

**World Disasters Report 2020**  
Executive Summary



# COMING HEAT CR HIGH WATER

**Tackling the humanitarian impacts of  
the climate crisis together**

**© International Federation of Red Cross and Red Crescent Societies, Geneva, 2020**

Any part of this publication may be cited, copied, translated into other languages or adapted to meet local needs without prior permission from the International Federation of Red Cross and Red Crescent Societies, provided that the source is clearly stated.

ISBN 978-2-9701289-6-0

URL: <https://media.ifrc.org/ifrc/world-disaster-report-2020>

Cover photo: Assam state, India, 2020. © Indian Red Cross Society

Cover design: Valentina Shapiro

**Contact us**

Requests for commercial reproduction should be directed to the IFRC secretariat:

**Address:** Chemin des Crêts 17, Petit-Saconnex, 1209 Geneva, Switzerland

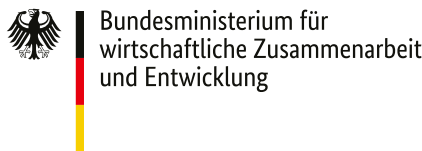
**Postal address:** P.O. Box 303, 1211 Geneva 19, Switzerland

**T** +41 (0)22 730 42 22 | **F** +41 (0)22 730 42 00 | **E** [secretariat@ifrc.org](mailto:secretariat@ifrc.org) | **W** [ifrc.org](http://ifrc.org)

The International Federation of Red Cross and Red Crescent Societies would like to express its gratitude to the following for their support to the *World Disasters Report 2020*.



Australian Government  
Department of Foreign Affairs and Trade



# Snapshot of climate- and weather-related disasters and their impacts

In the past ten years, **83% of all disasters triggered by natural hazards were caused by extreme weather- and climate-related events**, such as floods, storms and heatwaves.

The **number of climate- and weather-related disasters** has been increasing since the 1960s, and **has risen almost 35%** since the 1990s.

The proportion of all disasters attributable to climate and extreme weather events has also increased significantly during this time, from **76% of all disasters during the 2000s to 83% in the 2010s**.

These **extreme weather- and climate-related disasters have killed more than 410,000 people in the past ten years**, the vast majority in low and lower middle-income countries. Heatwaves, then storms, have been the biggest killers.

A further **1.7 billion people around the world have been affected by climate- and weather-related disasters** during the past decade.



# EXECUTIVE SUMMARY

## Overview

The COVID-19 pandemic has shown how vulnerable the world is to a truly global catastrophe. But another, bigger, catastrophe has been building for many decades, and humanity is still lagging far behind in efforts to address it, as communities and countries still need to adapt to its realities.

The impacts of global warming are already killing people and devastating lives and livelihoods every year, and they will only get worse without immediate and determined action. The frequency and intensity of climatological events are increasing substantially, with more category 4 and 5 storms, more heatwaves breaking temperature records and more heavy rains, among many other extremes. Loss of natural resources, food insecurity, direct and indirect health impacts and displacement are likewise on the rise. Many communities are being affected by concurrent and consecutive disasters, leaving them with little time to recover before the next shock arrives. The most at-risk people in these communities are in danger of being left behind if their needs and capacities are not understood, and their voices not heard.

The massive stimulus packages that are being developed around the world in response to COVID-19 are an opportunity to build back better – not only with a green recovery but an adaptive one, using funds to invest in making communities safer and more resilient.

The resources we need to adapt to current and imminent climate-driven disaster risks are within reach. As an example, it would take an estimated 50 billion US dollars (around 49 billion Swiss francs) annually to meet the adaptation requirements set out by 50 developing countries for the coming decade. This amount is dwarfed by the global response to the economic impact of COVID-19 which has already passed 10 trillion US dollars (approximately 9.8 trillion Swiss francs), including a 750 billion Euro (802 billion Swiss franc) COVID-19 economic bailout scheme agreed by EU leaders in July 2020, and a 2.2 trillion US dollar (2.1 trillion Swiss franc) COVID-19 stimulus bill adopted by the USA in March. This money should be used for the essential task of creating jobs, whilst at the same time also facilitating a green, inclusive and resilient recovery.

