

Climate-smart disaster risk reduction

Helping communities reduce their risks, protect themselves and prepare for emergencies



CLIMATE-SMART DRR

There is nothing natural about a disaster. Shocks and hazards do not inevitably lead to catastrophe. Nonetheless, each year millions of people are killed, injured, displaced or made poor by natural hazards. Annually, on average, natural hazards kill 67,000 people, affect 199 million people, and drive 26 million people into poverty.¹

The number of disasters is increasing due to climate change, population growth, urban development in risk-prone locations, and changes in land use. The average number of disasters doubled in the last 40 years.² Most disasters in recent years have been weather related. Even if climate change is curtailed, that trend is set to continue.

The poorest and most exposed suffer most. Risk, and exposure to suffering, are determined by economic development, vulnerability, and coping capacity. People exposed to natural hazards in the poorest countries are seven times more likely to die than people in rich countries. The elderly, people with disabilities, women and children are disproportionately harmed.

1 Centre for Research on the Epidemiology of Disasters (CRED), <u>Disasters 2018: Year in Review</u> (2019); World Bank, <u>Results Brief</u> – <u>Climate Insurance</u> (2017).

2 CRED, Economic Losses, Poverty & Disasters, 1998-2017 (2018).

Investments in community-based disaster risk reduction (DRR) and climate change adaptation have a profound impact when disasters strike in terms of saving lives and protecting livelihoods. It is also highly cost effective. Analysis of IFRC's community-based DRR programmes shows that, on average, each dollar spent on DRR saves 16 dollars in response and recovery costs.

Today, IFRC is one of the biggest community-based DRR actors in the world. For three decades, community-led DRR and climate risk management have been key focus areas of IFRC.

The IFRC network is in a unique position Z to advise on, advocate for and implement community-based climate action and DRR. Our ongoing presence in communities enables greater trust, which is critical to ensure the sustainability of our efforts. With 192 National Red Cross and Red Crescent Societies serving as auxiliaries to governments, more than 160,000 local units/chapters and 14 million volunteers across the globe, the IFRC network is well placed to stimulate real and practical action on an unparalleled scale globally and bring the evidence gathered on community risks and adaptation needs to the attention of policy makers.







How does IFRC help communities reduce risks?

Example activities include:

1. Risk and vulnerability assessment

• Community-level risk assessments and action planning (e.g. Enhanced Vulnerability and Capacity Assessment)

2. Legislation for climate smart disaster risk reduction

• Integration of climate smart DRR in laws, regulations, plans and policies

3. Reduction of impacts

- Structural mitigation activities such as river bank enhancement, strengthening bridges, safe evacuation centres, etc
- Livelihoods support/diversification and social protection
- Ecosystem-based DRR / nature-based solutions (e.g. protection and restoration of mangroves, reforestation of unstable slopes)
- Risk-informed shelter solutions

4. Community knowledge development and awareness-raising

- Climate change and DRR education in schools (e.g. co-development with Ministries of primary and secondary DRR and CCA school curricula on major hazards and adaptive actions)
- Public awareness and public education on climate adaptation, disaster risk reduction and preparedness (e.g. via Public Awareness and Public Education (PAPE) messages, WhatNow service on Google, radio, theatre, etc)

5. Early Warning Early Action

- Community Early Warning Systems & ensuring national early warning messages reach at-risk communities in a timely manner
- Early Action Protocols and Forecast-based Financing to support early action
- Anticipatory and risk-informed action; this includes planning for handling new extreme events such as unprecedented flood levels and heat waves

6. Community preparedness for effective response

- Establishment and training of Community Disaster Response Teams (e.g. simulations, first aid...)
- Contingency planning, including for new extreme events
- Support to local authority capacity via auxiliary role of National Societies

IFRC strives to ensure its actions are communitydriven, holistic, context-appropriate, technically sound, effective and efficient, in line with its Framework for Community Resilience.

In addition, in order to most effectively support communities, IFRC supports National Society institutional capacity as part of the Preparedness for Effective Response (PER) approach.

IFRC's DRR and climate activities are embedded across prevention, preparedness, response and recovery to support the long-term resilience of communities.

Our Strategy for Climate Action and DRR³

In coming years, the IFRC will significantly strengthen its community-based disaster risk reduction efforts and climate action. Acknowledging the risks that people face from natural hazards at every scale, the IFRC will help communities at risk to become resilient and thereby reduce their vulnerability to long-term effects of climate change. This work will contribute to the first pillar of the Red Cross Red Crescent Movement Ambitions to Address the Climate Crisis⁴ which aims to scale up climate-smart DRR, early action and preparedness.

Our strategic priorities

Vision. Vulnerable communities across the world become more resilient and better prepared for disasters and climate change impacts now and in the future

To achieve this goal, the IFRC network will deploy its worldwide network to scale up innovative and effective community-based/led disaster risk reduction (DRR) and climate action programmes building on three decades of extensive experience in disaster and climate risk management and National Societies' unique mandate as auxiliary to governments.

