

- Climate extremes are intensifying, driving loss of life and livelihoods in countries least able to cope. For Least Developed Countries (LDCs) and Small Island Developing States (SIDS), effective early warning systems are not optional; they are essential to safeguard development gains and reduce impacts for people at risk.
- The Climate Risk and Early Warning Systems Initiative (CREWS) has shown over its first decade that pooled, catalytic finance can deliver tangible outcomes in deploying and reinforcing early warning.
- Since 2015, CREWS has enabled LDCs and SIDS to strengthen early warning systems by supporting
 national strategies and laws, improving risk data and forecasting products, and advancing
 preparedness and anticipatory action.
- It has provided access to early warning and climate services to over 300 million people and leveraged nearly USD 1 billion in additional investments, while its model of being country-driven, partner-delivered, and results-focused has proven to be both agile and scalable.

Looking ahead, the CREWS 2030 Strategy sets out an ambitious pathway:

- By 2030: all LDCs and SIDS will have the essential early warning and climate services needed to protect lives and livelihoods
- How: by reinforcing national foundations, unlocking and aligning scaled-up financing, and driving innovation and people-centered approaches that design and improve early warning systems for an era of climate extremes.

This Strategy positions CREWS as a **transformational enabler**: beginning with targeted support, building and strengthening foundational capacities, and unlocking scaled, sustainable investments that reduce loss and damage and build long-term resilience.



Credit: Julian Lott/ Alamy Stock Photo

1. Context

The world is experiencing a marked rise in the intensity and frequency of disasters. Disaster mortality in LDCs is 2.5 times higher than the global average, and SIDS face unique vulnerabilities to sea-level rise and extreme weather. While advances in forecasting, data modelling, and communications technologies create unprecedented opportunities, many countries still struggle to ensure warnings are accessible, actionable, and trusted.

Early warning systems are a core public good and an integral part of national disaster risk management systems. 88% of LDCs and SIDS highlight early warning systems as a priority in their national climate commitments, yet financing remains fragmented and not always accessible to the countries with the higher needs. With constrained fiscal space, national governments face difficulties sustaining and scaling systems, making catalytic international support vital.

It is urgent to move from fragmented, reactive responses toward approaches that are coherent, integrated, and anticipatory. Overlapping mandates, siloed institutions, and weak cross-sectoral coordination that undermine effectiveness, require reforms that break down institutional silos and foster collaboration across thematic areas. Early warning systems cannot be treated as standalone technical projects; they must be embedded as core elements of disaster risk management, climate adaptation, and resilience programmes, designed to evolve, connect, and adapt across sectors and actors.

However, the real leadership lies with countries themselves, expressed through their national adaptation plans, disaster risk management strategies, and sectoral investment frameworks. The role of CREWS is to help these countries transform their ambitions into practical, financed, and sustainable early warning capacities.



Credit: UNDP Haiti

2. Who We Are

CREWS is a dedicated financing mechanism that supports LDCs and SIDS in designing and improving essential early warning and climate services. We are positioned as a trusted, country-driven and demand-led mechanism, aligning with the Sendai Framework, the Paris Agreement, the Sustainable Development Goals, and the global Early Warnings for All initiative.

Our delivery model is simple but powerful: pooled donor resources are channelled through partners and implemented with governments and national stakeholders at the centre. This ensures that financing is efficient, catalytic, and aligned with national strategies and regional frameworks.

Our financing pathways are designed to provide a progressive approach to strengthening multi-hazard early warning systems and climate risk information services, beginning with foundational support and moving towards long-term, scaled-up investments.

Accelerated Support Window – This entry point provides rapid, short-term technical assistance to address urgent needs. It supports enabling conditions such as capacity assessments, gap analyses, and initial technical support that lay the groundwork for more structured interventions.

Multi-year programmes — Building on the accelerated support, CREWS provides multi-year programmes that deliver more comprehensive and integrated support. These programmes strengthen institutional capacity, foster partnerships, and advance the systematic development of early warning systems and related services across multiple sectors.

GCF-CREWS Scale-Up – For countries that demonstrate readiness and a clear pathway for sustained impact, CREWS support can be scaled up by the Green Climate Fund (GCF). This enables access to larger financial resources to implement transformative, country-led programmes that expand early warning coverage and climate services at national and regional levels and at the same-time de-risking GCF investments.