It is also critical to use available resources well – headlines about millions and billions of dollars should not distract us from ensuring that what is allocated is best spent for those people who need it most. At present, the available funding for climate change adaptation and disaster risk reduction does not seem to consistently prioritize the countries at highest risk and with the lowest ability to adapt and cope with these risks.

While higher volumes of funding do often go to countries facing the highest levels of vulnerability to disaster risk and climate change, this is not consistently the case. Many highly vulnerable countries are left behind, receiving little climate change adaptation support.

The analysis presented in *World Disasters Report 2020* shows that none of the 20 countries most vulnerable to climate change (according to ND-GAIN) and to climate- and weather-related disasters (according to INFORM) were among the 20 highest per person recipients of climate change adaptation funding. Somalia, the most vulnerable, ranks only 71st for per person funding disbursements. None of the countries with the five highest disbursements had high or very high vulnerability scores. At the other end of the spectrum, 38 high vulnerability countries (out of 60) and 5 very high vulnerability countries (out of 8) received less than \$1 per person in climate adaptation funding, while two (Central African Republic and DPRK) received no disbursements at all. Notably, none of the largest five recipients are fragile contexts.

An additional challenge is ensuring that funding reaches the most at-risk people within these countries. Many communities may be particularly vulnerable to climate-related risks, from people affected by conflict whose capacity to manage shocks is already strained, to migrants and displaced people who may struggle to access the services and assistance they need, to urban poor people and other marginalized communities. Support needs to reach these communities most vulnerable to climate-related risks as a priority.

The issues are not only financial. The report argues it is time to shake off business as usual and turn words into action. Much of what needs to be done has been known for years – it is just overdue in implementation. But we also need to scale up some new lessons learned more recently from our changed environment. Fundamentally, we need to ensure that we are implementing the intertwined commitments in the Sustainable Development Goals (SDGs), the Paris Agreement and the Sendai Framework for Disaster Risk Reduction 2015–2030 in a joined-up way. And we must do a much better job of ensuring that all actors – including governments, donors, the humanitarian, development, climate and environmental sectors – prioritize support for the people, communities and countries most at risk.

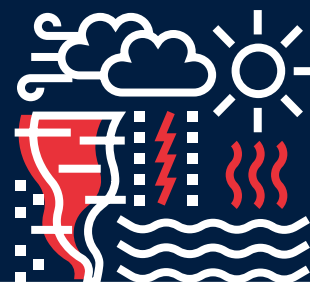
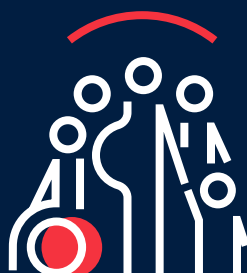
# Disasters during the COVID-19 pandemic

Climate change is not waiting for COVID-19 to be brought under control. Many people are being directly affected by the pandemic and climate-driven disasters all at once, and the world's poorest and most at-risk people are being hit first and hardest. Over 100 disasters took place between March 2020 (when the pandemic was announced) and six months later when this report was finalized, and over 50 million people were affected. So, we may well be “busy” with the pandemic, but there’s still never been a more urgent time to act.

More than  
**100**  
disasters  
occurred during the  
first **6 months** of the  
**COVID-19 pandemic**

More than  
**50**  
million  
people have  
been affected

More than  
**10**  
different disasters  
affected over  
**250,000 people**



# 99%

of people affected were impacted by  
**extreme climate- and weather-related disasters**

Sources: IFRC GO, EM-DAT

Notes: WHO declared the COVID-19 pandemic on 11 March 2020. Figures are from 1 March 2020 to 1 September 2020.

The *World Disasters Report 2020* takes a deep dive into the disaster risks that climate change is driving, and analyses the action needed to address their human impacts.

