



# UPROOTED BY CLIMATE CHANGE

Responding to the growing risk of displacement

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Climate change is already forcing people from their land and homes, and putting many more at risk of displacement in the future. Supercharged storms, more intense droughts, rising seas and other impacts of climate change all magnify existing vulnerabilities and the likelihood of displacement, disproportionately affecting low-income countries, women, children and indigenous peoples.

Responding to these growing realities demands far stronger action towards ending global climate pollution, supporting resilient communities, ensuring rights for people on the move and developing long-term strategies to ensure that those who are forced to move in the future are able to do so safely and with dignity.

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**Cover photo:** Tiiria, 11, balances on a fallen coconut tree near her family home in Teaoraereke village, South Tarawa, Kiribati. Sea-level rise, increased wave heights, higher storm surges and other pressures are causing extensive coastal erosion and saltwater inundation. Pacific Island countries and communities are working hard to confront the realities of climate change, catalyse international action, and minimize the risks of displacement. Photo: Vald Sokhin/Panos/OxfamAUS

# SUMMARY

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Climate change is already forcing millions of people from their land and homes, and putting many more at risk of displacement in the future. Supercharged storms, more intense and prolonged droughts, rising seas and other impacts of climate change all exacerbate people's existing vulnerabilities and increase the likelihood of being forced to move.

While climate change affects us all, the risks of displacement are significantly higher in lower-income countries and among people living in poverty. Oxfam's analysis reveals that between 2008 and 2016, people in low- and lower-middle-income countries were around five times more likely than people in high-income countries to be displaced by sudden-onset extreme weather disasters.<sup>1</sup> Women, children, indigenous peoples and other vulnerable groups are also disproportionately affected.

The loss of homes, livelihoods and ancestral lands through displacement epitomizes the human cost and the grave injustice of climate change. Those least responsible for climate change are bearing the brunt of its impacts, and have fewest resources to cope with these new realities. The disproportionate incidence and impact of climate change related displacement both stems from and further drives inequality.

Displacement is disruptive and traumatic. However, much can and must be done to minimize the risk of displacement linked to climate change, and to guarantee rights and protection for people who are forced to move.

A first priority must be far more rapid reductions in global climate pollution, in line with limiting warming to 1.5°C. At the same time, communities must be supported to build resilience to the impacts of climate change that can no longer be avoided. Developed countries in particular must rapidly accelerate the decarbonization of their economies. They must also increase the scale and accessibility of support to enable developing countries to transition to a 100 percent renewable energy future and adapt to the impacts of climate change. At the 2017 UN Climate Change Conference (COP23), governments must recommit to the goals of the Paris Agreement and substantially strengthen international action and cooperation towards ending climate pollution and building resilient communities.

While recognizing that all possible measures must be taken to avoid displacement, it is also necessary to support strategies to ensure that people who are forced to move in the future can do so safely, with dignity, and on their own terms. The negotiation by September 2018 of two new Global Compacts – one on safe, orderly and regular migration, and one on refugees – offers a critical opportunity to help ensure safety, dignity and lasting solutions for those who are displaced, or at risk of displacement, in the context of climate change.

In addition to actions and commitments at the global level, regional and national responses will play an increasingly important part in minimizing displacement in the context of climate change and ensuring that viable options are available to those forced to move.

Between 2008 and 2016, people in low- and lower-middle-income countries were around five times more likely than people in high-income countries to be displaced by sudden-onset extreme weather disasters.

## HOW CLIMATE CHANGE IS DRIVING DISPLACEMENT

Climate change is amplifying the risk of extreme weather disasters by increasing the destructive power of storms and floods. At the same time, rising seas, shifting rainfall patterns, drought and other slow-onset changes are eroding people's land, natural resources and security, and magnifying existing vulnerabilities.

In 2016, a year after Cyclone Pam brought destruction to Vanuatu, Cyclone Winston displaced more than 55,000 people in Fiji and caused loss and damage worth around one-fifth of the country's GDP.<sup>2</sup> In 2017, the Caribbean and south-eastern USA experienced a truly devastating hurricane season. In the wake of Hurricane Harvey, Hurricane Irma caused catastrophic damage across several Caribbean islands including Barbuda, Saint Martin and Anguilla before making landfall in Florida. Two weeks later, Hurricane Maria – another near-record hurricane – tore through the Caribbean, bringing destruction to Dominica and Puerto Rico. In August 2017, extreme monsoonal floods affected more than 43 million people in Bangladesh, Nepal and India. More than 1,200 people were killed and millions displaced.<sup>3</sup>

The impacts of sea-level rise and other slower-onset changes such as desertification are felt incrementally over time, with assets and security being steadily eroded, and communities faced with a long and difficult decision making period. Those who make the decision to move under such circumstances are being forced to move involuntarily. Rising seas, combined with more intense storms, are increasing coastal erosion and inundation. By one estimate, in the long term, sea-level rise resulting from 2°C of warming could submerge land that is currently home to 280 million people.<sup>4</sup> The loss of land to erosion and inundation not only damages livelihoods and security; it also threatens deep cultural ties to the land and sea. The world's atoll nations, including Kiribati, Tuvalu and the Marshall Islands, face a truly existential threat from sea-level rise.



Photo: Ula Majewski/Oxfam, August 2017

**'My great hope for my country is that it remains, existing on the map.'**

Claire Anterea, Kiribati Climate Action Network.

Climate change is also exacerbating drought in many parts of the world by changing rainfall patterns, and by higher temperatures increasing evaporation from the soil, adding to drier conditions. For example, in East Africa, increased temperatures caused by climate change are exacerbating the impacts of drought.<sup>5</sup> Drought erodes food and livelihood security, particularly for households that rely on rain-fed agriculture. Individuals and families in arid regions often use short-term migration to cope during bad years. But increasingly severe and frequent droughts may force them to move permanently.



**‘In my lifetime I have never seen this. We used to have 700 sheep and goats. Now we have seven. This drought is affecting everyone.’**

Ibado, Somali region, Ethiopia.

In Ethiopia’s Somali region, severe drought has forced pastoralists, including Ibado (pictured) and her family, to move into temporary settlements.

Photo: Tracy Carty/Oxfam, March 2017

The majority of people displaced by extreme weather disasters and other impacts of climate change remain within their own countries, while some may be forced to cross borders.<sup>6</sup> Some people remain permanently displaced, while others are eventually able to return home. There are also those who may wish or need to move, but lack the resources to do so and become ‘trapped’.