After a decade of experience and demonstrated impact, CREWS has shown what works. We support governments to create enabling environments by supporting strategies, policies, institutions, and partnerships that anchor early warning systems in national development.

3. What We Aim to Achieve

Vision



A world where everyone - especially those most at risk - is protected by timely, accurate, accessible, and actionable early warning systems that save lives, safeguard livelihoods, and strengthen climate resilience today and for the future.

Mission



To transform early warning services in LDCs and SIDS by financing targeted, catalytic investments that build critical foundations, de-risk larger programmes, and scale impact. CREWS lays the groundwork, strengthens systems, and unlocks pathways to transformation.

Gna



By 2030, people most at risk¹ in all LDCs and SIDS will have reliable access to early warning and climate services, reducing loss and damage and strengthening resilience



Credit: Jake Lyell/ Alamy Stock Photo

^{1 &}quot;People at risk" as defined in the CREWS' Guidance Document on People-Centered Risk-Informed Early Warning Systems (2023)

4. The Strategy

The CREWS 2030 Strategy is built on three strategic priorities: 1) Strengthening national foundations, 2) Catalyzing transformation through scaled finance, and 3) Driving next-generation systems. The three priorities are supported by commitments to support gender responsiveness, people-centered approach and innovation.

Strategic Priorities and Targets

Strengthening foundational early warning and climate services

- All LDCs and SIDS have operational coordination mechanisms on early warning.
- An additional 200 million people in LDCs and SIDS with access to improved forecasts and early warning services.
- Decrease in loss of lives and disruption to livelihoods due to disasters.



Catalyzing transformation through scaled finance

- An additional USD 1 billion in resources mobilized by 2030 for early warning services in LDCs and SIDS, including
 - De-risking access to USD 400 million.
 - Co-financing and programmatic alignment to USD 600 million.

Driving next-generation systems

- At least 15 new projects piloting innovative technologies or approaches.
- All CREWS-financed services linked to anticipatory action frameworks/early action protocol developments.
- Increased level of integration of science with local, indigenous, and traditional knowledge.

Priority 1. Strengthening the foundations of early warning systems, ensuring that local, national and regional early warning and climate services are prioritised and sustainably designed to meet the diverse needs of communities

CREWS will strengthen the foundations of early warning systems in LDCs and SIDS by building reliable, equitable, and sustainable services that meet international standards while responding to local realities. By 2030, CREWS aims for all LDCs and SIDS to have the essential elements of effective early warning systems in place, extending coverage to millions more people² and reducing disaster-related losses.



Targets

- All LDCs and SIDS have operational coordination mechanisms for early warning.
- An additional 200 million people in LDCs and SIDS with access to improved forecasts and early warning services.
- Decrease in loss of lives and disruption to livelihoods due to disasters.



Solutions

To reach these targets, CREWS will:

- Consolidate evidence-based norms, standards, and good practices, and support governments with diagnostics, peer learning, and technical assistance.
- Assist countries to develop or update policies, laws, and institutional frameworks, reinforcing inter-agency coordination and publicly funded services.
- Equip national actors with the necessary competencies through skills assessments, training programmes, and mentoring partnerships.
- Go beyond conflict-sensitivity to embed fragility, conflict and violence (FCV) considerations into
 project design, contingency planning, and delivery, ensuring continuity of services, safeguarding
 investments, and reaching populations often left behind.

A cornerstone of this work will be inclusivity: CREWS will support the co-design of forecasts and warnings with communities, so they are accessible in local languages, culturally relevant, and tailored to women, youth, older persons, people with disabilities, and marginalized groups. Local organisations will be engaged and strengthened as partners in delivery.

² The basis for comparison is the cumulative figure as reported by the CREWS 2024 Annual Report.

Priority 2. Catalyze transformation through scaled, accessible and sustained investments

CREWS will act as a catalyst for scaled and sustained investment in early warning systems, positioning them as an essential basic public service that is embedded in national budgets and development strategies. This approach will help countries move beyond fragmented, project-based efforts to coherent, long-term financing models that drive resilience and systemic impact.



Targets

 An additional USD 1 billion in resources mobilized by 2030 for early warning services in LDCs and SIDS, including de-risking access to USD 400 million and co-financing and programmatic alignment to USD 600 million.



