Technical expert group on comprehensive risk management: plan of action with progress updates on implementation

This plan, developed by the TEG-CRM and subsequently endorsed by the Executive Committee, identifies actions that will contribute to the implementation of the activities under strategic workstream (c) of the five-year rolling workplan of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts.

Result/related activity under workstream (c) of the five-year rolling workplan of the Executive Committee	Actions/deliverables	Lead/ co-leads	Indicative time frame for completion of action	Status as reported on 18 May 2022.
Methodologies for enhancing knowledge and understanding of CRM approaches identified and/or developed (activity 2a)	At COP 25, the NAP Expo and/or the Adaptation Futures conference, hold an event (tentative title: "Bringing together comprehensive risk management with national adaptation plans and other relevant processes"), with the following sub-actions: i. Develop guidance documents on CRM (broad focus: nationally determined contributions, NAPs) to be discussed at 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 two-year workplan of the Executive Committee with the TEG-CRM. iv. Share examples from ongoing or completed CRM approaches with the TEG-CRM	IISD/MCII/C A/IIASA /IFRC/UNDR R	By end 2020	The following products have been produced: (a) A series of briefings (brief one, two and three) on compound risks facing vulnerable countries as a result of the COVID19 pandemic (Climate Analytics) and an analysis of compound COVID and climate risks (IFRC). (b) A brief on how its integrated risk management programmes allow for predictable anticipatory and early responses, significantly reducing human suffering, losses and damages from climate-related disasters (WFP). CRM briefs, reports, case studies, prepared by WFP are kept available and up to date on this page. (c) A working paper produced by IIASA (delivered with ISET): Transforming resilience-building today for sustainable futures tomorrow (d) Guidance on CRM completed by IIASA (delivered with GIZ) with applications in India and Tanzania (Link) (e) Guidance on Integrating slow onset processes into climate risk management by IIASA (delivered with GIZ)(link) (f) "Technical Guidance on Comprehensive Risk Assessment and Planning in the Context of Climate Change" by UNDRR (delivered with GIZ). — (The publication will be online by Q1 2022). A complementary CRM training package with 4 modules, has been produced by UNDRR's Global Education and Training Institute (GETI) and Regional Offices have conducted ToTs to target (16+) countries wherein CRM technical support is currently

	CA/IIASA/II SD/MCII /IFRC		being rolled out. Plans are on the way to further scale up the programme and reach more countries in 2022/23. Many resources on anticipatory action in the face of rising risks, including from IFRC and WFP, are being made available on the Anticipation Hub. Adaptation Futures 2020 took place from 4-8 October 2021 and featured several sessions relating to CRM, linking to various products listed in this TEG-CRM update (IFRC, IIASA with GIZ).
	IISD/UNDRR WFP/IFRC		In addition, the activity catalyzed the preparation of the following products: (a) A Guide to integrate the effect of climate change into water management in the Maghreb region with a great risk of drought (Mohammed VI Polytechnic). (b) The CRM video is currently being developed and should be ready Q1 2022 (UNDRR). (c) A specific analysis of adapted anticipation approaches during the COVID pandemic, based on experiences across the Red Cross Red Crescent network, is currently under review in a scientific journal and will be shared with the TEG-CRM as soon as it is available (IFRC).
A.2 Prepare and share the summary of the event referred to in activity A.1 above with the Executive Committee for its consideration	Secretariat	Completed	The report published on the UNFCCC website >>> and reported at ExCom 11 (March 2020)
A.3 Organize an expert meeting on risk assessment and adaptation with a view to informing the IPCC assessment process	IFRC/IIASA/ CA/ UNDRR	Completed	As part of UNDRR's Risk Dialogue series, a webinar was conducted last 16 September 2021 entitled "DRR Implications of the IPCC AR6 WGI Report: The Need for Urgent Action." At the COP, CRM, risk assessment, adaptation and disaster risk reduction were highlighted in a number of side events co-organized by UNDRR. In March 2022, another Risk Dialogue is scheduled to take place, entitled "Impacts, Adaptation and Vulnerability: IPCC WGI and Disaster Risk Reduction." webinar series. Will be discussed with other organizations

