

## Accelerated Support Window

<b>Action Title</b>	Enhancing risk data ecosystem and people-centered early warning systems in Timor-Leste
<b>Country(ies)</b>	Timor-Leste
<b>Partner Country Entity / Entities</b>	<i>Civil Protection Authority (CPA)</i> <i>National Directorate of Meteorology and Geophysics (NDMG)</i>
<b>Implementing Partner (if submission by Implementing Partner)</b>	UNDRR
<b>Implementing Partner Requested (if submission by Partner Country)</b>	<i>Select at least 1:</i> <input type="checkbox"/> World Bank/GFDRR <input type="checkbox"/> WMO <input type="checkbox"/> UNDRR <input type="checkbox"/> No preference
<b>Action Type</b>	<i>Select at least 1:</i> <input type="checkbox"/> Continued Assistance <input checked="" type="checkbox"/> Analyses and Assessments <input checked="" type="checkbox"/> Advisory Services
<b>Early Warning System Element(s) Supported</b>	<i>Select at least 1:</i> <input type="checkbox"/> Monitoring, detection, analysis and forecasting of hydro-meteorological hazards providing lead-times for action <input type="checkbox"/> Dissemination of timely and authoritative warnings <input type="checkbox"/> Preparedness and response plans triggered by warnings and weather and climate predictions <input checked="" type="checkbox"/> Disaster risk knowledge based on the systematic collection of data and disaster risk assessment  The proposed actions in Timor-Leste will focus on: (i) Strengthening the country's disaster losses and damages accounting mechanism. (ii) Promote people-centered early warning systems catering to the need of persons with disabilities and women. (iii) Support national disaster management agency and hydromet office to lead and coordinate the operation and actions for people-centered multi-hazard early warning systems.  See the details in <b><i>Specific Actions and Objectives</i></b>  The proposed actions in Timor-Leste respond to one of the most priority needs of the Government of Timor-Leste in strengthening climate risk information and data ecosystem. The actions will support national authorities in strengthening multi-hazard early warning systems with better targeting of the population at-risk and that are most at risk. In working with Civil Protection Authority (CPA), National Directorate of Meteorology and Geophysics (NDMG), and other relevant line ministries and department, the proposed actions will support the enhancement of the government's overall capacity to generate and apply risk knowledge to contribute to mitigation of climate-related risk.
<b>Contributions to CREWS Programming Principles and</b>	<b>CREWS Programming Principles addressed:</b> <i>Select all relevant:</i> <input checked="" type="checkbox"/> People-centered <input checked="" type="checkbox"/> Gender-responsive

