and therefore the actions under the activity should be considered by all the experts. He reminded the experts that actions should consider experts not present at the meeting, include other TEG-CRM where relevant, and build on best available science and data.

45. Expert group discussions on activity 2 of workstream (c) focused on knowledge and understanding of CRM approaches. Brainstorming on what are CRM approaches led to a cluster of ideas and actions on identifying gaps and developing methodologies to enhance knowledge and understanding of CRM approaches. Actions proposed by experts on types of knowledge products included technical meetings, workshops, webinars, guidance talk for decision-makers, linking knowledge materials to National Adaptation Planning (NAP) processes. Experts also discussed that knowledge products should be focus on risk governance, integration of transformation (within the resilience building and adaptation actions) and dealing with conflicts and cascading risks.

46. Expert group discussions on activity 4 of workstream (c) focused on facilitating stakeholder engagement and capacity building for enhanced observation and risk assessment in the context of loss and damage. Experts identified regional and global stakeholders to facilitate capacity building for risk observation and risk assessment. Group discussion also focused on October 2019 stakeholder
engagement workshop on capacity-building for observation and risk assessment, particularly identifying the workshop topic, list of invitees, format and content of the workshop. The WMO discussed priority sectors to focus on observation and risk assessment, including agriculture, health, energy, water, and disaster as a cross-cutting sector.

47. Mr. Stefan Rösner, Deutscher Wetterdienst, highlighted that regional risk assessments currently lack the scale for national use and by including relevant regional institutes, developing regional capabilities about risk assessment could be an outcome of the workshop. Another expert pointed out that the nature of risk assessments is changing, and some national risk profiles already embed systemic risks. Experts agreed on the need to include national cases at the stakeholder workshop, through in the context of the workshop and timeframe, this may not be possible.

48. Expert group discussions on activity 5 of workstream (c) focused on the development and dissemination of user-friendly CRM tools. The experts discussed the dissemination of risk profiles, risk management strategies and climate risk insurance via channels such as the Fiji Clearing House Mechanism and global platforms. Experts highlighted that several stakeholders, outside of the TEG-CRM, are already working on risk profiles there is need to compile an inventory current actions in partnership with the Insurance Development Forum, Oasis Platform, and UNDRRR’s Global Risk Assessment Forum. On actions related to insurance solutions, experts discussed that a broader evaluation of different financial instruments would be useful to the TEG-CRM, with a focus on social protection (in fragile states), developing principal approaches for climate and disaster risk finance, incorporating instruments in the Fiji Clearing House Mechanism and linkages between gender and climate risk finance. Mr. Kreft, discussed the need to create a taxonomy and/or topography of different risk finance instruments applicable to addressing loss and damage resulting from climate change.

49. The session concluded with general questions and answers raised by experts. One expert asked that when identifying gaps in activity 2, should the TEG-CRM focus on the gaps related to existing methodologies and CRM approaches or gaps where no one is working on? The response from session co-facilitators clarified that the Excom in the five-year rolling workplan focuses on identifying existing gaps. While all the identified gaps may not be addressed, they could pave the way forward for TEG-CRM actions. Another expert raised the question on what type of support would the TEG-CRM receive from the secretariat to implement the actions identified in the plan of action? In her response, Dr. Koko Warner clarified that the secretariat’s role was to support TEG-CRM implement their actions, building on the mandates of the WIM Excom. On the issue of branding of actions, the CRM Champions clarified that the actions should be in line with the five-year rolling workplan. The actions and outcomes can be treated as WIM Excom material and there is scope for the TEG-CRM to be creative and innovative during implementation of the plan of action and visibility for the contributions.

4. Session 4: Finalizing a draft plan of action and identifying priority events/milestones for TEG-CRM plan of action

50. Regarding discussions on the draft plan of action, the following reflections were shared by the expert members of the TEG-CRM:

(a) Key gap is outreach and communication of CRM approaches to relevant stakeholders;

(b) CRM discourse and approaches should be disseminated to the global community (inclusive of regional and national stakeholders, and governmental and non-governmental organizations);

(c) Balancing between business as usual actions and aspirations/visions.