Solutions

To reach these targets, CREWS will:

- Work with ministries of finance and disaster management authorities to integrate early warning systems into national budgets and public investment frameworks. This dual focus on catalytic finance and institutional strengthening will enable early warning to evolve into a sustained national function.
- Align its programmes with national plans such as National Disaster Risk Management Plans, National Adaptation Plans, Nationally Determined Contributions, and regional frameworks to ensure country ownership and policy coherence.
- Unlock aligned investments and de-risk scaled-up funding in partnership with governments, multilateral-development banks (MDBs), financing facilities and the private sector.
- Provide support to governments in preparing strong proposals to international climate funds, including the GCF–SAP CREWS Scale-Up Framework, and facilitate partnerships with bilateral donors and development banks.
- Align with the Systematic Observations Financing Facility (SOFF) to close the weather and climate data gap.

A cornerstone of this work will be the promotion of principled, guided investments: Through its pooled funding, de-risking of investments, and programme leveraging, CREWS will ensure that financing is driven by country needs, is people-centered and gender responsive, and draws on the best available expertise and adapted technologies.

Priority 3. Drive the next-generation early warning systems through innovation, integration, and strategic partnerships

CREWS will lead efforts to modernize people-centered early warning systems by fostering innovation, integration across sectors, and strategic partnerships. By 2030, all CREWS-supported systems will be designed to enable anticipatory action and to integrate meteorological, hydrological, and climate services.



Targets

- At least 15 new projects piloting innovative technologies or approaches.
- All CREWS-financed services linked to anticipatory action frameworks/early action protocol developments
- Increased level of integration of science with local, indigenous, and traditional knowledge.



Solutions

To reach these targets, CREWS will:

- Pilot and support the adoption of emerging technologies such as AI-based forecasting, next-generation satellite systems, cell broadcast technology and mobile alert platforms, ensuring that these innovations are scalable and context-appropriate.
- Advance the integration of scientific forecasting with local, indigenous, and traditional knowledge, improving trust, accessibility, and local uptake of warnings.
- Embed early warning systems and impact-based forecasting within anticipatory action frameworks and early action protocols, linking forecasts with plans and triggers, in collaboration with governments and humanitarian actors.
- Promote integrated planning across climate, meteorology, and hydrology, ensuring efficiency and coherence in service delivery.

A cornerstone of this work will be partnerships with the private sector: CREWS will demonstrate the economic value of early warning systems, unlock co-financing, and expand delivery channels.



5. How CREWS will deliver

CREWS' impact to 2030 will be achieved through **three interconnected levers:** catalytic financing, knowledge and innovation, and policy influence. What distinguishes the CREWS model is its robust, strategic and operational partnerships – with a network of national, regional and global Operational Partners and its Implementing Partners, bringing additional expertise and networks to strengthen delivery and impact.

1

Catalytic financing provides the entry point. Through its flexible pooled financing pathways, CREWS can respond rapidly to urgent needs, while at the same time laying the groundwork for larger, long-term programmes. Each dollar invested is designed to de-risk and unlock additional resources, turning targeted support into scaled, sustainable systems.



2

Knowledge and innovation ensure that lessons and good practices from CREWS' first decade are systematically applied and scaled. CREWS projects serve as testbeds where innovations in technology, institutional arrangements, and people-centered approaches are adapted and refined. By partnering with platforms such as the Risk-Informed Early Action Partnership (REAP), CREWS captures and shares knowledge, and enables governments and partners to build on proven models rather than starting from scratch.

3

Policy influence is what anchors sustainability. By supporting governments to embed early warning in national laws, budgets, and disaster risk management frameworks, CREWS helps ensure that systems are domestically owned, financed, and led. At the same time, CREWS contributes to regional and global policy dialogues – not as a stand-alone initiative, but as a bridge that strengthens coherence between climate finance, development priorities, and humanitarian action.

Together, these three levers allow CREWS to open doors to scale: initiating action where gaps remain, creating the enabling environment for larger investment, and ensuring that early warning systems become a core public good.

An accompanying Operational Plan will set out the milestones, resource needs, monitoring framework, and risk management approach that will translate this strategy into measurable results by 2030.

CREWS Implementing Partners













CREWS Operational Partners

































































The CREWS Initiative gratefully acknowledges the support of:

CREWS Members







Austria







Finland



















CREWS Observers













Visit www.crews-initiative.org Contact us: crews-secretariat@wmo.int Follow us: https://www.linkedin.com/company/crews-initiative/ Watch us: https://www.youtube.com/@crewsinitiative6027 Engage with us: https://bsky.app/profile/crews-initiative.bsky.social