<p><b>Results Framework</b></p>	<p><input type="checkbox"/> Promotes Coherence  <input checked="" type="checkbox"/> Leverage</p> <p><b>CREWS Results Framework Outputs to which the Action is expected to contribute to:</b>  <i>Select at least one:</i></p> <p><input type="checkbox"/> NMHSS' service delivery improved, including the development of long-term service delivery strategies and development plans  <input checked="" type="checkbox"/> Risk information to guide early warning systems and climate and weather services developed and accessible  <input type="checkbox"/> Info. and comm. tech., including common alerting protocols, strengthened  <input checked="" type="checkbox"/> Preparedness and response plans with operational procedures that outlines early warning dissemination processes strengthened and accessible  <input checked="" type="checkbox"/> Knowledge products and awareness programmes on early warnings developed  <input checked="" type="checkbox"/> Gender-responsive training, capacity building programmes provided</p> <p><b>CREWS Programme Indicators to which the Action is expected to contribute to:</b>  <i>Select at least one:</i></p> <p><input type="checkbox"/> Loss of life  <input type="checkbox"/> Forecasting and warning capacity  <input checked="" type="checkbox"/> Access to early warning  <input checked="" type="checkbox"/> Use of risk information  <input type="checkbox"/> Capacity to disseminate warnings  <input type="checkbox"/> Capacity to prepare for and respond to warnings</p> <p>The proposed actions directly contribute to the generation and application of socio-economic vulnerability and historical disaster statistics in the value chain of early warning systems in Timor-Leste, which is essential for higher precision of impact-based forecasting in the future. People-centered early warning system will be promoted by engaging groups of persons with disabilities and women in generating insights on how these specific populations receive, or do not receive, warning messages, and their perceptions of such messages. The goal is to inform and improve the subsequent actions taken based on these warnings. This is a step towards systematically engaging most at-risk population in the designing of early warning messages and effective dissemination channels to ensure the reach out of early warnings that are actionable. UNDRR will work closely with UNDP to ensure a strong technical backstopping for the methodologies, and the capacity enhancement activities that are most appropriate in the context of the country while taking advantage of the system/mechanism already in place.</p> <p>UNDRR will ensure that the country also benefits from the international initiatives and standards. These include the framework for gender and disability analysis and a checklist and implementation guide for inclusive early warning early action that are developed through CREWS Pacific SIDS 2.0; Gender Action Plan for SFDRR; and the gap analysis tool under Early Warnings for All (EW4ALL).</p>
<p><b>Need and Rationale</b></p>	<p>Timor-Leste is one of the newest countries in Southeast Asia and it is categorized as Least Developed Country and Small Island developing State. The country has a young and growing population of 1.3 million (median age 20). About 42% of them are classified as living below the national poverty line, and 70% of them as living in multidimensional poverty. Timor-Leste regularly experiences drought, flooding, landslides that stem from meteorological hazards including the effect of the El Niño Southern Oscillation (ENSO), as well as earthquakes. The recent flood in 2021 is said to be the most extensive in the last 50 years (13 municipalities and 30,000 people affected, 34 lives lost). The effect of climate change can only make this type of event more frequent, severe, and unpredictable, negatively impacting the population and economy, and hamper the efforts of sustainable development.</p> <p>Timor-Leste National Adaptation Plan 2021 prioritizes the enhancement of early warning systems as an approach to reduce potential impact of climate hazards and related</p>

disaster risk. Resources have been mobilized to strengthen the country's capacity for observations, monitoring, analysis and forecasting and the governance aspect of climate services (NDMH, UNEP/RIMES). To supplement this work on observation network, the Systematic Observations Financing Facility (SOFF) is mobilized to support upper air monitoring equipment. Much work has been done and on-going to strengthen to better anticipate and prepare for drought in agriculture sector (UNDEP/FAO). There is an ongoing effort to support the communities to have better preparedness to act upon early warnings and standardizing broader early action protocols (Timor-Leste Red Cross (CVTL) and Australian Red Cross). National Framework for Climate Service Strategic Plan (2023-2028) Strategic Action Plan was recently drafted, and this sets the priorities of early warning systems in the country.

Timor-Leste's mid-term review of Sendai Framework for DRR in 2023 highlights the weaknesses of risk knowledge in its availability and applicability. Currently, disaster-related statistics are not collected systematically due to lack of standards and human resources capacity. Data on human casualties lacks the details on the population with unique vulnerability such as people with disability, women, and elderly. Disaster loss in economic terms is not accounted for regularly, unless there is a large-scale disaster that triggers post-disaster needs assessment. The state/progress of early warning systems has not been holistically monitored.

Historical disaster statistics on both human casualties and economic effects are essential to target warning messages and prepositioning of resources to the most underserved and at risk, such as people with disability, women, elderly citizens, and children. They are also essential on understanding the areas and assets that are most impacted by disasters traditionally so that the system of early warnings can be designed to reduce the vulnerability and risk around those elements at risk. Strong disaster-related statistics also help improve precision of impact-based forecasting and broader disaster risk reduction.

There are a few platforms under development where risk knowledge can be pooled and made accessible for decision support. Those include Climate Data Information Platform System (CDIS) supported by UNEP/GCF, Timor-Leste Emergency Response System (TERS), and Spatial Data Infrastructure Platform supported by UNDP/GCF. However, availability of ground data, particularly disaster losses in economic terms, remains a gap.

Amidst the ongoing efforts to enhance observation capacities to cover wider population with early warnings, it is not well known the extent of the reach of early warnings for people with disability and women. Without taking into consideration the specific need of and advice from the vulnerable population, the country will not achieve people-centered early warning systems, that are truly effective to save lives of the most vulnerable.