More often than not, displacement is a result of multiple factors and it can be difficult to isolate one driver from another. Underlying poverty, the growing number of people living in exposed areas and a variety of other factors all contribute to the growing risk of displacement. The line between ‘sudden’ and ‘slow’ onset changes can also blur. For example, sea-level rise increases the risk from tropical cyclones, as storm surges are exacerbated by higher sea levels. When extreme weather disasters become more and more frequent, conditions may become increasingly hostile over time. Climate change may also exacerbate the conditions driving conflict and violence, as people are forced to compete for dwindling natural resources.

# THE UNEQUAL IMPACT OF CLIMATE CHANGE AND DISPLACEMENT

On average, 21.8 million people were reported newly internally displaced by sudden-onset extreme weather disasters each year between 2008 and 2016.<sup>7</sup> Extreme weather disasters affect all countries, rich and poor. But while nowhere is immune, people in poorer countries are much more likely to be forced to move. Oxfam's analysis of the historical data reveals that on average people in low- and lower-middle-income countries are five times more likely to be displaced by sudden-onset extreme weather disasters than people in high-income countries.<sup>8</sup> However, gaps in existing data are likely to mask the full extent of the impact in the world's poorest countries. Usually, reported displacement numbers only cover people displaced by sudden-onset extreme weather disasters and do not include people forced to move by drought and other slow-onset events, which also have a severe impact on the world's poorest countries. For example, Oxfam estimates that around 3.2 million people in low-income countries were internally displaced by extreme weather disasters over the first nine months of 2017 (January–September), of whom more than half were displaced by drought.<sup>9</sup>

Indigenous peoples are often the worst affected by climate change and at highest risk of displacement. In many cases, these new challenges come on top of a long history of discrimination, disadvantage and the legacy of colonization. The impacts of displacement may go far beyond the loss of security and livelihoods – profoundly affecting a community's deep cultural and ancestral connection to its land.



Hilda Mosby, Masig Island, Torres Strait Islands, Australia.

Photo: Brian Cassey/Oxfam, June 2017

**‘When we talk about relocation, it is very clear that this is an option of last resort. This is our home. No one is willing to leave, to lose their cultural ties, the loved ones they have laid to rest here. We want to try everything we can to keep our community here.’**

Hilda Mosby, Torres Strait Islander.

Women are also disproportionately harmed by climate change and disasters and related displacement. Women typically bear greater responsibility for tasks that are made more difficult by climate change, including sourcing food and water.<sup>10</sup> Displaced women are also disadvantaged in many humanitarian recovery efforts, and may face greater difficulty in accessing assistance.<sup>11</sup> Conditions of displacement are often conducive to gender-based violence.

Climate change also disproportionately impacts children and young people, who face heightened levels of vulnerability during disasters and situations of displacement.<sup>12</sup> Elderly and disabled people are often neglected in situations of displacement. Migrant workers, who typically move to areas that are highly exposed to climate impacts and live in poorly constructed housing are also particularly at risk. People already displaced by conflict, many of whom are located within the world's 'climate change hotspots'<sup>13</sup> may face secondary or repeated displacement due to the impacts of climate change.

## LEADERSHIP FROM THE FRONTLINES

While it is essential to recognize the disproportionate impacts of climate change and displacement, it is equally important to recognize the crucial role of those most affected in driving solutions to climate change. Many countries that are acutely vulnerable to climate change, including Pacific Island countries, are showing determined leadership in response to the climate crisis. This includes implementing ambitious renewable energy strategies and climate change adaptation plans, and working to catalyse stronger international action. Indigenous knowledge is critical to climate solutions and to building resilient communities, and indigenous peoples worldwide are at the forefront of action on climate change. In addition, enabling the greater participation of women and young people in decision making at all levels is essential to driving fair and effective responses to climate change.

Pacific Island countries are showing determined leadership in response to the climate crisis.

## RESPONDING TO THE CHALLENGES

The growing threat of displacement in the context of climate change requires an integrated global agenda aimed at minimizing displacement, upholding the rights of people on the move, and supporting strategies to ensure safe and dignified movement for those who may be forced to move in the future.

### Minimizing displacement

Minimizing the risk of future displacement demands rapidly accelerating action to end global climate pollution, in line with limiting warming to 1.5°C and thereby significantly reducing the risks and impacts of climate change. Developed countries in particular must commit to stronger emissions reductions and to increasing support to enable developing countries to implement their emissions reduction commitments. The Facilitative Dialogue 2018, mandated to take stock of collective efforts towards the Paris Agreement's long-term temperature goal, is a key opportunity to enhance collective ambition. Minimizing displacement also depends on supporting communities to build resilience to the impacts of climate change. This requires increasing the scale and accessibility of international finance for adaptation, as well as ensuring strong and inclusive adaptation strategies at the national and local levels.

### Upholding rights for people on the move

It is necessary to guarantee rights, status and protection for people who are forced to move by the impacts of climate change – both those who are internally displaced and those who have to move across borders.

## Supporting long-term strategies for safe and dignified migration

It is necessary to plan now to ensure that people facing the existential threat of climate change are able to migrate safely, with dignity, and on their own terms. This involves creating expanded channels for regular migration, including opportunities for education, family reunification, labour migration, and humanitarian visas. Long-term strategies to address the risk of displacement may also include greater opportunities for seasonal migration, including enhanced labour mobility schemes, which may allow communities to diversify their livelihoods and increase resources available for climate change adaptation.

## Providing finance and resources for people forced to move

Lastly, the international community has a responsibility to provide adequate finance and resources to those forced to move – through immediate humanitarian support, climate risk insurance, and by mobilizing finance to address loss and damage from climate change impacts, including displacement.

# RECOMMENDATIONS

## International climate negotiations – the Paris Agreement

- COP23 must lay the ground for a robust Facilitative Dialogue 2018. This should be informed by the Special Report on 1.5°C of the Intergovernmental Panel on Climate Change (IPCC), and ensure a substantial strengthening of global action before 2020.
- Developed countries must significantly increase international finance for climate change adaptation, and prioritize simplified access to funding for climate-vulnerable communities.
- COP23 must reaffirm the necessity of finance for addressing loss and damage, above and beyond the US\$100bn already promised for adaptation and mitigation, and agree that a new loss and damage finance mechanism will be established within two years.