Ambition. IFRC will mobilize a significant scale-up in climate-smart DRR activities led and managed by communities. Its activities will reach 100 million people by the end of 2020.

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In 2018, IFRC and National Red Cross and Red Crescent Societies invested 207 million Swiss francs on DRR and climate change adaptation projects. Our programmes reached 52 million vulnerable people in 160 countries.

Implement, promote and enhance approaches and tools for community-based DRR and climate action.

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Leverage new technologies for community-based DRR and climate action.

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Catalyse and capitalize on the IFRC network and volunteer base to scale up community-based DRR and climate action.

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Enhance DRR and climate advocacy and partnerships.

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3 IFRC Secretariat and Disaster Risk Reduction Working Group. The DRR Working Group consists of technical DRR advisors from Partner National Societies and relevant Reference Centres.

What we will prioritize

1. Promote and enhance approaches and tools

We will:

- Continue to lead advances and innovation in early action and forecast-based financing, including through a wider disaster risk financing lens.
- Promote climate action and climate-smart programming, including nature-based solutions.
- Increase risk reduction action in urban contexts and fragile and conflict-affected settings.

2. Leverage new technologies

We will:

- Advance the development of digital versions of key IFRC community resilience tools and expand risk and early warning functionalities of IFRC's <u>online disaster information platform</u>.
- Continue to pilot the use of artificial intelligence and machine learning for analysis and decision-making related to disaster risk reduction and preparedness.
- Explore the use of earth observation for decision-making to support early action and resilience building efforts of National Societies.

3. Catalyse and capitalize on IFRC's network and volunteer base to scale up

We will:

- Enhance the capacity of National Societies and branches to promote and implement scalable climate smart DRR activities.
- Stimulate an improved distributed network approach with partner National Societies and IFRC Reference Centres.
- Enhance the engagement of IFRC's volunteer network, especially youth, in climate action and DRR.

4. Strengthen partnerships and advocacy

We will:

- Strengthen our engagement with multilateral organisations and financial institutions, the private sector, foundations and other civil society actors to enhance our impact and reach.
- Privilege partnerships that focus on climate action, nature-based solutions, anticipatory action and disaster risk financing.
- Extend and develop our role in global, regional and national policies and frameworks, carrying the evidence for adaptation needs of vulnerable people to the attention of policy makers and adaptation planning agencies.



4 reasons why community-based DRR and climate action are important

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1. Save lives and livelihoods when disaster strikes. Many of the natural hazards that take place do not need to become major disasters when people are prepared and able to cope with them. Severe hazards will occur, but disasters can be prevented or their impacts drastically reduced. Community risk assessment and DRR planning, ecosystem-based DRR and early warning early action – including preparations for more extreme events – can prevent natural hazards from becoming disasters..

In Bangladesh

Investments in DRR contributed to a decrease in cyclone-related deaths from over 300,000 in 1970 (cyclone Bhola) to 3,500 in 2007 (cyclone Sidr), even though Sidr was more powerful.

In Peru

Climate-smart DRR efforts during El Niño episodes contributed to a reduction in deaths from 9,300 in 1982/83 and 1997/98 to 20 in 2015/16.

In Mozambique

Hundreds of people died in 2000 due to devastating floods while, eight years later, similarly serious floods led to no deaths or injuries, thanks to the evacuation of nearly 100,000 people. sents a large saving in terms of avoided losses and reconstruction costs. IFRC's costbenefit analyses of community-based DRR programmes show that, on average, every dollar spent on DRR saves over \$16 on the cost of response or recovery.⁵ Many DRR actions can be described as 'no regrets': they have a net positive effect regardless of whether the threat materializes.

2. Is highly cost-effective. It generally repre-

3. Brings socio-economic benefits. Investing in disaster resilience has been shown to generate a 'triple dividend' by avoiding losses once disasters occur; stimulating economic activities and innovation; and environmental, social and economic co-benefits. It can also reduce forced population movements.

4. Supports countries to achieve global commitments, namely the Sendai Framework for Disaster Risk Reduction 2015-2030, Paris Agreement and 2030 Agenda for Sustainable Development.

Key statistics

- Natural hazards kill an average of 67,000 people every year
- 199 million people are affected by natural hazards every year, on average
- For every dollar invested in DRR, on average over \$16⁶ is saved on the cost of response and recovery
- IFRC community-based DRR activities assisted over 50 million people in 160 countries in 2018
- Community-based DRR requires on average US\$5 per person

For further guidance see the <u>Minimum</u> standards for local climate-smart disaster risk reduction. 5 This is an average figure based upon Cost Benefit Analysis studies carried out in 11 countries. Case studies can be obtained upon demand.

6 Idem.

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