Climate Change and Disaster Displacements

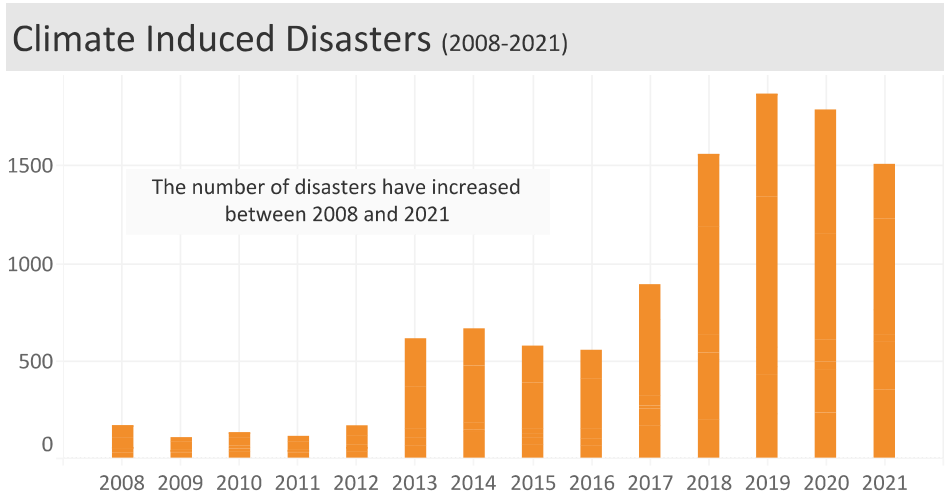
The world's forgotten victims

Climate Refugees

Climate change is the defining crisis of our time. Climate change and increasingly extreme weather events, have caused a surge in natural disasters over the past 50 years. The graph shows the increase in climate related disasters like storm, drought and flood between 2008 and 2021.

Every year, weather and climate related disasters such as floods, storms and droughts force millions of people from their homes.

As the effects of climate change induce more extreme weather conditions, that number is expected to rise. This is alarming situation!



Intended Audience

The analysis is primarily intended to support the work of:

1. Any Regional, national, sub-national and local Disaster Risk Management actors, particularly disaster management agencies, civil defence and emergency responders in addressing disaster displacement risk.

2. National and regional governments in ensuring that policies to avoid and manage displacement within and across borders are coherent across all relevant sectors.

3. National and sub-national law and policymakers, such as parliamentarians, in regulating the inclusion of measures to reduce and manage disaster displacement.

4. Local authorities responsible for land-use planning and urban development in reducing vulnerabilities and exposure that may lead to displacement, and in ensuring disaster displacement risk is included in spatial development plans.

5. Global Organisations like UNDRR (United Nations Office of Disaster Risk Reduction), United Nations Framework Convention on Climate Change (UNFCCC)

6. Others, such as international organisations, civil society, community-based organisations, and academics, may also find it useful.

UNDRR
UN Office for Disaster Risk Reduction

United Nations Framework Convention on Climate Change

EMERGENCY RESPONSE TEAM
GROUPE TACTIQUE D'INTERVENTION

National Disaster Management Authority

Datasource Information

The data is obtained from The **Internal Displacement Monitoring Centre** or **IDMC which** is an International non-governmental organization established in 1998 by the Norwegian Refugee Council in Geneva. IDMC maintains Global Internal Displacement Database (GIDD) which is focused on monitoring and providing information and analysis on the world's internally displaced persons (IDPs). GIDD is the source of our Dataset.

The GIDD dataset used in analysis provides an interactive platform of data on internal displacement, designed for policymakers, among others. It provides data on situations of displacement associated with sudden-onset natural hazard-related disasters from the year of 2008

Below is the link to datasource and meta data:
Global Internal Displacement Database | IDMC (internal-displacement.org)

Objective of the Story

Climate change is not only a future threat; it already affects millions of people and seriously hampers the development agendas of numerous countries. One of the many policy challenges aggravated by climate change is disaster-induced displacement.

The objective of the story is to analyze how the ocuurences of climate change induced disasters have changed over time and study factors in form of hazards that cause these displacements.