## The 2018 Global Compact on Migration should:

- Reaffirm the international responsibility to minimize displacement through addressing the root causes of climate change and factors in vulnerability;
- Support short- and long-term strategies to ensure safe and dignified movement for those who may be forced to move due to climate change, while recognizing that relocation is an option of last resort;
- Progressively develop new norms for addressing displacement in the context of climate change and gaps in legal protection, specifically: a two-year process to identify a protection and reception strategy that includes legal recognition and status for people forced to cross borders due to disasters, including extreme weather events; and a longer term process to address migration and displacement across borders when related to slow-onset impacts of climate change.



## Regional and national responses should:

- Encourage the establishment and strengthening of regional mobility schemes and agreements, ensuring these are designed to support the needs of communities and safeguard against the exploitation of migrants.
- Expand opportunities for safe and regular migration for those who may be forced to move permanently, including through bilateral and multi-country agreements, special visa categories and open-access arrangements between developed countries and countries facing a high risk of displacement.
- National Adaptation Plans should include: early identification of communities at risk of displacement due to climate change; consultation with and full participation of affected communities; and strategies to support successful relocation, when appropriate, based on upholding human rights and protecting livelihoods and culture.

An expanded set of recommendations is provided in the briefing paper.

# INTRODUCTION

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*'A growing number of people are uprooted by natural disasters or lose their livelihoods to desertification, with climate change now found to be the key factor accelerating all other drivers of forced displacement. These persons are not truly migrants, in the sense that they did not move voluntarily. As forcibly displaced not covered by the refugee protection regime, they find themselves in a legal void. So while the nature of forced displacement is rapidly evolving, the responses available to the international community have not kept pace.'*

António Guterres, then UN High Commissioner for Refugees, December 2011<sup>14</sup>

Displacement linked to climate change is not a future threat but a current and growing reality, affecting millions of women, men, boys and girls around the world.

Climate change is increasing the risk of extreme weather disasters, including floods and storms. In 2016, 23.5 million people were displaced internally by extreme weather disasters.<sup>15</sup> At the same time, rising seas, shifting rainfall patterns and other changes are eroding people's livelihoods and security, and putting many more people at risk of displacement in the future.

Based on an analysis of data on new displacements over the period 2008 to 2016, people in low- and lower-middle-income countries were around five times more likely than people in high-income countries to be displaced by sudden-onset extreme weather disasters.<sup>16</sup>

Displacement is disruptive and traumatic, and epitomizes the injustice and human cost of climate change. Even carefully planned and assisted migration may mean the loss of ancestral land and seas, cultural ties and traditional livelihoods.<sup>17</sup> Leaving home is hard at the best of times – and devastating when it occurs because no other option exists.

Responding to the growing threat of displacement in the context of climate change must begin with far stronger action to minimize displacement, through tackling its root causes and supporting communities with building resilience. At the same time, we must work to strengthen protection and legal recognition for those who are on the move as a result of disasters and climate change. Finally, while recognizing that all possible measures must be taken to avoid displacement, in cases where migration may become the only option, it is necessary to support proactive, long-term strategies to ensure that people who are forced to move are able to do so safely, with dignity, and on their own terms.

The first part of this paper explores the many ways in which climate change is driving displacement: including rising seas, supercharged weather disasters, drought and extreme heat. It explores both sudden and slow-onset changes, and the interconnection between climate change and other migration pressures.

The decision to move is often complicated and driven by multiple factors. People may move to escape conflict, oppression, poverty, food insecurity or disasters. Climate change can magnify these threats, which are further exacerbated by inequality, fragile and weak governments, and other factors.<sup>18</sup> The tipping point for

People in low- and lower-middle-income countries were around five times more likely than people in high-income countries to be displaced by sudden-onset extreme weather disasters in the period 2008–2016.

one person or family may be different from that of another. Some people may remain permanently displaced, while some may eventually return home. Other people may wish or need to move, but lack the resources to do so and become 'trapped'.<sup>19</sup> Most of those who move do so within their own country,<sup>20</sup> while some may be forced to move across borders.

The second part of the paper explores the disproportionate incidence and impact of displacement linked to climate change in lower-income countries, as well as on women, children, indigenous peoples and other vulnerable groups. It shows how displacement both stems from inequality and further amplifies inequality, and how people living in poverty and otherwise vulnerable populations are paying the true cost of the impact of the fossil fuel industry and unsustainable lifestyles.

The third part outlines the broad areas of action that must be prioritized in responding to the growing risk of displacement in the context of climate change. This paper concludes with specific recommendations for action under the Paris Agreement, the new Global Compacts on migration and refugees, and initiatives at regional and national levels.

# 1 CLIMATE CHANGE IMPACTS AND HOW THEY FORCE PEOPLE TO MOVE

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## OVERVIEW

Globally, people are twice as likely to be displaced by disasters now than they were in the 1970s.<sup>21</sup> The increasing frequency and intensity of many weather-related hazards,<sup>22</sup> the growing number of people living in exposed areas and the underlying vulnerability of populations are all factors contributing to the rise in disaster displacement.<sup>23</sup> Of the 24.2 million people newly internally displaced by sudden-onset disasters in 2016, 23.5 million were displaced by weather-related disasters, including storms and floods.<sup>24</sup> This is more than three times the number of people newly displaced by conflict and violence.<sup>25</sup>

In 2016, more than three times as many people were newly displaced by weather-related disasters than by conflict and violence.

Without stronger action to tackle the root causes of climate change and build resilience to its impacts, this trend of increasing displacement is expected to get worse. Climate change is a ‘threat magnifier’: increasing the risk of displacement from sudden-onset weather disasters by supercharging storms, wildfires, floods and landslides that destroy people’s homes and livelihoods. At the same time, the slow creep of sea-level rise, shifting rainfall patterns, rising temperatures and other changes may erode people’s livelihoods and security over time to the point that they are forced to move.

Slow-onset events, including rising sea levels, melting glaciers and desertification offer particular challenges to the people living with their impacts. Typically, impacts are felt incrementally, with assets and livelihoods being slowly eroded and a prolonged and difficult decision making period for the families affected. Those with sufficient resources may move before the danger is obvious to the rest of the world, and may be erroneously identified as economic migrants rather than people who have been compelled to move in the face of climate change. Others may stay, not wanting to take the risk of migration, which could involve leaving behind their main resources – land, ocean, a house, their livelihood. Some stay due to cultural attachment to the land and sea, and to the community and culture of which they are a part. But staying too long can erode resources and push people further into poverty.

