

Early Warning and Anticipatory Action

Background

Due to the changing climate, the frequency and severity of extreme weather events have increased and will continue to do so. In the past ten years, 91 per cent of all disasters triggered by natural hazards were caused by extreme weather- and climate-related events, such as floods, storms and heatwaves, while the number of such disasters has risen almost 35 per cent since the 1990s.¹ These disasters have killed more than 410,000 people in the past ten years, the vast majority in low- and lower middle-income countries.

The humanitarian system is facing unprecedented levels of need and the needs increasingly outstrip available humanitarian funding. The International Federation of Red Cross and Red Crescent Societies (IFRC) predicts that, by 2050, 200 million people every year – twice as many as 2019 – could need international humanitarian aid due to a combination of climate-related disasters and the socioeconomic impacts of climate change.²

Studies show that, in the last two decades, the deadliest and costliest disasters were forecasted.³ Scientific progress over recent decades means that we can make increasingly precise predictions about when and where hurricanes, drought, floods and other climate- and weather-related shocks are likely to occur, and what their likely impacts on people will be.

One of the key solutions identified to adapt to climate change and limit and reduce the loss and damage from extreme weather- and climate-related events is anticipating predictable disasters and acting ahead of time to protect people in the most vulnerable situations. **Growing evidence shows that early warning and anticipatory action approaches are more effective in terms of saving lives and livelihoods than post-facto response**, but also more cost-efficient and dignified, by managing risks before they become humanitarian disasters. They reduce response times, averting suffering and helping to prevent more severe impacts. They also reduce the financial impact of disasters, decrease the cost of humanitarian response and recovery, and protect development and climate change adaptation gains. **Early warning systems have been found to provide more than a tenfold return on investment** – the greatest of any climate change adaptation measure considered, while just 24 hours warning of a coming storm or heatwave can reduce ensuing damage by 30 per cent⁴. It is estimated that concerted anticipatory action could decrease the number of people needing international humanitarian assistance from 200 million every year by 2050 to 10 million.⁵

Anticipatory action is about shifting the focus from a traditional reactive response to a more proactive humanitarian response, protecting people ahead of predicted hazards to prevent or reduce acute humanitarian impacts before they fully unfold.

The IFRC Global Climate Resilience Platform, with its programme, is seeking to **unleash the full potential of people-centred early warning and anticipatory action** by supporting its successful, locally led implementation and scale-up.

¹ IFRC, 2020. World Disasters Report – Come Heat or High Water: Tackling the Humanitarian Impacts of the Climate Crisis Together. Available at: <https://www.ifrc.org/document/world-disasters-report-2020>

² IFRC, 2019. The Cost of Doing Nothing: The Humanitarian Price of Climate Change and How it can be Avoided. Available at: <https://www.ifrc.org/sites/default/files/2021-07/2019-IFRC-CODN-EN.pdf>

³ Coughlan de Perez E., et al., 2022. Learning from the past in moving to the future: Invest in communication and response to weather early warnings to reduce death and damage.

⁴ Global Commission on Adaptation, 2019. Adapt Now: A Global Call for Leadership on Climate Resilience. Available at: https://gca.org/wp-content/uploads/2019/09/GlobalCommission_Report_FINAL.pdf

⁵ REAP, 2022. Early Action: The State of Play 2021. Available at : https://www.early-action-reap.org/sites/default/files/2022-03/REAP_StateofPlay2021_FINAL.pdf

While a lot of progress has been made over recent years, much more is needed for early warning to reach and be actionable by “last mile” communities and for early warning to systematically lead to anticipatory action in the most at-risk communities. Although early warning systems technology has significantly improved, too often still early warning information is not accessible, understandable or actionable by at-risk communities and local actors, whether because it doesn’t reach communities or arrives late, is overly sophisticated or not in the right language, or isn’t accompanied by messages of what impacts can be expected and what action to take. **One in three people globally is still not covered by early warning services, mainly in least developed countries and small island developing states**⁶. Meanwhile, early warning often doesn’t lead to anticipatory action due to the lack of preparedness in terms of clarity of when to act and what actions to take, and the lack of financing available to implement anticipatory action. In the past ten years, anticipatory action systems have expanded from a few small pilots to over 40 countries, but the coverage of these systems remains limited and needs to be expanded to cover more shocks, more countries, and more people, particularly in the most at-risk communities.