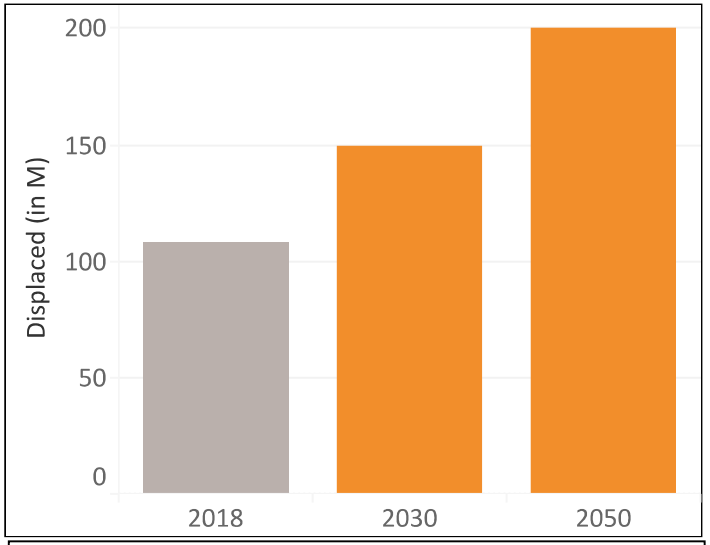
Disaster-induced displacement is more than a humanitarian concern—the entire development of affected regions is substantially challenged. With millions of people in limbo, individual vulnerabilities, human rights violations, conflict, poverty, and inequality increase. Poverty and inequality make disaster preparedness and resilience difficult, often exacerbating humanitarian crises. With inadequate resources and few opportunities to build resilience (through durable construction, sufficient savings, and diversified income activities, for example), poor communities tend to suffer most from disasters.




Concerning Facts

"There is clearly a very high cost of doing nothing. But there is no clear reason why 200 million people should be forced to pay it in 2050"

By 2050, 200 million people every year could need international humanitarian aid as a result of a cruel combination of climate-related disasters and the socioeconomic impact of climate change. This is nearly twice the estimated 108 million people who need help today from the international humanitarian system because of floods, storms, droughts and wildfires. Even by 2030, which is only a decade away, this number could increase almost 50 per cent.



Increase of population in need of humanitarian assistance as a result of climate-related disasters by 2030 and 2050 (under pessimistic scenario)

RESPONSIBLE FOR ONLY

1%

OF GLOBAL EMISSIONS,
the world's Least Developed

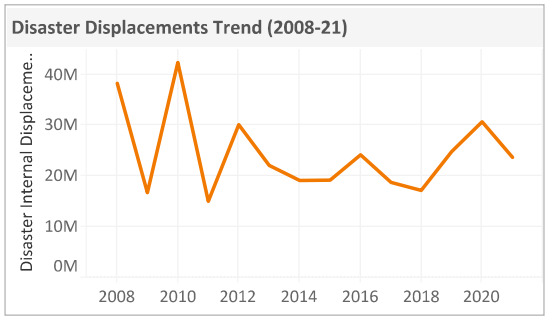
Countries have seen **99%** of the deaths from climate and weather related disasters

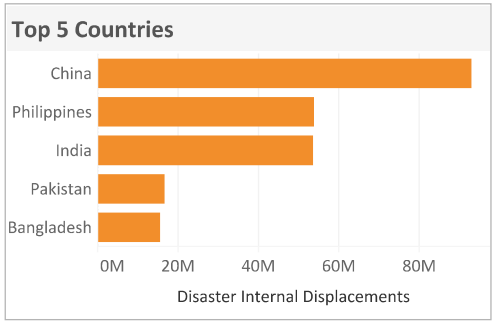
Disaster Displacements due to Climate Change

Year
All

308.1 M 2008 - 2021

Disaster Displacements due to Climate Change Induced Disasters





Top 5 countries with the most new disaster displacements are in **East Asia & Pacific and South Asia**

Problem Statement:

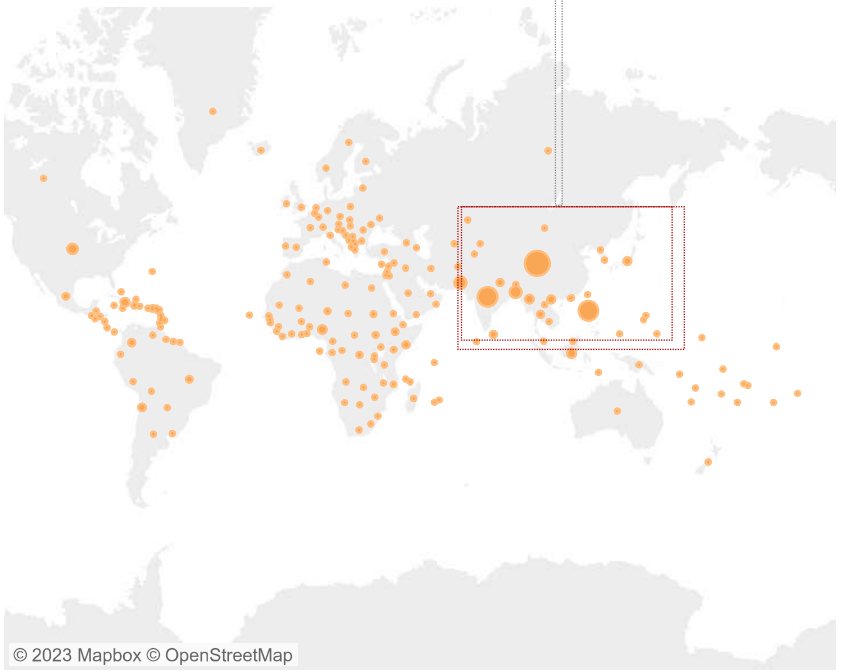
The climate crisis is a human crisis. It is driving displacement and makes life harder for those already forced to flee.

DISASTER DISPLACEMENT refers to situations where people are forced to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard. Such displacement results from the fact that affected persons are (i) exposed to (ii) a natural hazard in a situation where (iii) they are too vulnerable and lack the resilience to withstand the impacts of that hazard.

Forced displacement is one of the most common and immediate impacts of disasters. Facilitating people's movement to avoid their exposure to life-threatening situations via evacuations or planned relocations is one of the most effective ways of reducing mortality and injury. Having to flee one's home, however, particularly when return is not possible for an extended period, tends to increase humanitarian needs and expose people to other significant risks linked to their displacement.

Disaster displacement depends on three factors: the intensity of the hazardous event, the exposure of people and assets to it and their vulnerability.

Disaster displacement has impacts on economies and societies that go beyond the immediate phases of preparedness, emergency and recovery. Systemic risks and impacts affect the full development spectrum of countries and communities before, during and after disasters.



Regional Deep Dive of Displacements

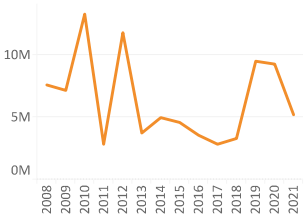
Most of the displacements triggered by disasters in were recorded in East Asia and Pacific and South Asia. Monsoon rains, floods and tropical storms hit highly exposed areas that are home to millions of people.

Year
All

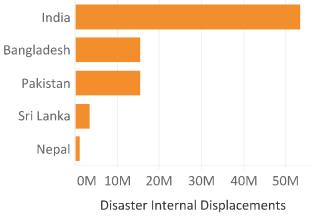
South Asia

89 M (2008-2021)

Dispacement Trend (2008-21)



Top 5 countries

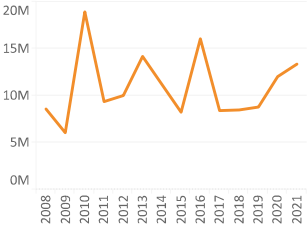


India witnessed largest number of displacements (approx. 50 M) between 2008-21 and 2009 witnessed largest displacements in region (more than 12 M)

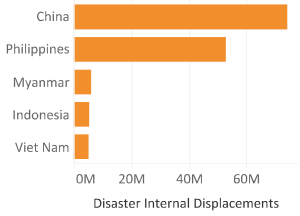
East Asia & Pacific

153 M (2008-21)

Dispacement Trend (2008-21)



Top 5 countries

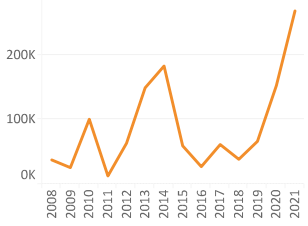


China witnessed largest number of displacements (approx. 70 M) between 2008-21 and 2010 witnessed largest displacements in region (more than 15 M)

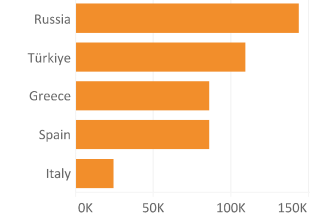
Europe & Cental Asia

1200K (2008-2021)