Effective multi-hazard early warning systems require collaborative and well-coordinated actions across the government departments and non-governmental stakeholders. Currently, there is a limited level of cross-ministry/sector coordination in the development of EWS norms and standards, particularly on the risk knowledge front, and the needs among the government and non-government partners for a functioning coordination mechanism is strong.

Despite being LDC and SIDS, Timor-Leste has not been part of the initial roll-out of the EW4ALL initiative. While Directorate of National Meteorology and Geophysics (NDMG) is already working the enhancement of early warning systems in the country, efforts need to be boosted urgently to bring the country's state of early warning systems to the level that can cover everyone by 2027 -- for which less than four years is left. This ASW intends to contribute to addressing the immediate needs of the country while generate better understanding of the existing resources gaps that may require further investment as part of the future CREWS programmatic investment for which a discussion is initiated

	<p>with WMO. UNDRR has an existing working relationship with the Civil Protection Authority (CPA) and NDMG, and the UN agencies on the ground such as UNDP and UNEP (who work closely with FAO, WHO and others). Based on this, the project will establish an initial understanding/analysis of the existing EWS-related initiatives on the ground to aid detailing out the scope of activities for Timor-Leste.</p>
<p><b>Specific Actions and Objectives</b></p>	<p><b>Risk knowledge availability and applicability</b>  <b>Objective:</b> To improve the availability of and applicability to losses and damages historical data, and risk information that support EWS</p> <ul style="list-style-type: none"> <li>▪ Enhance the methodologies and processes for calculating disaster losses for the prioritized economic assets agreed by the government.</li> <li>▪ Capacity building for strengthening data collection and analysis on human casualty (sex and disability disaggregated) and disaster loss in economic term.</li> </ul> <p>This action will build on the country’s existing disaster risk knowledge/losses and damages data system – TERS which is managed by CPA (linked with the available data in the DesInventar Timor-Leste).</p> <p><b>Promoting people centered early warning systems</b>  <b>Objective:</b> To transform early warning messages sensitive to the need and reality of the capability of persons with disabilities and women to access warnings and act upon them</p> <ul style="list-style-type: none"> <li>▪ Engage most at-risk communities and assess the current level of the reach of early warnings/messages, particularly for those with the most at-risk population and inform the future improvement of early warning messages.</li> </ul> <p>This action supports the implementation of the National Framework for Climate Service Strategic Plan (2023-2028) recently developed under the leadership of the Directorate of National Meteorology and Geophysics. The activities include engaging the most at-risk communities in generating evidence on the reach of early warning messages by strengthening a mechanism of regular interaction; and localizing the checklist for inclusive early warning early action (developed under the CREWS Pacific project) as a tool to accompany existing SOPs for early warning systems by the government. This action is guided by and contributes to The Sendai Gender Action Plan Key Objective 7: Implement gender-responsive and inclusive end-to-end multi-hazard early warning systems and anticipatory action.</p> <p><b>Governance and Coordination mechanism</b>  <b>Objective:</b> To create an enabling environment to promote the actions for effective early warning systems</p> <ul style="list-style-type: none"> <li>▪ Support CPA and DNMG’s role in leading inter-ministry/department work and multi-stakeholder coordination for the standardization and other normative work required.</li> </ul> <p>Part of the coordination will involve understanding of the missing gaps that may not be addressed in the current National Framework for Climate Services Strategic Plan 2023-2028 to support ensuring the country’s efforts in EWS enhancement is people-centered and end-to-end. For this, the matrix of EW4ALL gap analysis will be applied.</p>
<p><b>Alignment</b></p>	<p>The National Strategic Development Plan (SDP) 2021-2030 acknowledges the climate-change induced environmental challenges in pursuing a long-term sustainable</p>