	A.4 Develop a NAP database, tagging CRM approaches and lessons learned in different	IISD	Completed	NAP Trends database launched: https://trends.napglobalnetwork.org/
	A.5 Capture and share lessons learned from the NAP Global Network's regional peer learning summit for the Pacific on linking community assessment with the NAP process	IISD/CA	Completed	A regional peer learning summit for 12 countries in the Pacific (15 and 23 November 2020) was conducted by IISD in the context of the NAP Global Network to discuss how the Integrated Vulnerability Assessments (IVA) can play a role in M&E. The regional peer learning event can be accessed here: https://napglobalnetwork.org/2020/09/virtual-learning-event-me-for-national-adaptation-in-pacific-sids/
Revised compendium	B.1 Revise and update the compendium on CRM on the basis of final inputs from the TEG-CRM	Secretariat	Completed	Compendium on Comprehensive Risk Management Approaches published on the UNFCCC webpage
(activity 2b)	B.2 Create and maintain a user-friendly version of the compendium and, where necessary, update information on CRM approaches	Secretariat	Completed	
Paper(s) with clear priority (activity 2c)	C.1 Prepare paper(s) on social protection and forecast-based approaches	IFRC, WFP, ActionAid, ODI and relevant organizations (e.g. DIEb)	Completed	 The following products have been produced: (a) A paper and a brief on social protection and climate change, with a focus on WFP Regional Bureau for Latin America and the Caribbean's vision to advance climate change adaptation through social protection. (b) A brief highlighting 10 tips on shock- responsive social protection drawing on insights from reallife examples (WFP) (c) A study on shock- responsive social protection in Latin America and the Caribbean showcasing a theoretical framework, five country case studies, and relevant conclusions for action (WFP in collaboration with Oxford Policy Management). (d) A paper and a brief which reviews the evidence base on anticipatory action (WFP). (e) In January 2021, ActionAid and Rosa Luxemburg Stiftung jointly released a paper

				that outlines how gender- responsive systems of social protection and the various tools and policies that they include can help to deliver a human- rights based approach to sustainable development, while minimizing and addressing climate- induced loss and damage. (f) A joint paper on social protection by ActionAid, DIE and Red Cross Climate Centre was released in October 2021. The paper, namely, Social protection for climate-induced loss and damage: Priority areas for increasing capacity and investment in developing countries is available here: https://www.climatecentre.org/6889/social-protection-a-central-global-goal-for-ending-poverty-and-enhancing-human-capital-brief/ Another joint submission was made by ActionAid and Rosa Luxemburg Stiftung in November 2021 to highlight how social protection has a crucial role to play in addressing climate-induced loss and damage, strengthening resilience and advancing development goals. In addition, this activity catalyzed the following work: (a) On Forecast Based financing approaches (IFRC and WFP). IFRC as lead in development of the paper to update WFP.
Improved and enhanced understanding of tools and instruments for addressing the limits of the current CRM approaches and actions to facilitate transformational approaches (activity 2d)	D.1 Prepare technical paper(s) and undertake a book project on incremental and transformational approaches in collaboration with the TEG-CRM and relevant institutions	CA/IIASA/ IFRC/UNU and relevant organizations	Completed	The following products have been produced: (a) A review journal article on "Perspectives on transformational change in climate risk management and adaptation" published in the journal Environmental Research Letters (ERL) (b) A journal article on transformation and finance for the COSUST special issue building on the risk layering concept (IIASA) (c) A review paper on SIDS, risks, responses and loss and damage published (Climate Analytics). Complementary to work on Activities 5a, b and c D.1. (d) A journal article on sea level rise, CRM and