Dispacement Trend (2008-21)



Top 5 countries

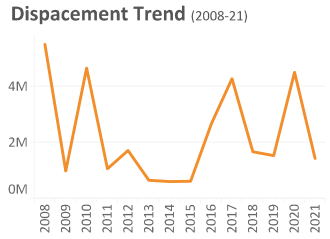


Russia witnessed largest number of displacements (approx. 140 K) between 2008-21 and 2021 witnessed largest displacements in region (more than 250K)

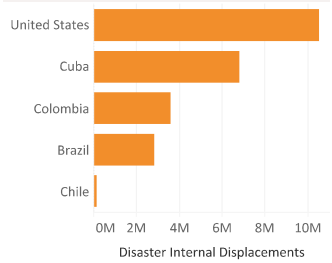
Americas

31 M (2008-2021)

Dispacement Trend (2008-21)



Top 5 countries

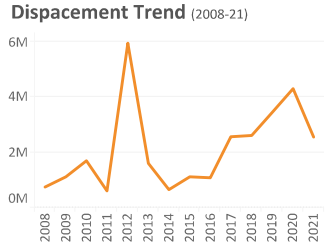


United States witnessed largest number of displacements (approx. 10 M) between 2008-21 and 2008 witnessed largest displacements in region (more than 5 M)

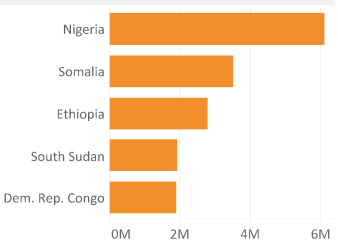
Sub Saharan Africa

29 M (2008-2021)

Dispacement Trend (2008-21)



Top 5 countries

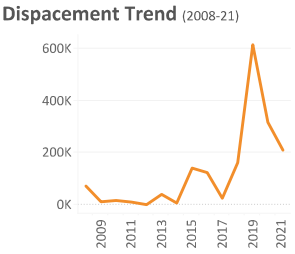


Nigeria witnessed largest number of displacements (approx. 6M) between 2008-21 and 2012 witnessed largest displacements in region (more than 5 M)

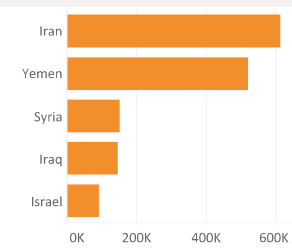
Middle East & N. Africa

1700K (2008-2021)

Dispacement Trend (2008-21)



Top 5 countries



Iran witnessed largest number of displacements (approx. 600K) between 2008-21 and 2019 witnessed largest displacements in region (more than 600K)

Nature's Fury | The Hazards

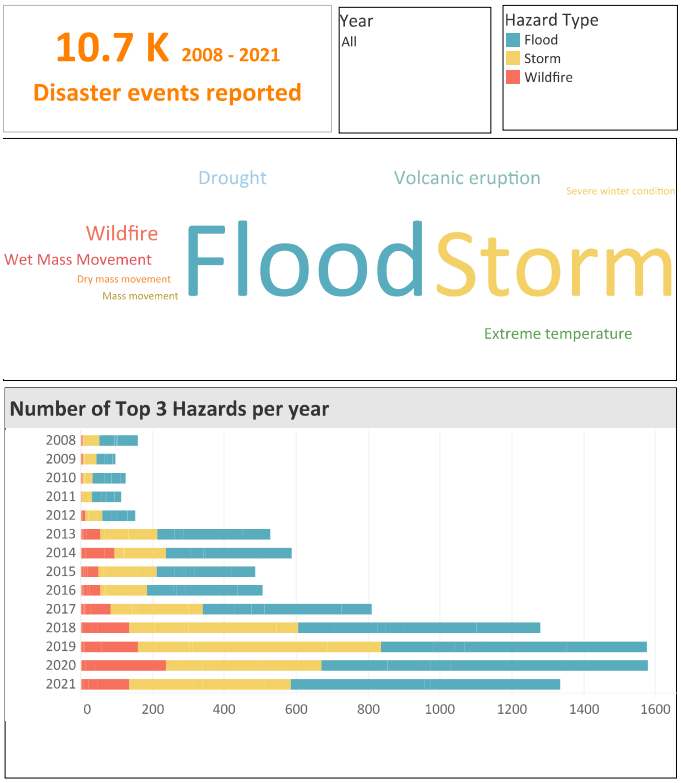
The IDMC report said: “Every year, millions of people are forced to flee their homes because of conflict and violence. Disasters and the effects of climate change regularly trigger new and secondary displacement, undermining people’s security and wellbeing.“The scale of displacement worldwide is increasing, and most of it is happening within countries’ borders.”