	<p>development. Timor-Leste devised several policies and plans to prioritize investment in early warning systems as an approach to mitigate the impact of disasters, including the National Adaptation Plan 2021 and National Framework for Climate Service Strategic Plan (2023-2028) Strategic Action Plan(draft). The country's 2021 Flood Response Plan laid out the actions that need to be taken in climate information services and early warning systems as part of overall flood risk reduction mechanism.</p> <p>The proposed action contributes to the ambition of Early Warnings for All (EW4ALL) initiative championed by the UN Secretary General. Mobilizing support to Timor-Leste's early warning systems enhancement is critical considering the vulnerability and the technical and financial capacities of the country that is LDC and SIDS, yet not part of the initial 30 roll-out countries. As the global lead on EW4ALL Pillar 1, it is UNDRR's role to leverage the knowledge and experiences to ensure that countries are given guidance to understand and fill the gaps experienced in the area of risk knowledge.</p> <p>Programmatically, the proposed action is in line with the outcome 6 of the UN Sustainable Development Cooperation Framework (UNSDCF) 2021-2025 in Timor Leste where resilience to climate change impacts and natural and human-induced hazards is promoted in an inclusive manner. The Investment Case for the Result Group 6 under the UNSDCF, and Timor-Leste's mid-term review for Sendai Framework for DRR (Nov 2023) articulate the existing investment, prospects, and challenges that need to be addressed, including losses and damages accounting and a need of a functional coordination mechanism around early warning systems enhancement.</p> <p>Currently, UNEP implements a GFC-funded project, <i>Enhancing Early Warning Systems to build greater resilience to hydro-meteorological hazards in Timor-Leste (2021-2027, \$21million)</i> with a focus on the climate service infrastructure, generation of forecasting and warning, impact-based forecasting, and governance mechanisms for climate information and early warning systems. Linked with this project, there is an ongoing effort to enable Timor-Leste to acquire funding through the Systematic Observations Financing Facility (SOFF) to improve the observation network. FAO has recently worked on a global El Niño Anticipatory Action and Response Plan (August-December 2023) that covers Timor-Leste to facilitate the early preparation for the drought condition expected. The above-mentioned actions are part of the draft National Framework for Climate Service Strategic Plan (2023-2028) Strategic Action Plan, which is the guiding document developed under the UNEP/GCF project for future investment in early warning systems in the country. UNDP also has a GCF project under which they roll-out a capacity development for disaster losses and damages data collection at national and sub-national level. Continued capacity building efforts are required to make the current losses and damages data collection capacity of the country more robust over time.</p> <p>Designing of the proposed actions support National Framework for Climate Service Strategic Plan (2023-2028) Strategic Action Plan and are informed by the gaps identified in the SFDRR Mid-term review and the discussion with the UNEP/GCF (DNMG and RIMES) team.</p>
<b>Timeframe</b>	The proposed action covers 12-month period.
<b>Action Cost (To be completed by Implementing Partner)</b>	USD 249,165 (USD 220,500 in activities and USD28,665 in partner fees)

<b>Other/ Attachments</b>	<p>[Country Endorsement Letter or similar<sup>1</sup> if submission by Implementing Partner]- Forthcoming</p> <p>[Detailed Activity List to be provided by Implementing Partner]- See page 3 and below.</p> <p>[Detailed Budget to be provided by Implementing Partner]- See below</p>	
<b>Activities</b>	<b>USD</b>	
Activity 1: Enhancing the methodologies/process for calculating disaster losses for the prioritized economic assets agreed by the government. (Development of protocols and methodologies required for tracking disaster losses and damages through expert technical support, and stakeholder consultation sessions)	56,500	
Activity 2: Capacity building for strengthening data collection on human casualty (sex and disability disaggregated), disaster loss in economic term, and monitoring of the progress. (Facilitation of training sessions/capacity building activities)	66,000	
Activity 3: Engage at-risk communities and assess the current level of reach and perception of early warnings/messages by persons with disability and women and inform the improvement of early warning dissemination and preparedness. (a study and dissemination of findings)	59,000	
Activity 4: Support CPA and DNMG's role in leading inter-ministry/department work and multi-stakeholder coordination for the standardization and other normative work required. (Allocation of a dedicated staff, meetings and workshop required for cross-ministry and multi-stakeholder coordination and mapping out existing initiatives)	39,000	
<b>Programme Budget</b>	<b>220,500</b>	
	<b>Partner Fees</b>	28,665
	<b>Total</b>	<b>249,165</b>

<sup>1</sup> This can include existing Letters or Frameworks in place between the Implementing Partner and Partner Country or Countries in the event that the scope of engagement includes the specific early warning system Action being requested. For Regional Action requests, the Endorsement Letter or similar existing Letter or Framework can originate from relevant regional institutions.