			SIDS for Current Opinion in Environmental Sustainability Special Issue on "Slow Onset Events related to Climate Change" (Climate Analytics). (e) A book project on the role of transformational risk management complementing other adaptation approaches would contain 17 chapters and is expected to be completed by mid-2022 (IIASA as part of the Flood Resilience Alliance)- a working paper synthesizing key insights has been finished and can be accessed as of September 1
D.2 Issue a call for submissions to support activity D.1 above	Secretariat	n/a.	D.1 activity did not require an issuance of a call by the secretariat
D.3 Conduct a desk review on the climate- conflict-food security nexus	WFP/Victor Cardenas /IFRC, in collaboration with relevant knowledge partners	Completed	The following have been completed: (a) A paper on climate and conflict risks in the LAC Dry Corridor (WFP in collaboration with SIPRI and the CGIAR). (b) A brief on the climate conflict-food security nexus in 3 languages (WFP). (c) WFP led a side event with partners, including CGIAR and SIPRI, on 'Addressing the triple burden of climate change, conflict and malnutrition' at COP26. The event is accessible here (WFP).
Identify how artificial intelligence can help in further developing CRM approaches (including regulatory frameworks)	Linda Siegele/ IIASA, in collaboration with relevant knowledge partners (e.g. DIE)	In 2020	The activity has been delayed due to the closure of the university from the impacts of COVID-19. IIASA has contributed to an OECD/ADB report on "Leveraging technology and innovation for disaster risk management and financing" with a focus on AI. Report can be found here. University College London (UCL) has funding for and has commenced a project called "Re-Energize DR3: Kick-Starting Global Governance", which goes through March 2023. The website can be found here. To date, an analysis of multi-hazard risk assessments; multi-scale governance structures; legislation; sectoral practices; tools and indicators have been completed, all informing the development of a toolbox. A survey for

				stakeholders has been prepared and insights from this survey will be integrated into the toolbox and future project planning. A series of workshops are being organized as part of this stakeholder engagement. The project team has included considerations of the use of artificial intelligence in DRR approaches, including from a governance perspective. The project focuses on three countries as case studies: Ghana, Mauritius and Qatar. However, a review of project outputs shows that data analysis from other regions has helped inform the development of the toolbox. Latest outputs and reports can be found here . (Linda Siegele)
Enhanced understanding of how the Fiji Clearing House for Risk Transfer supports the work of the Executive Committee and the TEG- CRM (activity 2e)	E.1 Invite partners to share information on the usage of the Clearing House, topics and questions posed and relevant information, and submit that information to the Executive Committee for consideration of how the Clearing House mechanisms can be enhanced to support the specific needs for disseminating the outputs of the TEG-CRM	Secretariat	Completed	Information on the usage of the Fiji Clearinghouse is included in the annual reports of the ExCom
Relevant regional and global research programmes and organizations that provide	A.1 Compile and complete an initial list of relevant regional and global research programmes and organizations (including a full list of acronyms), complemented by a list of international businesses, that provide capacity-building for observation and risk assessment [linkages with activity 1a under strategic workstream (a)]	WMO and UNDRR	Completed	Stakeholder engagement workshop on strengthening the capacities for observation and risk assessment in the context of loss and damage associated with climate
capacity-building for observation and risk assessment identified (activity 4a) A.2 Organize a stridentify capacitisk assessmelevel and to be view to enhar [linkages with]	A.2 Organize a stakeholder engagement workshop to identify capacity gaps related to observation and risk assessment at the national, regional and global level and to learn from national examples with a view to enhancing national and regional capacity [linkages with activity 2d under strategic workstream (e)]	Secretariat in collaboration with WMO and UNDRR	Completed	context of loss and damage associated with climate change was convened on 29-30 October 2019. Relevant organizations were engaged in the workshop