Even though they might have the ‘luxury’ of time to be able to plan, it should be recognized that people who move in the face of slow-onset climate impacts are being forced to move involuntarily, and deserve support to deal with these impacts.

## RISING SEAS CLAIMING LAND AND HOMES

Projections of sea-level rise range from 0.3m to 2.0m by 2100, with recent work suggesting that these could be significant underestimations.<sup>26</sup> Sea-level rise – teamed with more extreme storms and the associated storm surges, king tides and large waves – leads to inundation of low-lying coastal areas; increased frequency, severity and duration of coastal flooding; increased beach erosion; and groundwater inundation, all of which lead to communities being displaced.<sup>27</sup> By

‘We can’t leave. We don’t want to leave. This is our home and this is our land. But the problem is getting closer and closer.’

Tinaai Teaua, member of Kiribati Climate Action Network.

one estimate, in the long term, sea-level rise resulting from 2°C of warming could submerge land that is currently home to 280 million people globally.<sup>28</sup>

In terms of absolute numbers, the top 10 countries with the most people affected by sea-level rise are China, India, Bangladesh, Vietnam, Indonesia, Japan, USA, Philippines, Egypt and Brazil.<sup>29</sup> But based on the proportion of the population likely to be affected, some island nations have a much higher level of risk.

The world's atoll nations face a truly existential threat from sea-level rise. While often labelled as 'small island states', these and other Pacific Island countries are more accurately characterized as 'large ocean states', as they are custodians of vast tracts of ocean. For example, Tuvalu's exclusive economic zone (EEZ) is 27,000 times the size of its land.<sup>30</sup> For atoll nations and other large ocean states, their economies, culture, identity and livelihoods are inextricably tied to the ocean.

Sea-level rise, which may in the long term result in the complete submergence of atolls, therefore poses a particularly complex challenge for atoll nations, including the ability to retain sovereignty over their land and sea and prevent their citizens from becoming in effect stateless.<sup>31</sup>

## CASE STUDY: KIRIBATI

Photos: Ula Majewski/Oxfam, July/August 2017



**Until a few years ago, this land in Tebunginako village, Abaiang atoll was used to grow bananas, taro and other food crops. It is now regularly inundated at high tide.**

Kiribati is a large ocean state comprised of 32 atolls and one raised coral island, spread across more than a million square miles of the central Pacific Ocean, and with a population of approximately 110,000. Almost the entire land area of Kiribati, including the whole of the main population centre of South Tarawa, lies less than three metres above sea level. Kiribati is considered one of the most vulnerable countries on earth to the impacts of climate change.

Rising seas, increased wave heights and higher storm surges are inundating the land on which communities depend for their food, and contaminating the thin groundwater lens on which people depend for freshwater. These threats to food and water security are compounded by shifting weather patterns, ocean acidification and other impacts of climate change.



‘Over there, there was a big *maneaba* [meeting house], houses, many trees. All gone. Only the sea and the stones and the beach are left. If we leave this place, where would we go?’

Uriano Kaitabwa, Tebunginako village

Uriano Kaitabwa, 34, (above) stands on the beach where his house used to be. Behind him, what looks like a rock in the lagoon is in fact the remains of a petrol station. Uriano is one of many people in Tebunginako who have lost their homes and gardens to the sea and who have had to move to another area of very limited land within the village. Some parts of the village are now completely underwater.



‘Many times now we have had to move inland. We are very sad, because we know that the sea will never stop eating our land.’

Maria Tekaie, Tebontebike village

At the other end of Abaiang, Tebontebike village is also facing severe erosion and inundation. ‘I don’t want to go anywhere else,’ explains Maria Tekaie, 65 (above). ‘I want to stay here in Kiribati because it’s easy to live here and easy to find food here. The council tried to protect the land. They just put up a sea wall, but the sea is stronger than their sea wall and it destroyed a lot of things. Everybody grew their taro here, and the sea came and just destroyed it.’

The growing threat of displacement from climate change is a complex and sensitive subject in Kiribati. Communities and government officials alike are adamant that relocation is an option of last resort, and that they intend to do everything possible to remain. The nation's people, the I-Kiribati, fear not only the loss of their livelihoods and security but also the impact of displacement on their culture and identity, sovereignty, and deep connection to their land and sea.



**'My great hope for my country is that it remains, existing on the map, I hope that my people remain here, living with the surroundings we're familiar with, where our parents and ancestors are buried. That's what my hope for my country is, for things to remain as simple as this and as beautiful as always.'**  
Claire Anterea, Kiribati Climate Action Network

'My great hope for my country is that it remains, existing on the map,' says Claire Anterea (above), a leader within the Kiribati Climate Action Network. 'I hope that my people remain here, living with the surroundings we're familiar with, where our parents and ancestors are buried. That's what my hope for my country is, for things to remain as simple as this and as beautiful as always.'



**'My message to the world [is] to look at us. What our culture is like. How we are so proud of being I-Kiribati. The main message is to limit warming to 1.5°C. That was already agreed, but now they have to live up to their words.'**

Tinaai Teaua, Kiribati Climate Action Network

'Land is very important,' explains Tinaai Teaua (pictured right), another member of Kiribati Climate Action Network. 'We can't leave. We don't want to leave. This is our home and this is our land. We should stay here. But the problem is getting closer and closer. My message to the world [is] to look at us. What our culture is like. How we are so proud of being I-Kiribati. The main message is to limit warming to 1.5°C. That was already agreed, but now they have to live up to their words.'

Like many Pacific Island countries, Kiribati continues to face considerable challenges in accessing international climate finance and support for adaptation, due to the complex and bureaucratic nature of funding arrangements.<sup>32</sup> The need for adequate and accessible support for climate change adaptation is urgent and growing. A key priority is to increase local capacity to access and manage funds. At the same time, climate finance providers including the Green Climate Fund must ensure simplified access to funding for countries including Kiribati.

However, while I-Kiribati are squarely focused on adapting to the impacts that they face and minimizing the risk of displacement, even conservative projections for sea-level rise over the course of this century would see Kiribati lose much of its land area.