Chapter 2, **Hazards everywhere - climate and disaster trends and impacts**, analyses how the number of disasters has increased over time, and how climate- and weather-related disasters have increased in number and as a percentage of all disasters. As a result, we can expect not only less time to recover between disasters, but that multiple disasters will happen at once, in a manner described as compounding shocks. For example, the dangers of cyclones, flooding, droughts, fires or heat waves did not retreat while the world was adapting to the COVID-19 pandemic. This chapter looks at the potential humanitarian impacts of extreme weather events exacerbated by climate change over the next 10 to 30 years – including displacement, food insecurity and loss of livelihoods, damage to property, injury and loss of life – and the likelihood that many people will be pushed beyond their ability to cope. The number of people affected by climatological disasters is rising, and will continue to rise unless we take action on both climate change adaptation and mitigation.

Chapter 3, **Climate as a risk multiplier - trends in vulnerability and exposure**, looks at the uneven geographic impacts of climate- and weather-related hazards between regions (with Asia-Pacific bearing the greatest burden) and within countries. It considers how trends, such as rapid, unplanned urbanization and social and economic inequality, affect who is at greatest risk. It argues that efforts to reduce risks must be based on a fuller understanding of why some people are more vulnerable and/or have less capacity to cope with a crisis than others, bearing in mind the groups of people who tend to be more vulnerable, but also the significant variations of experience and circumstances within and between groups.

Without this, we will fail to reach the people most in need. The chapter also examines the strain the humanitarian system was under even before the global shock of the novel coronavirus, and warns that existing gaps will be worsened by the COVID-19 crisis.

Chapter 4, **Reducing risks and building resilience - minimizing the impacts of potential and predicted extreme events**, sets out how to effectively reduce the risk of climate- and weather-related disasters by reducing exposure and vulnerability, and increasing people's capacities to manage shocks and stresses. It calls for climate adaptation and risk-informed development efforts to be urgently scaled up today to respond to rising risks, and for a transformation in all approaches to resilience across the development, humanitarian, environmental and climate sectors.

Programmes and operations need to become 'climate smart'; we must do more to collaborate, reinforce and align efforts and co-produce solutions; and our adaptation and risk reduction practices must involve communities – particularly women, youth and indigenous people – in their design if they are to truly meet the needs of the most at-risk people. The chapter also looks at how the humanitarian sector has to not only become more effective, but also evolve if it is to cope with the increasing frequency and severity of climate- and weather-related events, specifically by expanding multi-hazard early warning and anticipatory approaches.

Chapter 5, **Going green - strengthening the environmental sustainability of response and recovery operations**, addresses the prospects for humanitarian assistance itself to become greener and more sustainable. It outlines ways in which the environmental sustainability of response and recovery operations can be strengthened while limiting the resulting climate and environmental footprint. And it argues that humanitarian organizations have a responsibility to do no harm, which means taking a much more serious approach across the sector to greening our own activities and operations, particularly in relation to our carbon footprint and our impact on the environment.

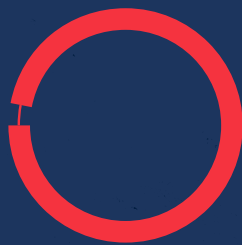
Chapter 6, **Climate-smart disaster risk governance - ensuring inclusive and coherent regulatory frameworks**, explores the imperative for countries to improve the effectiveness of their national risk governance frameworks in the face of increasing disaster risks and worsening climate trends. This should happen through coherent law and policy reform processes that enhance resilience to climate and disaster risks in a more systematic way. In this way, nations can optimize their available resources and increase the efficiency of their risk management measures. More integrated domestic laws and policies addressing climate and disaster risk are a key way to put in place cross-cutting international commitments under the SDGs, the Paris Agreement and the Sendai Framework.