(d) Pioneering transformation to enhance implementation of CRM approaches (vis-à-vis aspirations of the Paris Agreement, WIM Excom’s five-year rolling workplan);

(e) Consider the review of the WIM, so that the plan of action remains relevant and impactful;

(f) Social protection should be considered on a much larger scale with a focus on how social protection can make the vulnerable more resilient to shocks;

(g) Workstream (c) on CRM approaches centres attention on providing assistance to countries; and
(h) Making use of already existing projects/products (e.g. circulate the existing questionnaire and summary of responses to the questionnaire on climate risk analysis7 to the TEG-CRM).

51. Ms. Roper also led a discussion on additional considerations and interlinkages (see annex 3) between the TEG-CRM draft plan of action and other workstreams of the WIM Excom’s five-year workplan. The following suggestions on linkages were made by the TEG-CRM:

(a) **Workstream (a) slow onset events**: The Excom could invite experts to register in the roster of experts to expand on the current database;

(b) **Workstream (e) capacity building**: Under activity 2 address regional issues, develop interlinkages between sectors

(c) **Workstream (e) stakeholder engagement**: More can be done on developing guidance, linkages with global partnership forum, specific actions on agricultural insurance so that it relates to activity 3(b) on inviting relevant actors to continue developing insurance mechanisms.

52. An expert sought clarification on how the call for submissions under activity 2(d) will be issued for *providing information on tools and instruments addressing limits current CRM approaches and actions to facilitate transformational approaches*. Ms. Roper explained that Excom 10 may decide on the audience and utility of paper submissions as an input to the activity2(d). Dr. Adelle Thomas advised that the Climate Analytics had already prepared a paper, which could benefit from call for submission, noting that the submissions must be timely from the secretariat as an input to the paper. A suggestion was made by Dr. Reinhard Mechler that the submissions should link to concrete areas for inputs such as focusing on what transformation means in the context of CRM.

53. An expert stated that the important message from the draft plan of action was for the global community to recognize the importance of CRM approaches instead of relying on business as usual risk management approaches. Another expert reminded the TEG-CRM that CRM approaches need to consider multiple scales and interactions among risks.

54. The session concluded with experts agreeing to revisit the draft plan of action, and the need to re-confirm the scope, timeframe and actions with their respective organisations.

5. **Session 5: Finalizing an agenda for October 2019 stakeholder engagement workshop on capacity-building for observation and risk assessment in the context of loss and damage**

55. Mr. Nedal Katbeh-Bader and Mr. James Douris (WMO), introduced the session focusing on co-developing an agenda for the October 2019 stakeholder engagement workshop on capacity-building for observation and risk assessment in the context of loss and damage (hereafter the ‘workshop’). Building on the group work in session 3 of the meeting, Mr. Katbeh-Bader pointed out that the WMO was one of the key partners, though not limited, for the activity 4 under the workplan. He introduced the importance of the workshop in facilitating stakeholder engagement and enhancing and strengthening capacities for risk observation and risk assessment in addition to the importance of having actionable recommendations from the workshop.

56. Mr. Douris then proceeded to discussing the logistics and preparation for the workshop. Building on the expert group discussions on activity 4 of workstream (c) during session 3 of the meeting, he outlined the following key elements of the workshop:

(a) **Workshop working title**: Strengthening the capacities for observation and risk assessment in the context of loss and damage associated with climate change impacts

(b) **Workshop dates**: 28 -29 October 20198

(c) **Workshop venue**: UN Campus, Bonn, Germany

(d) **Co-organizers**: TEG-CRM, WMO, UNDRR

(e) **Objective(s) and expected outcomes**: A preliminary objective of enhancing capacity for observation and risk assessment in context of loss and damage.

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7 Available: [https://unfccc.int/sites/default/files/resource/docs/2017/sb/eng/01.pdf#page=18](https://unfccc.int/sites/default/files/resource/docs/2017/sb/eng/01.pdf#page=18)

8 Owing to logistics of the workshop, the dates for the workshop are revised as 29-30 October 2019.
57. With regards to the workshop venue, Dr. Zommers presented the UNDRR proposal to the TEG-CRM, whereby the UNDRR booked a workshop venue capable of hosting sixty people. She also informed the TEG-CRM that contingent on internal approvals, UNDRR was able to sponsor some country representatives. The TEG-CRM outlined that remote participation (e.g. skype-streaming) might be made available as an option.