In recognition of this long-term threat, former President Anote Tong began implementing policies to ensure that those who are ultimately forced to move are able to *migrate with dignity*. Elements of this approach include: ensuring greater opportunities for seasonal or permanent migration for those who wish to move now and in the coming years, recognizing that this will help to establish strong expatriate communities of I-Kiribati that will be able to absorb greater numbers of migrants in the longer term and benefit those in Kiribati through remittances; and raising the level of qualifications available in Kiribati to make qualified I-Kiribati more attractive as migrants.<sup>33</sup> A 2016 report by the Australian National University and the World Bank proposed an 'Australia–New Zealand Atoll Access Agreement' that would provide open labour market access to I-Kiribati.<sup>34</sup> In an act of regional solidarity, the Fiji government has assured the people of Kiribati and Tuvalu of the option to settle permanently in Fiji should they be forced to move.<sup>35</sup>

The case of Kiribati highlights the need for stronger international action to minimize the impacts of climate change and provide greater support to vulnerable communities. At the same time, long-term strategies are needed to ensure that people who are forced to migrate can do so safely and with dignity, and are guaranteed statehood and sovereignty over their land and sea.

Women civil society leaders and activists are at the forefront of efforts to build community resilience and to push governments around the world to take stronger action on climate change and prevent I-Kiribati being forced from their home.

## SUPERCARGED WEATHER DISASTERS

Higher surface temperatures and increased moisture in the atmosphere through evaporation mean there is more 'fuel' for storms, including tropical cyclones.<sup>36</sup> While climate change may not significantly affect the overall number of storms that form, those that do develop can become more intense and destructive.<sup>37</sup>

The strongest tropical cyclone to make landfall (typhoon Haiyan/Yolanda in 2013), the strongest ever recorded in the southern hemisphere (Cyclone Winston in 2016),<sup>38</sup> and two of the strongest ever recorded in the Atlantic (Hurricanes Irma and Maria in 2017) have all occurred in the last few years.

In 2016, storms displaced 12.9 million people worldwide.<sup>39</sup> Cyclone Winston affected approximately 540,000 people in Fiji – 62 percent of the population.<sup>40</sup> In many of the hardest hit areas, people had been struggling before the storm with



drought and water shortages brought about by the El Niño.<sup>41</sup> Forty-four people were killed by Cyclone Winston, more than 30,000 homes damaged or destroyed and more than 55,000 people displaced. The damage and loss amounted to around one-fifth of Fiji's GDP.<sup>42</sup> Despite an emphasis on 'building back safer' and increased attention to protection needs in the country, several thousand people in the worst-affected areas were still living in tents or temporary shelters a year later.<sup>43</sup>

In 2017, the Caribbean and south-eastern USA experienced a truly devastating hurricane season. In August, Hurricane Harvey brought severe flooding to Texas and Louisiana, forcing tens of thousands of people into temporary shelters. Following in Harvey's wake, Hurricane Irma caused catastrophic damage across several Caribbean islands including Barbuda, Saint Martin and Anguilla before making landfall in Florida. Two weeks later, Hurricane Maria – another near-record hurricane – tore through the Caribbean, bringing destruction to Dominica and Puerto Rico.

Climate change is also contributing to more extreme downpours.<sup>44</sup> In 2015 and 2016, 7.9 million and 3.6 million people were displaced in South Asia, the majority as a result of flooding and landslides associated with rains from a more intense monsoon and storms.<sup>45</sup> In August 2017, extreme monsoon floods affected more than 43 million people in Bangladesh, Nepal and India. At the time of writing, 1,200 people had been killed and millions displaced.<sup>46</sup>

When disasters force people from their homes, most try to return as quickly as possible. However, often people are unable to return due to the challenges of rebuilding and a lack of necessary support, and can be displaced for many months or years.<sup>47</sup> This interrupts schooling and livelihoods, and increases people's vulnerability. They can be displaced a second or third time. When disasters become too frequent, people may make the decision to move permanently.

## CASE STUDY: BANGLADESH



A man walks along an ever-eroding char (sand island) close to the town of Fulchuri Haat. The area is prone to seasonal flooding. Photo: Tom Pietrasik/Oxfam (2014)

Low-lying and densely populated Bangladesh is one of the most exposed countries on earth to the impacts of climate change.<sup>48</sup> In the coastal regions, rising seas, compounded by severe tropical cyclones and storm surges, are already displacing communities from their land and homes.<sup>49</sup> In mainland regions, riverbank erosion from intense monsoonal downpours is increasing the already extreme risk of flooding, leading to thousands of people becoming landless and homeless each year.<sup>50</sup>

A study in 2010 concluded that six million people had already been displaced by the effects of climate hazards in Bangladesh.<sup>51</sup> A decade ago, the Chief Advisor of the Government of Bangladesh warned that by one estimate, sea-level rise of one metre – which is well within projections for this century – would displace 25–30 million people.<sup>52</sup> Behind these startling numbers lie individual stories of families uprooted, livelihoods destroyed and grave fears for the future.



Nasiruddin, Takurgaon District, Bangladesh. Photo: COAST (a campaign and advocacy partner of Oxfam in the Bangladesh), August 2017



Rahmat Ullah, Takurgaon District, Bangladesh.  
Photo: COAST

Nasiruddin (pictured previous page) and Rahmat Ullah (above) are from the Takurgaon District of northern Bangladesh, one of 30 districts severely affected by recent floods – the worst they have ever faced. Having lost their rice paddies, jute plants and homesteads, they had no option but to uproot their families to Dhaka. Every day, even in heavy rain, they peddle rickshaws to try to make a new living, but as newcomers they do not know their way around the city.

Nasiruddin was living with his wife and two daughters in Takurgaon before the family was forced to move. Nasiruddin is now afraid that his older daughter will not be able to continue her education. Rahmat Ullah shares the same fears for his two boys. He says there is no employment in his village after the floods, and no way for the family to keep living in Takurgaon. Like many migrants to Dhaka, they now live in one of the cities' burgeoning informal settlements. Dhaka is one of the fastest-growing, most densely populated and least liveable cities in the world.



**'We have nothing to survive on. Everything has gone to the stomach of the sea.'**

Moneja Begum, Kutubdia Island, Bangladesh.

