

Update from



Working Group

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United NationsClimate Change



GEO messaging at COP28: EO and frontier technologies for climate adaptation, early warning, and nature protection

- Earth Information Day 3 December
- US Center on Global Heat Resilience Service 3
 December
- Estonia Pavilion on UNEP WESR and Global Ecosystems Atlas – 4 December
- Nature Positive Pavilion on Global Ecosystems Atlas – 9 December
- UK Pavilion on Global Ecosystems Atlas 10 December
- Other side events TBD with UAE Presidency, UAESA, UNFCCC TEC...





a supporting implementing partner

of



















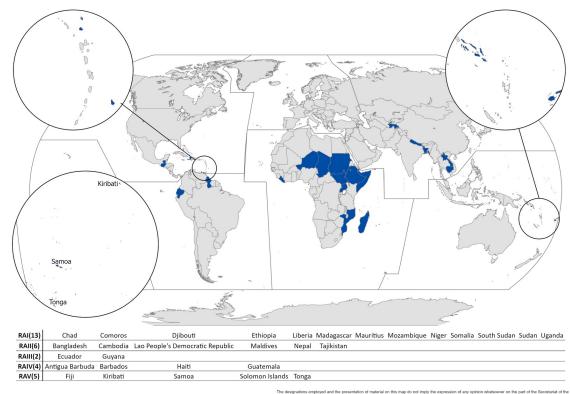


Figure 1: Budget overview for the four Pillars of the Early Warnings for All Initiative



TEC-ED knowledge product

Highlighting technology solution for improving risk knowledge in developing countries, especially LDCs and SIDS Making it fit-for purpose under **Early** Warnings



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of United Nations concerning the telemination of its routiers, critical requirements of the continuation of its routiers, critical requirements of the continuation of its routiers or boundaries.

The first EW4All group of 30 countries Source: WMO Cyrille Honoré Presentation at Session 3 at GEO Symposum 2023

UNFCCC TEC-GEO collaboration: A knowledge product on innovation

for risk knowledge

- Assessing gaps in available risk knowledge in developing countries, especially in SIDS and LDCs with regards to the early warning systems
- Possible souces of info: GCF, AF, CREWS etc.
- Aiming to provide guidance/insights on how gaps could be overcome through utilizing existing and emerging technologies, tools and innovation
- Concept note was presented and agreed at TEC meeting (21 September)
- Planning to leverage GEO WGs







TEC/2023/27/6

Technology Executive Committee

05 September 2023

Twenty-seventh meeting

19-21 September and 22 September 2023 (TEC-CTCN Joint session)

Supporting the Early Warnings for All Initiative through innovation and transformational technologies: Knowledge product on innovation for risk knowledge

Background note

I. Introduction

A. Background

- 1. As per activity A.3.1 of the TEC rolling workplan for 2023–2027, the TEC plans to engage in work on emerging and transformational adaptation technologies by identifying and analysing emerging and transformational technologies for adaptation (e.g., early warning systems and disaster risk management), including the role of finance and the private sector in supporting their deployment. The TEC is to engage with potential partners in 2023 to identify areas for collaboration on the topic of emerging and transformational adaptation technologies that contribute to reducing vulnerabilities and strengthening resilience. A related knowledge product is expected to be published in 2024.
- 2. At TEC 26,² the TEC considered several presentations containing potential focus areas for future work of the TEC on emerging and transformational adaptation technologies, including outcomes of a deep-dive session on early warning systems at the 2023 GSTIC conference, organized by the TEC in collaboration with the UNFCCC children and youth constituency. The TEC agreed to continue its work on emerging and transformational adaptation technologies with a focus on early warning systems, taking into account insights from the work of relevant actors under and outside of the UNFCCC on multi-hazard early warning systems (MHEWS), i.e. the Early Warnings for All Initiative³ (#EW4AII) launched by the UN Secretary General at COP27, and potential linkages with other activities of the TEC including the work on water-food-energy systems, digitalization, and oceans. A TEC activity group has been tasked with pursuing this work.
- 3. Subsequently, the TEC, through the UNFCCC secretariat, has joined the #EW4All as an implementing partner to pursue synergies and collaboration in the implementation of this activity of its workplan, while contributing to the overall work of the #EW4All and its partners, as appropriate. In particular, the TEC has embarked on a collaborative partnership with the Group on Earth Observation (GEO) for the development of the abovementioned knowledge product, with a focus on innovation for risk knowledge. GEO is a supporting implementing partner of the #EW4All Pillar 1 on Disaster Risk Knowledge and Management and Pillar 2 on Detection, Observation Monitoring, Analysis and Forecasting. Under Pillar 1, GEO co-leads activities on innovation for risk knowledge.
- 4. Other envisaged activities under #EW4All related to innovation for risk knowledge throughout 2023–2024, to which the TEC may contribute as appropriate, are: a) a global workshop on how to bring risk knowledge innovation to resource-constrained contexts; b) partnerships with private sector, academia and other technology actors to introduce and apply innovative technologies for risk knowledge (e.g. GIS, remote-sensing, drone data collection, etc.), and c) country-based

Available at: <u>https://unfccc.int/ttclear/tec/workplan</u>

² Meeting documents and report available at: https://unfccc.int/ttclear/tec/meetings.html

More information available at: https://public.wmo.int/en/earlywarningsforall-

Other collaborations with WMO

- WMO Green Climate Fund
 - Regional Training Workshop, 19-23 June Indonesia: JAXA and ECMWF represented CEOS community on satellite information to fill data gaps for climate science information for Green Climate Fund project proposals
- WMO Global GHG Watch (GGGW)
 - This requires involvement of examples of user programmes on AFOLU (e.g. GEOGLAM, GFOI) and marine observations (e.g. MBON, Blue Planet) showing practical involvement of GEO community
- Horizon Europe funding to improve collaboration between GEO and WMO, (IPCC), GCOS
 - TO BE RE-ISSUED IN 2024: Open call for proposal to implement joint action plan on climate observations and research (3M EUR instead of 2)











GEO Plenary focus on climate: urban resilience, biodiversity protection

Events involving CEOS members:

- Multiple flash talks, showcase sessions on Nov 6-7
- GEO Climate Change WG workshop (joint with other GEO WGs) to define next deliverables on Nov 6
- 2 substantive Plenary sessions on Nov 8:
 - Global Ecosystems Atlas
 - Global Heat Resilience Service (Early Warnings for All)
- Adoption of Ministerial Declaration and GEO Post-2025 Strategy on Nov 10