Chapter 7, **Smart financing - getting the money where it's needed most**, argues that our current climate finance structures are not yet hitting the target when it comes to allocation. Smart financing is about the where and how of spending, not just the how much. It means deliberately directing money to the countries and communities most at risk of climate change crises and designing holistic funding strategies from a starting point of what these people and places really require. There is a clear responsibility for developed countries to meet their commitments to provide financing, and also for all those involved in spending it to ensure it is best directed and designed to make the greatest difference for the people who need it most. This must involve integrating the experience and expertise of local people and systems facing the worst effects of climate change. This needs a concerted effort not only to target the most vulnerable places, but also to develop financing plans and tools which support the best outcomes for people.

Throughout, the *World Disasters Report 2020* insists that urgent action must be taken at the community level, where it is needed the most. But all actors have to be smarter about how they do this. In its recommendations, the report calls for all actors to be **climate smart**, to **get the priorities right**, and to **integrate and localize** climate and disaster risk management approaches.

# DISASTERS IN 2019

**97.6 million**  
people were affected  
and **24,396** people  
were killed



**97%**  
were affected  
by **climate-  
and weather-  
related disasters**

## Heatwaves, Western Europe

*June to August 2019*  
3 heatwaves affecting Belgium, France, Germany, Italy, the Netherlands, Spain, Switzerland and the UK caused 3,453 deaths

## Hurricane Dorian, Bahamas and USA

*September 2019*  
Caused 379 deaths

## Ebola outbreak, DRC

*August 2018-January 2020*  
Caused 2,264 deaths (2019 only)

## Floods, Paraguay

*May 2019*  
Affected more than 522,000 people and caused 23 deaths

## DISASTERS

*According to EM-DAT taxonomy*

- Storm
- Flood
- Landslide (hydromet)
- Wildfire
- Heatwave
- Drought
- Earthquake
- Volcanic activity
- Disease Outbreak

*Sources: IFRC 2020 based on data from EM-DAT, NCEI (NOAA), WHO, DFO, FIRMS (NASA), National Hurricane Center, Joint Typhoon Warning Center, IBTrACS (NOAA), ReliefWeb, secondary data review*

*Note: The maps used do not imply the expression of any opinion on the part of the International Federation of Red Cross and Red Crescent Societies or National Societies concerning the legal status of a territory or of its authorities.*

**308**

disasters were triggered by natural hazards



**77%**

of disasters triggered by natural hazards were climate- or weather-related



**Drought, Afghanistan**  
*April 2018–July 2019*  
Affected 10.6 million people

**Typhoons Faxai and Hagibis, Japan**  
*September–October 2019*  
Affected more than 510,000 people

**Cyclones Kammuri and Phanfone, Philippines**  
*December 2019*  
Affected 1.9 million and 3.2 million people respectively and caused 67 deaths

**Cyclone Fani, India**  
*May 2019*  
Affected 20 million people and caused 50 deaths

**Cyclones Idai and Kenneth, Comoros, Malawi, Mozambique and Zimbabwe**  
*March and April 2019*  
Affected more than 3 million people and caused 1,294 deaths

**Drought, East and Southern Africa**  
*January–December 2019*  
Affected more than 9 million people in 12 countries

**Wildfires, Australia**  
*September 2019–February 2020*  
19.4 million hectares burned

**127**  
Floods

**59**  
Storms

**25**  
Landslides (hydromet)

**8**  
Wildfires

**10**  
Extreme temperatures

**8**  
Droughts

**32**  
Earthquakes

**3**  
Volcanic activities

**36**  
Disease outbreaks



*Afghanistan, 2019. After years of drought, flash floods in March 2019 caused deaths and damage across many provinces in Afghanistan. Around the world, many communities are being affected by concurrent and consecutive disasters, leaving them with little time to recover before the next shock arrives.*

*© Afghan Red Crescent Society /  
Meer Abdullah Rasikh*

## Get climate smart

Humanitarian, development as well as climate and environmental actors need to become much better prepared to take actions triggered by a forecast (ranging from providing cash, sanitation and hygiene kits or shelter tool kits to safeguarding livelihood measures such as evacuations of livestock, among others) including through forecast-based financing. The *World Disasters Report 2020* argues that it is time to take this approach to scale, through both its incorporation in national disaster risk management laws, policies and plans, and in the procedures and practices of humanitarian donors and organizations.