58. Mr. Douris then led a discussion on potential and indicative list of participants. The TEG-CRM discussed that the proposed and targeted categories of participants could include academia, constituted bodies of the UNFCCC, parties/countries, UN agencies and INGOs, regional entities and platforms, drawing on to relevant agencies identified in the draft plan of action. The participant categories could then be filled by stakeholders aligned to the workshop agenda.

59. Mr. Douris moved on to talk about the workshop agenda, whereby the weighting and design of sessions would include a combination of presentations (maximum twenty minutes), panel discussions and parallel technical sessions. The agenda would need to be shared with the Excom co-chairs, with the following preliminary session titles and (co)leads:

(a) Session 1: Observations - status, gaps, links to risk assessment (esp. spatial variability in observation and data) [led by WMO and GCOS]

(b) Session 2: Linkages of observation and risk assessment, with indicative focal areas that are aligned with GFCS priority areas [led by: GFCS, WHO, FAO, UN Habitat]

(c) Session 3: Gaps in capacities to conduct comprehensive risk assessment, e.g. taking into account systemic risks [led by: UNDRR]

(d) Session 4: Vertical and horizontal integration of risk assessments for adaptation planning into DRR strategies, development planning, drawing on examples; [led by: UNDRR and other organizations]

(e) Session 5: Risk profiles - session potentially supported by a session on risk profiles in general [led by: MCII, IDF, UNDRR]

(f) Session 6: Next steps, recommendations and Close [led by: TEG-CRM, WMO, UNDRR]

60. Focussing on the next steps to finalize the draft agenda, Mr. Katbeh-Bader and Ms. Roper emphasized that the WMO, UNDRR, the CRM Champions and the Secretariat can jointly work on the planning of the workshop, including further defining the objectives, agenda and sessions and logistics. It was suggested by the CRM Champions that the save-the-dates should be sent out once workshop details were confirmed. Mr. Harjeet Singh, Action Aid International, emphasized that community-based approaches to risk assessment and observation could be considered at the workshop and include organizations that can make such knowledge available to stakeholders and countries.

61. It was agreed by the TEG-CRM that a draft agenda and participant list will be circulated to all, for additional inputs to the later. The CRM Champions also noted that when inviting participants to the workshop, a balance of regions and organizations should be considered, inclusive of country representatives.

IV. Next Steps and Close

62. The CRM Champions proceeded to summarising key discussions at the workshop, emphasizing that the first meeting of the TEG-CRM brought together a range of experts with different expertise on CRM approaches to enhance the implementation of the WIM Excom’s five-year rolling workplan.

63. The following next steps were discussed by the CRM Champions with the TEG-CRM:

(a) The CRM Champions and secretariat will compile the draft plan of action (see annex 4) and share by 9 September 2019 with the TEG CRM for feedback. A virtual meeting session to discuss the draft will be coordinated by the secretariat on 26 September 2019 and the plan of action should be finalized by TEG-CRM on 27 September 2019;

(b) To facilitate feedback from the TEG-CRM, the secretariat will provide a shared virtual document, with smaller groups discussions to continue to finetune the draft;
(c) The TEG-CRM agreed to meet at least once a year unless otherwise decided, but where possible virtual meetings or back-to-back meetings at other international events will be encouraged;

(d) TEG-CRM will be invited to attend the stakeholder workshop upcoming in October 2019 and once the agenda is finalized, the secretariat will share the agenda with the TEG-CRM; and

(e) A mailing list will be created for the purposes of communication as well as sharing information on events and papers or reports relevant to the TEG-CRM.

(f) The CRM Champions concluded by underlining that the review of the WIM in late 2019 will further inform the work of the Excom and the TEGs, highlighted the need to finalise the plan of action (see annex 3) and collectively implement the identified actions.

64. The expert members of the TEG-CRM also shared their overall reflections on the workshop, with experts welcoming the open method and approach to contribute to the meeting, as well as the appropriate length of the sessions. One expert noted that the development of the plan of action, could have been done together, which would have required less time spent on aligning actions to the overall WIM Excom five-year rolling workplan).