In addition, collective efforts from humanitarian, development and climate communities are needed to integrate early warning and anticipatory action in national disaster risk management and climate change adaptation plans, policies and strategies and institutionalize anticipatory action.

Although early warning and anticipatory action are critical components of effective climate change adaptation, so far anticipatory action has mainly been funded by humanitarian donors and actors.

What is people-centred early warning and anticipatory action?

People-centred or Community Early Warning Systems (CEWS) are an effort by or with a community to systematically collect, compile and/or analyse information that enables the dissemination of early warning messages that can help the community take action to reduce harm or loss from a hazard. It recognizes that communities must understand threats in order to avoid them and that engaging communities in the development of the early warning systems from the beginning can help ensure people actually heed warnings. Considering emergency alerts from national early warning systems often do not reach everyone at risk, CEWS can help ensure information and warnings reach and are actionable by the most vulnerable communities. Where and when national early warning systems are active, CEWS can complement governmental mandates to protect lives and livelihoods.

Anticipatory action refers to actions taken before a crisis hits, based on forecasts or predictions, to prevent or reduce potential disaster impacts prior to a shock or before acute impacts are felt. The types of actions are varied and depend on the hazard and context and can range from evacuation, the reinforcement of homes and

the distribution of health protection kits to mobile cooling centres and cash distribution. Implementing anticipatory action requires developing pre-agreed early action plans setting out what early actions will be taken, based on what triggers, and tying that to pre-agreed and reliable financial resources. It also requires investing in and empowering locally led action driven by local actors and organizations.

An ideal early warning early action system is an integrated one which capitalizes on the strengths of both national and community level systems to ensure clarity of alert, coherence of processes and complementarity of roles.



IFRC network’s role

⁶ <https://public.wmo.int/en/media/press-release/%E2%80%8Bearly-warning-systems-must-protect-everyone-within-five-years>

Early warning and anticipatory action have been a core part of the IFRC network’s work for decades, with a focus on people-centred, community systems and action. The IFRC network plays a critical role in terms of strengthening existing national early warning systems, linking them appropriately to end users through community early warning systems and facilitating end-to-end (national to community) early warning systems,⁷ as well as ensuring early warning leads to anticipatory action at the ground level. **Since 2014, the IFRC network has been pioneering technical improvements to the anticipatory action** approach by developing Forecast-based Financing (FbF) to ensure early warning leads to early action by supporting the development of pre-agreed anticipatory action plans including agreed triggers for action that are tied to pre-arranged financing.

In 2018, IFRC launched a funding mechanism that automatically releases funding for anticipatory action to National Red Cross and Red Crescent Societies with approved early action plans, once pre-agreed triggers are reached – the **Disaster Response Emergency Fund (DREF) anticipatory action window**. IFRC envisions to increase DREF funding allocated to anticipatory action to 25 per cent by 2025.

Early warning and anticipatory action are an institutional priority for the IFRC network – recognized in our Plan and Budget 2021-2025, the Climate and Environment Charter for Humanitarian Organizations and the IFRC Global Climate Resilience Programme. The Red Cross and Red Crescent Movement has endorsed a **Council of Delegates resolution on ‘Strengthening Anticipatory Action: Our way Forward’**, which is accompanied by an IFRC Operational Framework for Anticipatory Action which unpacks how the network will reach the desired scale-up by 2025.

The unique breadth and depth of work and partnerships covered by the IFRC network in this arena, along with its long-term engagement at the national and community levels, are important elements for scaling up early warning and anticipatory action in the most vulnerable communities.