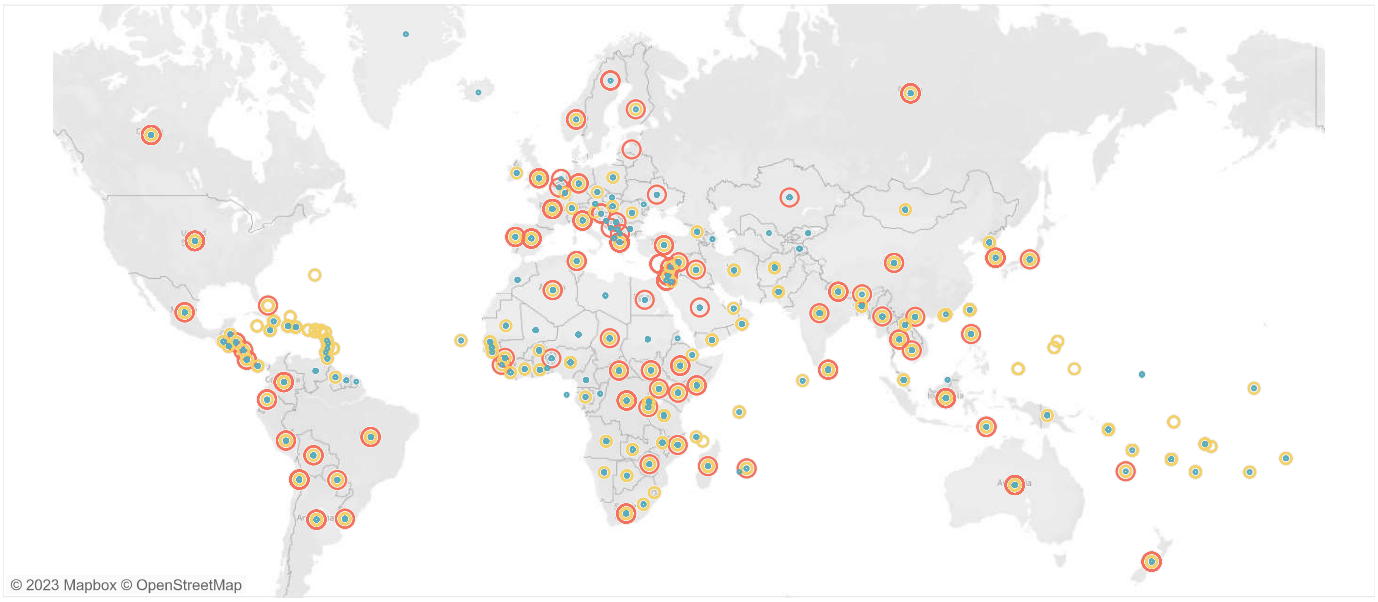
Climate change for the most part does not directly cause the rainfall or drought, but it makes these naturally occurring events more intense or severe. Carbon dioxide and other greenhouse gases, largely from power plants, vehicles, buildings, industry and agriculture, trap heat in the atmosphere, heating the planet.

We have considered following Climate Change induced Hazards in our study: Flood, Storm, Wildfires, Drought, Extreme temperatures, Severe Winter conditions, Volcanic Eruptions.

Through the Word cloud given, we found that Flood, Storm and Wildfires are top three contributers to the Disasters and Displacements and therefore we have analysed these three hazards as shown through the given graphs.

The Bar chart of number of top 3 hazards for different years show that number of floods, storms and wildfires have increased between 2008 and 2021.





Disaster Deep Dive

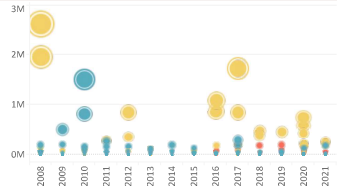
Most of the displacements triggered by climate change induced disasters of Flood, Storm and Widfires between 2008 and 2021 were recorded in East Asia and Pacific and Americas. Monsoon rains, floods and tropical storms, temperate storms and wildfires hit highly exposed areas that are home to millions of people.