Moneja Begum (above) is from low-lying Kutubdia Island in the south-east of Bangladesh. In 1991, the region was struck by one of the deadliest tropical cyclones on record. Moneja lost five members of her family, along with their fishing boat. They moved to the district town of Cox's Bazar on the mainland. They built a makeshift house in the shanty town now known as 'Kutubdia Para', as it has become home to ever-larger numbers of people forced to leave Kutubdia. During the 1960s, the island was around 60km<sup>2</sup>. Today only 25km<sup>2</sup> remain. Moneja has two daughters and one son. Her husband is a labourer on a boat. 'We have nothing to survive on', she says. 'Everything has gone to the stomach of the sea.'

Bangladesh's extreme vulnerability to climate change stems not only from its unique geography and exposure to climate hazards, but also from its underlying poverty.<sup>53</sup> Adaptation to climate change is a national priority and the country has been recognized for its efforts and achievements to date.<sup>54</sup> In particular, Bangladesh is at the leading edge of community-based adaptation initiatives designed to build the resilience of communities – and in particular, of women – to the impacts of climate change.<sup>55</sup> This includes enabling communities to better anticipate and prepare for disasters, and increasing community participation in national and local decision making. However, despite these efforts, Bangladesh faces severe and ongoing challenges from climate change that exemplify the need for urgent action from the international community.

## DROUGHT

Droughts have a huge impact on the movement of people – an impact that is often hidden in official counts and statistics. Climate change exacerbates drought by changing rainfall patterns (with many already dry areas experiencing even lower rainfall) and increasing temperatures that in turn increase evaporation from the soil, adding to dry conditions.<sup>56</sup>

The area affected by drought has increased since the 1970s, with more intense and longer droughts over wider areas, particularly in the tropics and sub-tropics.<sup>57</sup> In 2009, the International Organization for Migration (IOM) reported that over the previous 30 years, 1.6 billion people had been affected by droughts – more than twice the approximately 718 million people affected by storms.<sup>58</sup> While most migration in response to drought is temporary, over the 1970s to 1990s, an average of 5.1 million people per decade migrated permanently out of high drought risk zones: 2.3 million in Africa, 2.3 million in South-Central Asia, and the remainder in the Caribbean and South-Eastern Asia.<sup>59</sup>

The decision to migrate during a drought is a complex one. Drought erodes food and livelihood security, particularly for households that rely on rain-fed agriculture. Individuals and families in arid regions often use short-term migration to cope with bad years or seasons. But increasingly frequent droughts and unpredictable rainfall mean that many households have found this normal seasonal or temporary migration to be insufficient. As people come to perceive the situation as deteriorating, they are more likely to migrate permanently.<sup>60</sup> Recurring droughts deplete resources that people have saved, including finances, seeds and livestock, leaving them less able to buffer the impact of the drought. This means that if droughts occur in relatively quick succession, higher numbers of farmers and pastoralists are displaced.<sup>61</sup>

While there is little doubt that drought creates pressure on people to move, it is important to recognize that drought alone does not usually drive displacement. Chronic poverty, slow international response to crises, weak governance and other factors all contribute.<sup>62</sup>

In many situations, pervasive drought may exacerbate the drivers of conflict and violence,<sup>63</sup> so people forced to move in such circumstances are often counted as having been displaced by conflict rather than drought. This can underplay the impact of climate change and entrench prejudices about unstable countries and poor governance. A more accurate perspective would be to consider these as

**‘We used to have 700 sheep and goats. Now we have seven. This drought is affecting everyone.’**

Ibado, pastoralist, Ethiopia

poor countries dealing with additional and extremely difficult circumstances that are not of their making. This acknowledges the injustice of climate change, and may be more likely to lead to solutions addressing the drivers of displacement.

## CASE STUDY: DROUGHT, DISPLACEMENT AND TRAPPED POPULATIONS IN ETHIOPIA

Sub-Saharan Africa is particularly susceptible to drought, and climate change is making it much worse. Seasonal temperatures in the Sahel have already risen by 1.5–2°C, while incidences of drought and erratic rainfall have increased over the last 40 years.<sup>64</sup> The current drought in East Africa is the worst in living memory.<sup>65</sup> Coming on top of a three-decade drying trend,<sup>66</sup> three years of very low rainfall and high temperatures, it has exhausted people's coping abilities.<sup>67</sup>

In the Horn of Africa climate change has exacerbated the impacts of drought, which – together with conflict, and underlying poverty and vulnerability – has displaced 3.7 million people in Ethiopia, Somalia and Kenya, and left 15 million people severely food insecure.<sup>68</sup> Children make up a high proportion of the displaced, and are particularly vulnerable to violence and exploitation. During the previous drought in 2010–11, the number of underage girls sold into child marriage in exchange for livestock increased as families struggled to survive.<sup>69</sup>

Temporary settlements have been established to provide people with assistance. Ibado, age 60 (below), now lives with her nine grandchildren and their mother and father in Bodadere temporary settlement in the Somali region of southern Ethiopia. Like most of the people living here, the family are nomadic and have never lived in a settlement before.



Photo: Tracy Carty/Oxfam, March 2017

**'In my lifetime I have never seen this. We used to have 700 sheep and goats. Now we have seven. I have never lived in a settlement before – this drought forced me to. This drought is affecting everyone.'**

Ibado, Somali region, Ethiopia

Ibado says: 'In my lifetime I have never seen this. We used to have 700 sheep and goats. Now we have seven. I have never lived in a settlement before – this drought forced me to. This drought is affecting everyone.'<sup>70</sup>

Hawa (below) lives with five of her seven children in a small wooden shelter covered in animal skins, in a temporary settlement in the Siti Zone of the Somali region. She has lost more than 500 livestock in the drought. Her husband has gone to Djibouti to look for work. Without money she cannot buy anything in the markets and struggles to live.



Photo: Abbie Trayler-Smith/Oxfam, 2016

'Here in the village there is no work. There is nothing you can do. I fetch water and firewood and collect maize from the World Food Programme.'