The key to this lies in taking full account of – and acting on – what science tells us about upcoming risks, while understanding that these may be very different from those of even the recent past. This requires combining an existing understanding of vulnerabilities and capacities with one of possible future risks at different time scales (including weather forecasts, seasonal forecasts and longer-term climate change projections).

For disaster risk management programming, both long-term and medium/seasonal forecasts can be critical for planning and investment, while short-term forecasts should trigger anticipatory action. Forecast-based financing and similar approaches have gone well beyond the proof-of-concept phase, with IFRC, National Red Cross Red and Crescent Societies and other partners integrating them into their work in more than 60 countries to date. All early warning systems must reach the most at-risk people, and be easily understood and acted on by them, while investments in early warning must be matched by investments in early action if people's lives are to be saved. At the same time, information about risks and especially vulnerable groups that is collected to develop early warning and early action systems can seamlessly inform long-term risk reduction and adaptation planning (but currently rarely does!). For instance, alongside investments in flood early warning systems for vulnerable communities, critical infrastructure must be made more resilient in order to withstand the predictable – and often rising – risk of weather extremes and rising sea levels.

## Get the priorities right

Our collective goal is to keep everyone safe from disasters, but our first priority and focus should be the communities that are most exposed and vulnerable to climate risks.

The *World Disasters Report 2020* shows that international climate and disaster risk reduction finance are not keeping pace with adaptation needs in low income countries, and the countries with the very highest risk and lowest adaptive capacities are not being prioritized.

A clear mandate to focus on the most at-risk people – and to ensure they participate in decision-making – is also missing from many disaster risk management laws and national adaptation plans. While the people and communities most at risk vary widely from place to place, slum dwellers, migrants and displaced persons, indigenous communities, older and disabled persons and persons with diverse sexual orientation, gender identity and expression and sex characteristics are among the people most frequently left behind.

## Integrate and localize the approach

'Integration' may not sound like a particularly revolutionary approach to the global climate crisis, but it is indispensable. The main global regulatory frameworks – the SDGs, the Sendai Framework and the Paris Agreement – already call for integrated approaches in climate change adaptation, disaster risk reduction and development. However, few national disaster risk management laws and policies fully integrate climate change adaptation and some states employ parallel and separate institutional mechanisms and planning processes for climate change adaptation, disaster risk management and development.

There is also a lack of integration across international finance sources, with climate, development and humanitarian funding streams often operating in uncoordinated ways, leaving gaps in coverage – particularly in support for local responders and community-level action.

Local humanitarian and civil society organizations can anticipate, respond to, and support the recovery of affected communities, if these communities have the resources they need. Multilateral climate finance is extremely difficult for civil society groups to access, and there is a collective blind-spot that can prevent support from being available for long-term institutional capacity building of local disaster responders.

## Summary of recommendations

### For governments

- Design investments, including COVID-19 financial stimulus packages, to support a green, resilient and inclusive society, investing in climate change mitigation and adaptation.
- Ensure that major infrastructure, such as schools, hospitals, child and senior care facilities, seawalls, power plants and water and sanitation facilities, is designed (and where possible retrofitted) to withstand projected climate and weather extremes and rising sea levels, making use of environmental impact assessments as a regulatory tool.
- Review disaster risk management laws, policies and plans to ensure they are climate smart, understood and implemented. These should also consider key innovations such as forecast-based action and financing, linked to shock-resistant social protection systems.
- Invest and design integrated and people-centred early warning and early action systems that assure timely delivery of actionable warnings at community level, as well as an adequate protective response.
- Ensure decentralized access to funding for adaptation and disaster risk management activities, particularly at the local level.