Hazard Type
- Flood
- Storm
- Wildfire

Americas

3,009 disasters (2008-21)

Displacements due to Top 3 Hazards

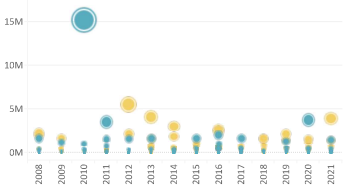


Storms had caused the greatest number of displacements as a single event in Americas. Huricane Ike of 2008 in Cuba displaced more than 2.5 million people

East Asia and Pacific

4,142 disasters (2008-21)

Displacements due to Top 3 Hazards

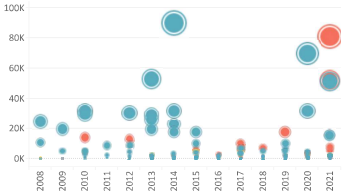


Storms and Floods had caused the greatest number of displacements as a single event in East Asia and Pacific. China Flood of 2010 and Tropical Storm of China of 2012 displaced more than 20 million people

Europe & Central Asia

753 disasters (2008-21)

Displacements due to Top 3 Hazards

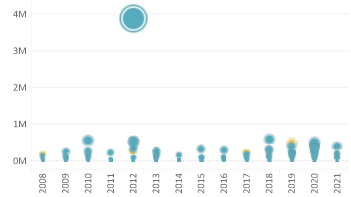


Wildfires and Floods had caused the greatest number of displacements as a single event in Europe and Central Asia. Balkan Flood of Bosnia and Herzegovnia of 2014 displaced more than 90K people and Turkey Wildfires of 2021 caused more than 80K displacements.

Sub Saharan Africa

1,651 disasters (2008-21)

Displacements due to Top 3 Hazards

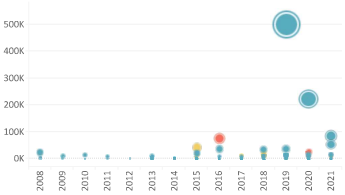


Floods had caused the greatest number of displacements as a single event in Sub Saharan Africa. Nigeria Flood of 2012 displaced more than 3.5 million people

Middle East & N. Africa

253 disasters (2008-21)

Displacements due to Top 3 Hazards

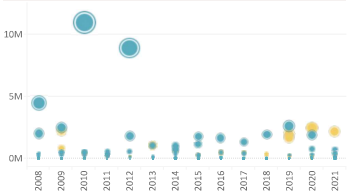


Floods had caused the greatest number of displacements as a single event in Middle East & N. Africa. Iran Flood of 2019 and Yemen Flood of 2020 displaced more than 700K people

South Asia

1,323 disasters (2008-21)

Displacements due to Top 3 Hazards



Storms and Floods had caused the greatest number of displacements as a single event in South Asia. Pakistan Flood of 2010 and Indian Flood of 2012 displaced more than 15 million people and Tropical Storm Yaas of 2021 caused more than 2 million displacements in Bangladesh and India.

Calls to Action

"We need to invest now in preparedness to mitigate future protection needs and prevent further climate caused displacement. Waiting for disaster to strike is not an option." - Filippo Grandi, UN High Commissioner for Refugees

1

DECARBONIZE THE GLOBAL ECONOMY
Reducing global temperature increases will reduce the risk of population displacements.

2

REDUCE LONG-TERM VULNERABILITY AND EXPOSURE
Stronger buildings, more resilient infrastructure, and dedicated infrastructure like dikes and pumping stations can protect people and economies and reduce the likelihood of a climate hazard becoming a climate disaster.

3

REBUILD AND REPAIR WITH THE NEXT EMERGENCY IN MIND
The steps that are taken after a climate emergency can greatly reduce the impact of future hazards. Taken together, these measures will save money and, most importantly, save lives and reduce suffering for millions of people.

4

ANTICIPATE DISASTERS, IMPROVE EARLY WARNING AND STRENGTHEN EMERGENCY RESPONSE
There will continue to be a need to respond to disasters, but the way aid groups and governments do this can be drastically improved. Two points are crucial: more emphasis on early warning systems that reach vulnerable communities, and new, creative mechanisms for financing humanitarian response before a disaster strikes.

Thank You!

Submitted By:

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