	B.1 Make a presentation at Excom 9 and collaborate in designing and conducting the stakeholder workshop referred to in activity A.2 above	WMO and UNDRR	Completed	WMO presentation on 'User Interface Platforms for Comprehensive Risk Management' available on the ExCom 9 webpage
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 (activity 4b)	B.2 Continue to engage with the Executive Committee on matters related to activity 4 under workstream (c) of its five-year rolling workplan and in implementing CRM approaches	WMO	Completed	 (a) Reviewing the climate services capacity of National Meteorological and Hydrological Services (NMHSs) through a self- assessment checklist to verify progress with respect to climate services implementation and identify areas where support is needed. Enhances the service delivery capacity of developing countries and improves access to regional and global monitoring and prediction systems. (b) Second International Workshop on Cataloguing of Hazardous Weather, Climate, Water, and Space Weather Events: The workshop will be organized jointly with key agencies representing DRR, loss and damage and insurance and reinsurance to design consistent, well-described, and agreed protocols. The workshop will take place in Q3/4 of 2021 WMO, OCHA and UNDRR organized a UN side event at COP 26, entitled "Getting ahead of climatic disasters: Know, Predict, Warn, Act." The side event captured the user interface aspects, among other high-profile issues.
Capacity-building needs identified, as appropriate (activity 4c)	C.1 Prepare a workshop report on how to address key capacity gaps related to observation and risk assessment on the basis of the outcomes of activity A.2 above [linkages with activity 2d under strategic workstream (e)]	Secretariat in collaboration with WMO and UNDRR	Completed	The report published on the UNFCCC website >>>
Development and/or dissemination of guidance facilitated, as appropriate, for comprehensive risk profiles, and, where possible, comprehensive risk profiles developed for designing and implementing country-	A.1 Hold a workshop (working title: "Unifying climate risk data at the country level") at the fifty-second sessions of the subsidiary bodies with a view to discussing the added value of creating risk profiles, technicalities/ methodologies, standards and data sources for risk profiles, including the preparation of asset inventories	MCII/UNDR R/Victor Cardenas	Completed	The workshop on "Unifying climate risk data at the country level" was planned to take place at SB 52. It will be turned into virtual event(s). MCII and UNDRR conducted a series of virtual side events during the LAC, Asia Pacific and Africa Regional Climate Weeks.

driven risk/risk assessments at the national level, including for the preparation of asset inventories (activity 5a)	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	Completed	Completed a comprehensive climate risk assessment in Pekalongan, Indonesia in close collaboration with the local City and Regency governments. This article summarizes some findings. See the report, including a case study in Indonesia, here: http://collections.unu.edu/view/UNU:8720 (MCII).
	A.3 Invite relevant organizations, agencies and community-based institutions to share experience of and knowledge on risk assessment	ActionAid	Completed	In 2020, ActionAid published a paper - "Participatory methodologies enable communities to assess climate-induced loss and damage" co-authored by Teresa Anderson and Harjeet Singh: https://www.apn-gcr.org/bulletin/article/participatory-methodologies-enable-communities-to-assess-climate-induced-loss-and-damage/ The findings were shared in several relevant fora, including a recent workshop in January 2022 on addressing Loss and Damage, organised by Climate Justice Resilience Fund, Climate Action Network and Loss and Damage Collaboration. The IPCC WGII Sixth Assessment Report made a reference to the paper on people's vulnerability to climate change.
Risk management	B.1 Facilitate the development and dissemination of subnational guidance on CRM [linkages with activity 2a]	IFRC/IIASA/ UNU and relevant organizations	Completed	Running risk management/contingency planning workshops in 2021 with some of IIASA member countries (India, Egypt, Vietnam, Iran) - see factsheet on IIASA CatSim model (IIASA). Providing guidance on subnational anticipatory action through its Anticipation Hub, in close coordination with national government agencies, as well as WMO and a range of science partners (IFRC).
strategies and approaches/good contingency plans and planning (activity 5b)	B.2 Organize a side event and deliver a presentation on CRM knowledge products (e.g. evidence on costs and benefits of different risk management approaches) at the Dialogue Platform on forecast-based finance	WFP and IFRC	Completed	CRM knowledge products are a key component of both regional and global Dialogue Platforms, hosted by IFRC's Anticipation Hub. In 2020, several of these occurred virtually, including the last global dialogue in Berlin (December 2020) themed 'Collaborating for Climate, COVID-19 and Conflict: Getting Ahead of Crises with Anticipatory Action'. Regional Dialogue platforms will be organized in 2021 in Africa, Asia and LAC (IFRC). Sessions conducted by WFP during the Dialogue Platforms on forecast-based Finance in 2019 in Maputo (African focus), Punta Cana (LAC focus), Manila (Asian focus), and Berlin (global focus). WFP participated and