65. In their closing remarks, the CRM Champions thanked the expert members of the TEG-CRM for their engagement, the panellists, rapporteurs, the secretariat, and the German Development Institute for the facilities they provided for the meeting. Ms. Roper emphasised that the TEG-CRM plan of action provides an effective way to identify cross-boundary partners.
### Annex I

List of technical members of the TEG-CRM at the meeting

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Mr. Victor CARDENAS</td>
<td>Independent</td>
</tr>
<tr>
<td>Ms. Anne HAMMILL</td>
<td>International Institute for Sustainable Development</td>
</tr>
<tr>
<td>Mr. Reinhard MECHLER</td>
<td>International Institute for Applied Systems Analysis</td>
</tr>
<tr>
<td>Ms. Linda SIEGELE</td>
<td>Independent</td>
</tr>
<tr>
<td>Mr. James DOURIS</td>
<td>World Meteorological Organization</td>
</tr>
<tr>
<td>Mr. Stefan RÖSNER</td>
<td>Deutscher Wetterdienst</td>
</tr>
<tr>
<td>Ms. Zinta ZOMMERS</td>
<td>UN Office for Disaster Risk Reduction</td>
</tr>
<tr>
<td>Mr. Maarten van AALST</td>
<td>Red Cross Red Crescent Climate Centre/ University of Twente</td>
</tr>
<tr>
<td>Mr. Harjeet SINGH</td>
<td>ActionAid International</td>
</tr>
<tr>
<td>Ms. Aparna SHRIVASTAVA</td>
<td>Mercy Corps /Start Network</td>
</tr>
<tr>
<td>Mr. Soenke KREFT</td>
<td>Munich Climate Insurance Initiative</td>
</tr>
<tr>
<td>Mr. Gernot LAGANDA</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>Ms. Adelle THOMAS</td>
<td>Climate Analytics</td>
</tr>
<tr>
<td>Ms. Le-Anne ROPER</td>
<td>Executive Committee of the Warsaw International Mechanism for Loss and Damage</td>
</tr>
<tr>
<td>Mr. Christoph von STECHOW</td>
<td>Executive Committee of the Warsaw International Mechanism for Loss and Damage</td>
</tr>
<tr>
<td>Mr. Nedal KATBEH-BADER</td>
<td>Executive Committee of the Warsaw International Mechanism for Loss and Damage</td>
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</tbody>
</table>

**Virtual Attendees**

| Ms. Riyanti DJALANTE        | United Nations University                                                   |
| Ms. Ekhosuehi IYAHEN        | Insurance Development Forum                                                |
| Ms. Fatima DROUECH          | Mohammed VI Polytechnic                                                    |

**Members Absent**

| Ms. Litea BIUKOTO           | Secretariat of the Pacific Community                                       |
| Ms. Rebecca NADIN           | Overseas Development Institute                                             |
### Annex II

Stocktake of relevant activities and events being planned by organizations for 2019-2021