### For humanitarian (and other relevant civil society) organizations

- Embrace and strengthen climate adaptation, in particular in urban settings, as well as in contexts where development practitioners may be less present, such as complex crises.
- Scale up use of forecast information in planning and learn from successes in forecast-based triggers for early action

- Continue to strengthen rapid response and scale up capacity for disasters that cannot be avoided.
- Take responsibility to transparently report and improve on global and local climate and environmental footprints, strengthen the environmental sustainability of humanitarian activities and impact, and make stronger links to the environment throughout humanitarian work.

### **For multilateral and bilateral donors**

- Design COVID-19 support packages to enable a green, resilient and inclusive recovery, investing in climate change mitigation and adaptation.
- Increase ambition to match the adaptation needs of the most vulnerable developing countries.
- Ensure allocation of climate and disaster risk reduction finance prioritizes countries that are at the very highest risk and lowest capacity.
- Change procedures so that multilateral climate finance can be accessed at local level for community-led resilience building as well as for strengthening long-term institutional and response capacities.
- Scale up support for anticipatory approaches so that many more people can receive assistance ahead of predictable shocks.
- Support humanitarian organizations to achieve a greener approach (which should include adequate budgeting for strengthening systems and allow for sustainable procurement) and coordinate among themselves to avoid contradictions in their demands on funding recipients.

### **For climate change institutions and experts**

- Embrace and promote more effective management of disaster risk caused by climate change as a critical element of adaptation and thus an important goal of global and domestic climate action, alongside mitigation.
- Connect analytical tools (as well as policy and financing instruments) for long-term adaptation with short-term forecast-based action and post-disaster response.
- Redouble efforts, in cooperation with humanitarian and development partners, to ensure that communities receive timely and understandable scientific information about climate-driven risks.
- Build on the experience of the humanitarian and disaster risk reduction communities in managing shocks, which includes the need for multi-stakeholder approaches, and a strong focus on implementation at local level.

### **For everyone**

- Ensure that the most vulnerable people are addressed as a matter of priority in climate change adaptation and disaster risk management.
- Listen more closely to the voice of communities, to understand local knowledge, coping mechanisms, practices and needs related to climate risk, and to design culturally appropriate programmes.
- Support and empower the leadership of local civil society and communities in climate change adaptation and disaster risk management efforts.
- Work together across silos to address climate-driven disaster risks.



*Mozambique, 2020. In Praia Nova, people are still struggling to get back on their feet a year after Cyclone Idai.*

© IFRC / Anette Selmer-Andresen

## Time to act

COVID-19 has demonstrated that humanity has the capacity to recognize and respond to a global crisis, finding resources where none seemed available, and taking unprecedented and rapid steps to respond to the crisis.

Climate change is an even more significant challenge to humanity than the novel coronavirus, one which literally threatens our long-term survival.

We must address this threat by taking action to reverse climate change. In the meantime, we must work to limit the deaths and damage that climate-driven disasters are already driving.

We all – governments, donors, the humanitarian, and development, climate and environment communities – need to act effectively before it's too late. Let's not miss our chance.

Download the [full report](#).



# **THE FUNDAMENTAL PRINCIPLES OF THE INTERNATIONAL RED CROSS AND RED CRESCENT MOVEMENT**

## **Humanity**

The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

## **Impartiality**

It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

## **Neutrality**

In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

## **Independence**

The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

## **Voluntary service**

It is a voluntary relief movement not prompted in any manner by desire for gain.

## **Unity**

There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

## **Universality**

The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.



**The International Federation of Red Cross and Red Crescent Societies (IFRC)** is the world's largest humanitarian network, with **192 National Red Cross and Red Crescent Societies** and around **14 million volunteers**. Our volunteers are present in communities before, during and after a crisis or disaster. We work in the most hard to reach and complex settings in the world, saving lives and promoting human dignity. We support communities to become stronger and more resilient places where people can live safe and healthy lives, and have opportunities to thrive.