				led some sessions in all the 2020 Dialogue Platforms. Reports on these sessions are available on this page. In 2021, WFP and IFRC co-hosted the Global Dialogue Platform, as well as the Southern Africa Dialogue Platform, which isthe first ever organized in South Africa. The Dialogue Platforms now take place on an annual basis in LAC, Asia, Africa, South Africa and at the global level (WFP).
	B.3 Organize regional expert workshops to identify regional stakeholders and needs related to climate risk management (building on activity A.2 above) and to support the development of national and subnational DRR plans, inclusive of ecosystembased solutions, informed by climate risk	UNDRR and relevant organizations	Completed	As part of UNDRR's Programmatic Approach on Comprehensive Climate and Disaster Risk Management, regional workshops were conducted as prelude to the ToT rollout with target countries. In addition, UNDRR held Affiliated Events in the Asia Pacific and Africa Regional Climate Weeks to present CRM and discuss its applications in developing/updating National DRR Strategies and NAPs. Similarly, CRM was discussed in the 8th Africa Regional Platform for DRR held in November 2021.
	B.4 Prepare a paper or synthesis report on risk layering, inclusive of strategies and methodologies for assessing risk layering and risk governance [linkages with activity 3b under strategic workstream (e)]	IIASA/IFRC/ Victor Cardenas/ Linda Siegele/ WFP (contributor) and relevant organizations	Completed	A journal article published on transformation and finance for the COSUST special issue building on the risk layering concept (IIASA) - see D1. Synthesis may follow after publication of special issue
	C.1 Develop a syllabus on governance principles (considering pro-poor principles) related to CRM including disaster risk financing and insurance	MCII	Completed	Document produced, expected publication in April 2022 (MCII).
Climate risk solutions (activity 5c)	C.2 Organize a workshop on disaster risk financing and insurance to be held at COP 25 and/or other partnership forums on gender or disaster risk financing and insurance in fragile contexts [linkages with activity 3b under strategic workstream (e)]	Start Network/ Mercy Corps/ ActionAid/W FP	Completed	No joint workshop was organized during COP25. During 3rd InsuResilience Global Partnership Forum at the margins of COP25, WFP participated in two sessions on sovereign risk pools, reflecting on successes and challenges and exploring opportunities to link social protection and risk finance measures.

	C.3 Develop a taxonomy and/or topography of disaster risk financing and insurance instruments and their applicability (including how to address adverse selection and uninsurable risks), illustrated by good practice examples [linkages with activity 3b under strategic workstream (e)]	MCII	Completed	The following document has been developed: "Climate and Disaster Risk Financing Instruments: An Overview" https://climate-insurance.org/wp-content/uploads/2021/05/Climate-and-Disaster-Risk-Financing-Instruments.pdf
Activities 5a, b and c	D.1 Prepare a synthesis paper on insights from the TEG-CRM subgroup's activities in 2019 and 2020, including recommendations on knowledge gaps and, where relevant, research questions	UNU	By end 2020	Not implemented. The lead expert no longer a member.