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant CRM Actions</th>
</tr>
</thead>
</table>
| Climate Analytics             | • Least Developed Countries and Small Islands Developing States social vulnerability.  
   • Loss and damage is not considered as a priority in NCs, NAPs and NDCs.  
   • Developing guidance document to allow countries to think of CRM framework in their specific context and identify actions, and areas of supports.  
   • Support in including loss and damage in their NCs, NAPs and NDCs.  
   • Support to UNFCCC processes. |
| IISD                          | • Developed the NAP Global Network (implemented 4 years ago) - goal is to support developing countries in enhancing their adaptation processes.  
   • Can offer their platforms and knowledge products for the work of TEG-CRM through NAP global platform |
| Mercy Corps/START Network     | • Humanitarian issues  
   • insurance at local level  
   • risk assessment around stresses and shocks  
   • Finance, resilience building in the context of flooding in Indonesia  
   • Assessing risk in fragile contexts and financial flows  
   • Developing finance instruments based on risk assessment |
| WFP                           | • Ecosystem services  
   • Climate Impacts on food security  
   • Humanitarian support after disaster, forecast-based finance |
| ActionAid                     | • Humanitarian resilience  
   • Raising attention of countries on slow-onset events  
   • risk assessment and planning  
   • enhancing capacity building |
| UNU                           | • Disaster risk reduction  
   • Adaptation perspective  
   • Inputs to IPCC related work |
| Insurance Development Forum   | • Public private sector initiative from insurance industry  
   • Establishing mechanisms in Global South to enable response to disasters  
   • Finding incentives for engaging governments and private sector |
| WMO                           | • Forecasting and data analyses  
   • Providing tracking instruments  
   • Standardization  
   • Mapping of expertise from countries and organizations. |
| Linda                         | • Environmental and climate law  
   • Changing behaviour  
   • Geographical focus on Pacific island communities  
   • Practical approaches on loss and damage  
   • Long-term planning on adaptation and loss and damage (paper to be published this year)  
   • Developing tools on disaster risk management development with University College London |
| IISA                          | • Informing transitions and transformation on climate change issues  
   • Disaster risk management and analysis  
   • Translating words and advises into action. |
<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant CRM Actions</th>
</tr>
</thead>
</table>
| MCII         | • Focusing on implementation of Nationally Determined Contributions (NDCs) and local action, and community led action on resilience  
|              | • Exploring transformational approaches.  
|              | • Developing insurance for vulnerable groups.  
|              | • Focusing on concept development and policy engagement.  
|              | • Expertise on Economics of climate change adaptation (different hazards and risk opportunities and models are worked on, economic limits of risk adaptation, cost/benefit analysis).  
|              | • Raising the role of international corporations  
| DWD          | • Climate observation, satellite facilities, MET services, Weather forecasting, climate monitoring  
|              | • Focus on Germany but tradition of cooperation with other MET services  
| Victor Cardenas | • Financial expertise, financial instruments such as cat bonds for managing risks, Disaster funds, insurance.  
|              | • Focusing on how the financial system is considering and preparing for climate change in Latin America  
| UNDRR        | • Global monitoring and coordination, GAR report, Upcoming Report on droughts.  
|              | • Disaster losses database  
|              | • National profiles on Loss and Damage.  
|              | • Focusing on capacity building of governments and trainings.  |
Annex III

TEG-CRM - Additional Considerations from Other Workstreams

Workstream A - Enhanced cooperation and facilitation in relation to slow onset events

1a) Continuously update the database of organizations working on SOEs and their current efforts, including institutional arrangements for comprehensive risk management.

3) Organize a technical meeting, jointly coordinated by the technical expert group on comprehensive risk management and the SOEs expert panel/group, with a focus on approaches in relation to recovery and rehabilitation and permanent loss.

Question: Can TEG-CRM lend any support to this? How?
Secretariat to remind TEG-CRM members, when presenting the work of Excom, to mention ways to register in the Roster of Experts as well as RISK TALK under the Fiji Clearing House.

Workstream E - Enhanced cooperation and facilitation in relation to action and support, including finance, technology and capacity-building, to address loss and damage associated with the adverse effects of climate change.

Under Capacity Building:

2b) Invite relevant actors to organize regional stakeholder workshops to build capacity for the use of comprehensive risk management guidelines, including using feedback from test cases and any pilot projects they have identified.

Question: Can TEG-CRM lend any support to this? E.g., identifying regional stakeholders and recommending this to the Excom.
Linkage to NAP Expo and Adaptation Future event (see activity 2a) as well as the Stakeholder Engagement Workshop (see activity 4).

Under Stakeholder Engagement:

3 (a) Engage stakeholders with relevant specialized expertise, including in disaster risk reduction, development aid, humanitarian aid and risk management, to develop knowledge and support the dissemination of best practices to effectively plan and prepare for and respond to loss and damage.
(b) Invite relevant actors to continue developing insurance mechanisms, as appropriate, embedded in an integrated risk management approach, for example diversified agricultural insurances as a risk transfer mechanism that can help farmers, in different socioeconomic conditions, to reduce climate risks in the sector.

Question: Has these already been adequately captured in workstream c? Should amendments be made to capture these activities? If new activities needed, who has responsibility?
This plan of action, developed by the Technical Expert Group on Comprehensive Risk Management (TEG-CRM), identifies actions that will contribute to the implementation of the activities contained in Strategic workstream (c) of the five-year rolling workplan of the Executive Committee of the Warsaw International Mechanism (WIM Excom) for Loss and Damage. Actions identified below have linkages with Activity 6 of workstream (c) and, where relevant, linkages to other workstreams are identified. The lead/co-lead of actions will consult with the wider TEG-CRM as appropriate in undertaking respective actions. Leads/co-leads will report verbally at TEG-CRM meetings (or as relevant to be agreed with the TEG-CRM) on the progress of those actions or deliverables that will be undertaken in collaboration with the TEG-CRM and Excom in support of the five-year rolling workplan.