Hawa, Somali region, Ethiopia

## EXTREME HEAT

According to the International Organization for Migration,<sup>71</sup> the expansion of 'super-hot' areas in parts of the world potentially represents an important push factor for future migration: 'Even in the best-case scenario of the lowest possible temperature increase, millions of people will potentially be unable to maintain daily life activities during hot periods of the year in their areas of origin in low- and middle-income countries, and also in developed countries.'<sup>72</sup>

Extreme heat events are already becoming hotter, lasting longer and occurring more often as the global average temperature climbs. These events are already causing deaths, sickness and falling productivity among outdoor workers across the world.<sup>73</sup>

In summer 2015, one of the deadliest heat waves in history killed more than 3,700 people in India and Pakistan.<sup>74</sup> One recent study says that if global greenhouse gas emissions continue on their present upward trajectory, South Asia, the home of one-fifth of humanity, is likely to experience summer heat waves where levels of heat and humidity combine to exceed what humans can survive without protection.<sup>75</sup> Even in a climate held to 2°C above pre-industrial levels, Karachi in Pakistan and Kolkata in India could experience conditions equivalent to their deadly 2015 heat wave every year.<sup>76</sup> A major study in 2014 concluded that heat

stress is a stronger driver of migration in Pakistan than flooding.<sup>77</sup> Parts of the Middle East and Northern Africa may become even hotter.<sup>78</sup>

In Europe, by 2100, more frequent heat waves could lead to a 50-fold increase in the number of heat-related fatalities per year.<sup>80</sup>

In South Asia and in large parts of Africa and Central America, much of the population is dependent on subsistence farming that requires long hours of hard labour out in the sun, and this could become impossible. With crops wilting untended, animals dying, and with no other means of making a living, 'the continuation of daily life activities in hot tropical and subtropical parts of the world... is threatened',<sup>81</sup> and it is almost inevitable that people will be forced to move.

Tragically, fleeing to cities in hope of respite from the heat in rural areas may be counterproductive, especially for people living in informal settlements. This is because the urban heat island effect – created by dense buildings, dark roofs, and concrete and waste heat emissions – mean that urban areas are typically up to 3°C hotter than surrounding areas. What is much worse, however, is that urban areas cool at a much slower rate at night; in the evening the difference between urban and rural areas can be as much as 12°C.<sup>82</sup> The deadly effects of heat waves peak when there is no respite from the heat, and when high humidity means that the body's cooling mechanism of sweating becomes ineffective. Heat stroke can rapidly ensue. Many major cities in the Gulf region could exceed a tipping point for human survival, even in shaded and well-ventilated spaces. This threshold 'has, as far as we know... never been reported for any location on Earth'.<sup>83</sup>

## WHEN 'EXTREME EVENTS' BECOME THE NORM

The line between 'extreme events' and 'slow-onset events' can blur when the extreme events begin to occur more and more frequently. In these cases, people are left to make a difficult decision – are the 'new normal' conditions tolerable? If not, when and where to move?

The Kralanh area of Cambodia illustrates this point. In July 2000, early heavy rains and monsoons inundated Cambodia. The floods were described as the most devastating natural disaster to hit the country in decades, and officials noted this as a turning point: the first of many consecutive years of disaster. In 2002, the area was hit with droughts and later flooding that significantly damaged harvests. Between 2003 and 2006 there were consistently low levels of rainfall, impacting rice production for many families. In 2007 there was a severe drought. Finally, in 2009 disastrous flooding affected thousands of hectares of rice paddy, with many families losing their entire harvest. These shocks have been particularly problematic because their consecutive nature has meant households have had little chance to recover from one shock before experiencing another.<sup>84</sup>

As a result, farmers feel that the environment has shifted from being 'stable' and instead has begun to 'fail the people'. With most farmers getting half or less of what their fields would typically yield in a good year, many resort to borrowing

'The temperature has changed greatly. Summer never used to be so hot, but this year we can hardly work in the fields in the morning. It is so hot that we get blisters all over our body'

Seken Ali, farmer, Pangsha, Rajbari, Bangladesh<sup>79</sup>

from moneylenders or microfinance institutions. This in turn has spurred migration (mostly to Thailand) to earn income to repay the loans. Increasingly, householders see agriculture as an unwise and risky livelihood, and are using migration in the absence of alternative livelihood strategies at home.<sup>85</sup>

## CLIMATE CHANGE AND CONFLICT AND VIOLENCE

Climate change contributes to the pressures driving conflict by increasing food insecurity, poverty and resource scarcity. Conflict can in turn exacerbate the impacts of climate change, and the two combine to increase food insecurity. The World Food Programme estimates that refugee outflows increase by 1.9 percent for each percentage increase of food insecurity.<sup>86</sup> Climate change and conflict thus act as interconnected multipliers of misery and drivers of displacement.<sup>87</sup>

The flight of Somalis to neighbouring countries in recent years has been driven by a combination of drought, famine and the violence of al-Shabab and other armed groups. 'The drought made the conflict worse,' explains one Somali pastoralist living in a camp in Ethiopia. 'Everyone became afraid of everyone. Some raiders came and took away the little food we had produced on our farm. Now we are in a very hard time: the people at home face conflict and famine. They are starving. If we could go back, we would have only dry land and death to greet us.'<sup>88</sup>

Increased water extraction and climate change in the context of growing populations has resulted in Lake Chad shrinking to a tenth of its former size, leading to increased competition for, and conflict over, land and water resources. Armed groups, in particular Boko Haram, thrive in this fragile environment.<sup>89</sup> To date, 2.6 million people, including 1.5 million children, have been displaced by the humanitarian crisis in and around the Lake Chad Basin, putting them at risk of violence and malnutrition.<sup>90</sup>

**'The drought made the conflict worse... If we could go back, we would have only dry land and death to greet us.'**

Somali pastoralist, Shedr camp, Ethiopia



## 2 THE UNEQUAL IMPACT OF CLIMATE CHANGE, MIGRATION AND DISPLACEMENT

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No country is immune from the impacts of climate change. The dramatic events of recent years, including the devastating 2017 Atlantic hurricane season, have highlighted the human cost of climate change and risks of displacement for communities in developed and developing countries alike.