With support through investment from the Global Climate Resilience Platform, **the IFRC network will focus on the following areas** where it has a distinct comparative advantage and experience:

- Developing early action protocols/plans for more countries and more climate-related hazards, and ensuring National Societies are “early action ready” to enable quick community-based actions when a warning arrives, over large areas.
- Developing CEWS and ensuring that national early warning messages and investments reach and benefit at-risk communities, including through engagement in the Climate Risk and Early Warning Systems (CREWS) Initiative.
- Working with authorities, hydro-meteorological agencies, public officials and other stakeholders to develop and strengthen national early warning early action systems.
- Improving the accessibility, understandability and actionability of national early warning systems, including

In March 2019, the **Mozambique Red Cross (CVM)** submitted an Early Action Protocol related to cyclones which set out an agreed threshold for pre-emptive action along with which anticipatory actions should be implemented, once that threshold was met, to protect people ahead of a forecasted cyclone. IFRC allocated funding from its Disaster Response Emergency Fund anticipatory action window for CVM to procure and preposition stocks such as shelter strengthening material and water purification tablets to reduce the risk of waterborne disease outbreak. CVM also undertook readiness activities such as first aid training for volunteers and capacity building for local builders to ensure that it would be ready to act quickly when the trigger for action was met. In December 2020, CVM received the forecast that tropical storm Chalane had formed and was bearing down on Sofala. In the lead time of 48 hours, CVM assisted 7,500 people with early warning messages, prepositioned stocks and demonstrations of how to strengthen homes to protect against high winds, while directly strengthening homes for the most vulnerable including elderly and people with disabilities. (IFRC, 2022. Global Climate Resilience Programme. Available [here](#)).

⁷ IFRC/CREWS Secretariat, 2020. People Centered Early Warning Systems: Learning from National Red Cross and Red Crescent Societies. Available at: https://www.ifrc.org/sites/default/files/2022-03/220111_CREWS-IFRC_People-centred%20EWS_report_designed.pdf

through the promotion of the Common Alerting Protocol standard format for early warning messages and impact-based forecasting, and contextualization and use of Public Awareness and Public Education (PAPE) messages on what protective actions to take.

- Strengthening the link between community and national early warning systems.
- Embedding anticipatory action into national strategies, policies and legislation as a central component of disaster risk management and climate change adaptation.
- Promoting and supporting linkages with long-term climate change adaptation and disaster risk reduction programmes.
- Increasing DREF funding allocated to anticipatory action.
- Investing in learning, research and information exchange for continued improvements to the design and implementation of people-centred early warning and anticipatory action.
- Supporting collaboration and coordination between different stakeholders which otherwise may not interact, such as with climate and development actors and national/local authorities, at both the country/local and international level, including through the Anticipation Hub.

IFRC network's value proposition

The IFRC network's added value in people-centred early warning and anticipatory action includes **long-lasting experience in early warning and early action** designed with communities, for communities and with strong linkages to national authorities and hydro-meteorological services.

Early warning and anticipatory action are a **major element of the services provided by the network's 192 National Red Cross and Red Crescent Societies**. Our network of 180,000 local branches and 14 million volunteers play an important role in community mobilization and supporting locally led action, ensuring that early warning **information is effectively communicated and disseminated to "last mile"**, hard to reach communities, and that at-risk communities gain ownership of early warning systems and that their needs are understood and heard to ensure effective and participatory anticipatory action planning.

IFRC has been a **thought-leader in forecast-based financing** and shifting the paradigm of humanitarian response to be more proactive and anticipatory. As **auxiliaries to their governments, National Societies are key advocates** and players to integrate anticipatory action in national disaster risk management and climate change adaptation plans, strategies and policies and to promote and support concrete actions on early warning and early action at the local level.

The **cross-sectoral scope of National Societies' work integrates all aspects of anticipatory action**, enabling delivery of comprehensive action that can support resilience building. Furthermore, **National Societies' presence before, during and after emergencies means they can establish linkages between early warning and anticipatory action** work and their long-term programmes to strengthen the humanitarian-development nexus and promote resilience.

The IFRC draws upon expertise from across its network and beyond. The **Red Cross Red Crescent Climate Centre** provides expertise on climate science required for the development of robust anticipatory action plans, including feasibility studies and the development of triggers for anticipatory action. The IFRC/German Red Cross/Climate Centre **Anticipation Hub fosters practical learning and peer-to-peer exchange among practitioners related to anticipatory action**. IFRC hosts and is a member of the **Risk-informed Early Action Partnership (REAP)** to accelerate anticipatory action across development, climate and humanitarian stakeholders.