<table>
<thead>
<tr>
<th>Related Activities and Results of the Five-Year Rolling Workplan of the WIM ExCom</th>
<th>Actions or deliverables</th>
<th>Lead/Co-lead</th>
<th>Indicative time frame for completion of actions</th>
</tr>
</thead>
</table>
| Methodologies to enhance knowledge and understanding of CRM approaches identified and/or developed To identify gaps and identify or develop methodologies to be used by national governments to enhance knowledge and understanding of CRM approaches, including issues related to finance, data, technology, regulatory environments and capacity-building, which may feed into NAPs and other relevant processes, as appropriate (2A) | A.1 At the COP25, NAP EXPO and/or the Adaptation Future, organize an event (tentative title: *Bringing together comprehensive risk management with national adaptation plans and other relevant processes*) with following sub-actions:  
   i. Develop guidance documents on CRM (broad focus: NDC, NAPs) to be discussed in the events above and made available on the Fiji Clearing House for Risk Transfer [linkages with activity 5b]  
   ii. Prepare (or share) infographic on links between NAP processes and DRR strategies to promote CRM approaches [linkages with activity 5b]  
   iii. Share Summary of responses to the questionnaire on climate risk completed under the initial 2-year workplan with TEG-CRM  
   iv. Share examples from ongoing or completed CRM approaches with TEG-CRM | IISD/MCII/Climate Analytics/IIASA/IFRC/UNDRR | End of 2020 |
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<th>Lead/Co-lead</th>
<th>Indicative time frame for completion of actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.2</strong> Share the summary of the event referred to in A.1 with the WIM Excom for their consideration</td>
<td>Secretariat</td>
<td>End of 2020</td>
<td></td>
</tr>
<tr>
<td><strong>A.3</strong> Organize an expert meeting on risk assessment and adaptation, with a view to inform the IPCC Assessment Process(^9)</td>
<td>IFRC /IIASA/CA/UNDRR</td>
<td>Late 2020</td>
<td></td>
</tr>
<tr>
<td><strong>A.4</strong> Develop a NAP database tagging CRM approaches and lessons learnt in different countries</td>
<td>IISD</td>
<td>2020 - 2021</td>
<td></td>
</tr>
<tr>
<td><strong>A.5</strong> Capture and share lessons learnt from NAP Global Network Regional Peer Learning Summit in Pacific on linking community assessment with NAP processes</td>
<td>IISD / CA</td>
<td>Late 2020</td>
<td></td>
</tr>
</tbody>
</table>

**Revised compendium**

To collect feedback and provide advice on revisions to the compendium on CRM (2B)

| **B.1** Revise and update the compendium on CRM based on final inputs from the TEG-CRM | Secretariat | Completed |

**Paper with clear priority**

To consult with experts to prepare the paper referred to in action area 5, activity (c), of the initial two-year workplan and consolidate experience and lessons learned, and identify priority areas for increasing capacity and investment and communicate them to the relevant actors (2C)

| **C.1** Prepare paper(s) on social protection and forecast-based approaches. | IFRC, WFP, ActionAid, ODI and relevant organizations (e.g. DIE\(^{10}\)) | 2020 |

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\(^9\) Leads/co-leads are contributing to the IPCC as AR6 authors.

