



**Submission by the Food and Agriculture Organization of the United Nations (FAO)
To the United Nations Framework Convention on Climate Change (UNFCCC)
In relation to the Santiago Network of the Warsaw International Mechanism (Decision 2/CP.19)**

In accordance with the Decision 2/CMA.2, paragraphs 44–45, FAO welcomes the opportunity to submit report on progress made to the date in providing technical assistance to implement relevant approaches for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, particularly in relation to the agricultural sectors (crops, livestock, aquaculture, fisheries, and forestry).

In accordance with the aims of the Santiago Network which has been established under the Warsaw International Mechanism for Loss and Damage (WIM), FAO highlights the progress based on the three functions of the WIM.

i) Enhancing knowledge and understanding of comprehensive risk management approaches to address loss and damage associated with the adverse effects of climate change, including slow onset impacts.

FAO has developed a standard methodology to assess the impact of disasters and extreme events (damage and loss) in agriculture, which has been used to support the monitoring of the Sendai Framework for Disaster Risk Reduction (SFDRR) indicator C-2 and the Sustainable Development Goals (SDG) indicator 1.5.2. The methodology has already been applied in different country/regional contexts to track and monitor progress and achievements of specific targets on reducing direct economic loss from disasters.

A series of **E-learning courses on FAO's Damage and Loss Assessment Methodology for Sendai Framework Indicator C-2^a has been also developed** to introduce the FAO Damage and Loss (D&L) methodology, and support countries to generate precise and holistic data, assessments and analysis on the impact of disasters and extreme events on agriculture. These new e-learning courses help countries to better understand comprehensive risk management and how FAO's Damage and Loss methodology can be used to meet some of the data needs for climate change adaptation planning in the agricultural sectors.

In March 2021, FAO published a new edition of biannual report "The impact of disasters and crises on agriculture and food security:2021"^b, which examines the latest trends in disaster impact, analyse the specific vulnerabilities of the agricultural sector (crops, livestock, aquaculture, fisheries, and forestry) and provides key policy recommendations. The analysis revealed that **the agricultural sector absorbs approximately 26 percent of the impact caused by medium to large scale climate-related disasters in Least developed countries (LDC) and Low-to-Middle-Income Countries (LMIC)** (FAO, 2021).

FAO is currently working with Potsdam Institute for Climate Impact Research (PIK) and the University of Kassel to develop a methodology for quantifying Loss and Damage (L&D) associated with climate extreme events and slow onsets events in agriculture, building on the FAO's damage and loss methodology. This assessment also aims to explore pathways to help countries better align the Sendai Framework Monitor with the L&D assessment methods under the WIM. Furthermore, a new guidance material for FAO climate risk screening "Climate resilient practices: typology and guiding material for climate risk screening"^c was published in April 2021 to support countries with identification and management of climate risks and interventions across agricultural investment projects. The

^a Introduction to FAO's damage and loss assessment methodology, FAO. Available at:

<https://elearning.fao.org/course/view.php?id=608>

Using FAO methodology to compute damage and loss. Available at: <https://elearning.fao.org/course/view.php?id=644>

^b Available at: <http://www.fao.org/documents/card/en/c/cb3673en/>

^c Available at: <http://www.fao.org/3/cb3991en/cb3991en.pdf>

publication outlines potential climate resilient interventions and specific governance mechanisms for agricultural sub-sectors and focal area to support climate risk screening of agricultural investment projects.

ii) **Strengthening dialogue, coordination, coherence and synergies among relevant stakeholders**

FAO facilitates dialogue, coordination, coherence and synergies with relevant stakeholders, as an observer organization of the WIM, as well as a part of Santiago network. FAO is a key partner of the Capacity for Disaster Reduction Initiative (CADRI), leading a global effort with UN and non UN partners to strengthen countries capacities on for disaster risk reduction and climate change adaptation. In close collaboration with its partners, FAO has contributed to promote country risk information systems that are multi-hazard, multi-sectoral, better integrated and accessible to users at all levels, complemented by development of joint research to build evidence on return on investment in disaster risk reduction (DRR) and climate change adaptation (CCA). For instance, in collaboration with the World Meteorological Organization (WMO), FAO contributed to the “2020 State of Climate Services Report (WMO, 2020)^d”, together with 15 other international agencies and financial institutions through the Global Framework for Climate Services^e. The report highlighted the importance of preventive actions based on effective meteorological data, early warning systems and disaster risk assessments, given the fact that more than 11,000 disasters have been attributed to weather, climate and water-related hazards in the past 50 years, resulting in 2 million deaths and \$3.6 trillion in economic losses.