\(^{10}\) Pending nomination of DIE as ad-hoc member of the TEG-CRM and confirmation by Excom. IFRC and WFP to lead on forecast-based approaches while ActionAid and DIE will collaborate on social protection with both groups feeding into each other’s work. ActionAid will invite Rosa Luxemburg Stiftung to collaborate on preparing inventory of social protection schemes.
<table>
<thead>
<tr>
<th>Related Activities and Results of the Five-Year Rolling Workplan of the WIM ExCom</th>
<th>Actions or deliverables</th>
<th>Lead/Co-lead</th>
<th>Indicative time frame for completion of actions</th>
</tr>
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<tbody>
<tr>
<td><strong>Improved and enhanced understanding of tools and instruments addressing the limits of the current CRM approaches and actions to facilitate transformational approaches</strong>&lt;br&gt;To provide information on tools and instruments addressing limits current CRM approaches and actions to facilitate transformational approaches (2D)</td>
<td>D.1 Prepare technical paper(s) and undertake a book project on incremental and transformational approaches in collaboration with TEG-CRM and relevant institutions</td>
<td>Climate Analytics / IIASA/ IFRC/ IPCC/ UNU and relevant organizations (e.g. Flood Resilience Alliance, ISET Practical Action)</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td>D.2 Issue a call for submission to support activity D.1</td>
<td>Secretariat</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td>D.3 Conduct desk review on the climate-conflict-food security nexus</td>
<td>WFP/ Victor Cardenas/IFRC(^{11}), in collaboration with relevant knowledge partners</td>
<td>Late 2019 – Early 2020</td>
</tr>
<tr>
<td></td>
<td>D.4 Identify how artificial intelligence can help in further develop CRM approaches (including regulatory frameworks)</td>
<td>Linda Siegle/IIASA, in collaboration with relevant knowledge partners (e.g. DIE)</td>
<td>2020</td>
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<td><strong>Enhanced understanding of how the clearing house contributes to supporting the work of the Executive Committee and TEG-CRM</strong>&lt;br&gt;To identify how the clearing house for risk transfer can be used to support the work of the Executive Committee and TEG-CRM and how the clearing house for risk transfer can be enhanced (2E)</td>
<td>E.1 Invite clearing house partners to share information on the usage of the clearing house, topics and questions posed and relevant information, and submit the shared information to the Executive Committee for consideration on how the clearing house mechanisms can be enhanced to support the specific needs related to disseminating the outputs of the TEG-CRM</td>
<td>Secretariat</td>
<td>2020</td>
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<td><strong>Identification of relevant regional and global research programmes and organizations that provide capacity-building for observation and risk</strong></td>
<td>A.1 Compile and complete an initial list of relevant regional and global research programmes and organizations (including full list of acronyms), complemented by international businesses, that provide</td>
<td>WMO and UNDRR</td>
<td>Sept. 2019</td>
</tr>
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</table>

\(^{11}\)ICRC, IFRC/Climate Centre and ODI are completing a series of roundtables on climate and conflict, with a final analysis likely to be completed early 2020
### Related Activities and Results of the Five-Year Rolling Workplan of the WIM ExCom

<table>
<thead>
<tr>
<th>Actions or deliverables</th>
<th>Lead/Co-lead</th>
<th>Indicative time frame for completion of actions</th>
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<tbody>
<tr>
<td>Coordinating with regional and global research programs and organizations to facilitate capacity building for enhanced observation and risk assessment in the context of loss and damage (4A)</td>
<td>Secretariat in collaboration with WMO and UNDRR</td>
<td>Oct. 2019</td>
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<tr>
<td>Capacity-building for observation and risk assessment [linkages with activity 1a from strategic workstream a]: Indicative list include: UNFCCC constituted bodies (LEG, AC), DWD, GCOS, CREWS, GFCS, WMO, Copernicus, UNDRR, GRAF Technical Expert Group), IDR (France), IRDC (Canada), GIZ, MCII, PIK, WACSAL, SASSCAL, PCRAFI, CCRIF, SPREP, ARC, PIFS, SPC, IDF, UNDP, UNEP, Climate Analytics, IFRC, World Bank, OECD, CMCC, ISC (Science Council), ICTP, USAID, GCF, GEF, RMS, Geneva Association, WMO Regional Climate Centers</td>
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<td>A.2 Organize a stakeholder engagement workshop to identify capacity gaps related to observations and risk assessment at national, regional and global levels and learn from national examples with a view to enhance national and regional capacities [linkages with activity 2d from strategic workstream e].</td>
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<td>Enhanced understanding and awareness of the user interface platform and other tools available through WMO that support the design and implementation of CRM approaches among relevant users Inviting WMO to provide information on the user interface platform and its application for the design and implementation of CRM approaches in developing countries that are particularly vulnerable to the adverse effects of climate change, and disseminating this information to relevant users (4B)</td>
<td>WMO and UNDRR</td>
<td>Completed</td>
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<tr>
<td>B.1 Present at Excom 9 and collaborate with UNDRR and WMO for design and implementation of stakeholder workshop identified in A.2</td>
<td>WMO</td>
<td>2020</td>
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<td>B.2 Continue to engage with the Excom on matters related to Activity 4 of the Excom rolling workplan and in the implementation of CRM approaches</td>
<td>WMO</td>
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<td>Related Activities and Results of the Five-Year Rolling Workplan of the WIM ExCom</td>
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| **Capacity-building needs identified, as appropriate**  
Inviting relevant organizations and agencies under and outside the Convention to discuss how national and regional capacities could be enhanced to address loss and damage, including for risk management approaches to building the capacity of regional, national, subnational and local governments to address loss and damage (4C) | C.1 Prepare a workshop report on how to address key capacity gaps related to observations and risk assessment based on outcomes of activity 4A.2 [linkages with activity 2d from strategic workstream e] | Secretariat in collaboration with WMO and UNDRR | Late 2019 |
<p>| <strong>Facilitate the development and/or dissemination of guidance, as appropriate, for comprehensive risk profiles and, where possible, develop comprehensive risk profiles for designing and implementing country-driven risk/risk assessments at the national level, including for the preparation of asset inventories (5A)</strong> | A.1 Organize a workshop on “Unifying Climate Risk Data at country level” (working title) at SB 52, with a view to discuss the added value of creating risk profiles, technicalities/methodologies, standards and data sources for risk profiles including the preparation of asset inventories | MCII ECA/UNDRR/Victor Cardenas | Mid 2020 |
| | A.2 Develop a comprehensive risk profile, including a case study on climate risk and social protection in Indonesia and Japan | Mercy Corps, MCII, UNU and relevant organizations (e.g. ZFRA) | Late 2020 |
| | A.3 Invite relevant organizations, agencies and community-based institutions to share experiences and knowledge on risk assessment | ActionAid | 2020 |
| <strong>Facilitate the development and/or dissemination of guidance, as appropriate, for risk management strategies and approaches/good contingency plans and planning (5B)</strong> | B.1 Facilitate the development and dissemination of subnational guidance on CRM, as linked to Activity 2A | IFRC /IIASA and relevant organizations (e.g. Flood Resilience Alliance, Practical Action, Zurich)/UNU | 2019 - 2020 |
| | B.2 Organize regional expert workshops to identify regional stakeholders and needs related to climate risk management (building | UNDRR, and relevant organizations (e.g. GIZ) | 2019-2020 |</p>
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<td>5A, 5B and 5C</td>
<td>D.1 Prepare a synthesis paper on insights from the TEG CRM subgroup’s activities in 2019 and 2020, including recommendations defining knowledge gaps and where relevant, research questions</td>
<td>UNU</td>
<td>Late 2020</td>
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<tr>
<td>Facilitate the development and/or dissemination of guidance, as appropriate, for climate risk insurance solutions (5C)</td>
<td>C.1 Develop syllabus on governance principles for frameworks related to CRM including Disaster Risk Finance and Insurance (DRFI)</td>
<td>MCII</td>
<td>Late 2020</td>
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<td>C.2 Organize a workshop session on Disaster Risk Finance and Insurance at COP 25 and/or other Partnership Forums on Gender or DRFI in fragile contexts [linkages with activity 3b from strategic workstream e]</td>
<td>START Network/Mercy Corps/ ActionAid</td>
<td>2019 - 2020</td>
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<td>C.3 Develop a taxonomy and/or topography of DRFI instruments and their applicability (including how to address adverse selection and uninsurable risks) illustrated by good practice examples [linkages with activity 3b from strategic workstream e]</td>
<td>MCII</td>
<td>Late 2020</td>
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<td>B.3 Prepare a paper or synthesis report on risk layering, inclusive of strategies and methodologies to assess risk layering and risk governance [linkages with activity 3b from strategic workstream e]</td>
<td>IIASA/ IFRC/ Victor Cardenas/Linda Siegele/ WFP (contributor) and relevant organizations (e.g. Flood Resilience Alliance)</td>
<td>2020</td>
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<td>on 4A.2) and the support development of climate risk informed national and subnational DRR plans</td>
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Annex V

Key themes and issues discussed at the TEG-CRM meeting