Furthermore, FAO has facilitated dialogues through webinars and trainings partnering with relevant stakeholders. For instance, FAO organized a webinar in June 2021 “Reporting on adaptation in the agriculture and land use sectors under the Paris Agreement: Loss and damage assessment”^f, in collaboration with the Global Support Programme (GSP), Initiative for Climate Action Transparency (ICAT), and UNEP-DTU Partnership. The webinar featured the FAO’s damage and loss methodology^g and how it could be used to support the adaptation reporting. It highlighted country experiences on developing and testing a framework for climate change related loss and damage in Bangladesh and Mongolia. In addition, FAO organized a webinar on mainstreaming climate risk management in agricultural finance^h in December 2020, in collaboration with United Nations Framework Convention on Climate Change (UNFCCC), International Fund for Agricultural Development (IFAD), Global Environment Facility (GEF), World Meteorological Organization, (WMO) and the World Bank (WB), to discuss how multilateral institutions are developing climate resilience policies, strategies and projects. The webinar emphasized the fundamental role of the systematic use of climate change data and information, including knowledgeable climate and disaster risk screening procedures, and importance of integrating climate services across all elements of adaptation planning, as also highlighted in the Briefing Noteⁱ.

iii) **Enhancing action and support, including finance, technology and capacity-building, to address loss and damage associated with the adverse effects of climate change, to enable countries to undertake actions pursuant to 3/CP.18 (para. 6)**

FAO recognizes the importance of building the capacity tailored to the countries’ needs and national circumstances to address loss and damage associated with adverse effects of climate change, to enable countries to undertake actions.

FAO’s support to countries on Capacity Development for the implementation of DRR/M in the agriculture sectors is delivered through engagement with national governments and institutions in developing countries. This includes i) disaster risk governance, ii) risk monitoring and early warning system, and iii) vulnerability reduction measures, iv) preparedness. FAO has provided capacity development supports to strengthen damage and loss information systems in agriculture to more than 40 countries worldwide. This includes technical guidance on the institutionalization process of the FAO’s damage and loss assessment methodology for

^d Available at: <https://public.wmo.int/en/media/press-release/state-of-climate-services-2020-report-move-from-early-warnings-early-action>

^e Available at: <https://gfcs.wmo.int/>

^f Available at: <http://www.fao.org/climate-change/our-work/what-we-do/transparency/webinars/reporting-adaptation/en/>

^g Available at: <http://www.fao.org/climate-change/our-work/what-we-do/transparency/webinars/reporting-adaptation/en/>

^h Available at: <http://www.fao.org/climate-change/news/detail/en/c/1371277/>

ⁱ Available at: <http://www.fao.org/3/cb2453en/cb2453en.pdf>

agriculture within existing national damage and loss information systems and enhancing national capacities to monitor and analyze the Sendai Framework Indicator C2 & SDG Indicator 1.5.2.

Way Forward

FAO can further advance the overall D&L agenda, and contribute to the work of the WIM through the Santiago Network by enhancing linkage with the agricultural sector to promote a better understanding of this topic, and strengthen country support. These include facilitating and developing a comprehensive overview of good practices, challenges, experiences, and lessons learned in undertaking approaches to address loss and damage, and providing technical support and guidance. More specifically, a next step would be to further explore potential methodologies to quantify Damage and Loss caused by climate change induced extreme and slow onset events. Building on the existing approaches from the impact attribution science, climate attribution and climate change impact research, and the FAO D&L methodology, FAO envisages to develop a new comprehensive methodology for assessing climate change induced impacts on agriculture in collaboration with the PIK and University of Kassel. This would enable countries to quantify the climate change induced D&L, which would inform the UNFCCC and WIM agenda.

Through advancing the work on D&L in the agricultural sector, FAO would like to reaffirm its commitment to continue supporting the development and implementation of the Santiago Network to further catalyze its technical assistance to developing countries.