However, while climate change affects us all, the degree to which we are impacted is significantly influenced by our wealth, access to and control over resources, social status and power. It is no surprise that the impacts of climate change are felt first and hardest in lower-income countries, and by the poorest and most marginalized people, who are disproportionately women, children, indigenous peoples and other groups already faced with inequality and increased vulnerability. Typically, those at greatest risk from climate change have contributed the least to its causes – and have fewest resources to respond to the new challenges it creates, increasing their vulnerability and hence the risk of displacement.<sup>91</sup>

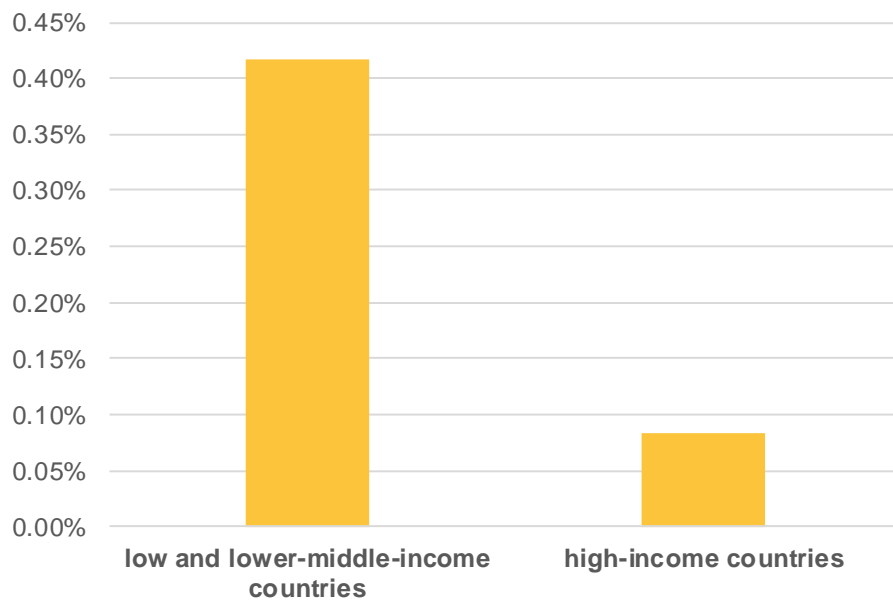
The disproportionate incidence and impact of displacement both stems from inequality and further amplifies inequality.

Climate change and the risk of displacement is intrinsically tied to inequality and other matters of global injustice. Not only does it impact most heavily on people living in poverty or historically disadvantaged groups but – by stealing their homes, livelihoods and connection to ancestral lands – increases their poverty and the inequality that made them vulnerable to start with.<sup>92</sup>

### LOW-INCOME COUNTRIES

Oxfam's analysis of historical data on internal displacements<sup>93</sup> shows that, on average, approximately 14 million people (0.42 percent of the population) in low and lower-middle income countries were reported newly displaced by sudden-onset extreme weather disasters each year over the period 2008–2016, compared with approximately one million (0.08 percent of the population) in high-income countries (Figure 1). In other words, people in low- and lower-middle-income countries were around five times more likely to be displaced by sudden-onset extreme weather disasters than people in high-income countries over this period.

**Figure 1: Percentage of population displaced each year by sudden-onset extreme weather disasters (average, 2008–2016)**



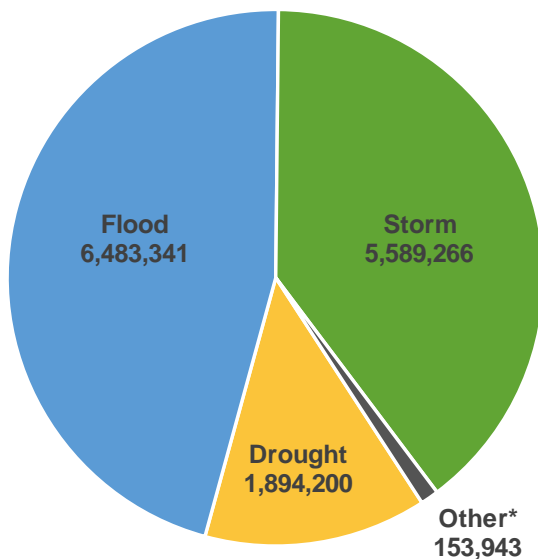
Full data: low-income countries – 0.32%; lower-middle-income countries – 0.44%; low- and lower-middle-income countries combined – 0.42%; upper-middle-income countries – 0.26%; high-income countries – 0.08%.

Source: Oxfam calculations, based on data from Internal Displacement Monitoring Centre. (See note on methodology in Annex 1.)

While this comparison itself is striking, it is very likely an understatement of the disproportionate incidence of displacement linked to climate change in the world's poorest countries, as the numbers do not cover people displaced by drought and other slow-onset events which have a severe impact on low-income countries due to the numbers of people whose livelihoods depend on the land. To illustrate this point, Oxfam has estimated the number of people newly internally displaced over the first nine months of 2017 (January to September) by both sudden-onset extreme weather disasters and drought. Oxfam's analysis suggests that around 3.2 million people in low-income countries, or 0.5 percent of the population, were newly displaced over this period, of whom 1.9 million, or more than half, were displaced by drought.<sup>94</sup> (However, this is likely a significant underestimate, as the analysis only includes data on drought displacement from countries in the Horn of Africa. Data on drought displacement was not available for other countries affected by drought, including in other parts of Africa, in Central and South America and Central Asia.)

Further, as a proportion of GDP, lower-income countries tend to suffer far greater economic losses than high-income countries from weather and climate-related disasters.<sup>95</sup>

**Figure 2: People displaced by weather and climate-related events, January–September 2017**



Note: Total number of people displaced = 14,120,750 including 3,219,668 in low-income countries.

\*Other = wildfires, 'wet' mass movement, extreme temperatures<sup>96</sup>

Source: Oxfam calculations, from various sources. (See note on methodology in Annex 1.)

Not only are people with lower income levels more likely to be displaced; they are also most likely to remain displaced for prolonged periods of time – sometimes for more than a decade.<sup>97</sup> Even in high-income countries, the poorest and most marginalized populations face significantly higher risks of displacement and of remaining displaced for longer periods. In the USA, the combined impact of Hurricane Katrina and Hurricane Rita in New Orleans in 2005, which displaced 1.3 million people,<sup>98</sup> was felt disproportionately by African-Americans and Latinos, who by some measures made up 85 percent of those affected. People in these communities were more likely to be poor, to live in low-lying parts of the city, and to lack the financial capacity to evacuate themselves. Federal government support to these groups was slower and smaller, prolonging their displacement.<sup>99</sup> Many were displaced for more than five years, with some still not having returned after a decade.<sup>100</sup>

## INDIGENOUS PEOPLES

Indigenous peoples are among those worst affected by climate change and at greatest risk of displacement. In many cases, the new challenges created by climate change come on top of a long history of discrimination, disadvantage and the legacy of colonization.

For indigenous peoples, the impacts of displacement may go far beyond the loss of security and livelihoods – profoundly affecting communities' deep cultural, spiritual and ancestral connection to land.

In the Philippines, indigenous communities displaced by typhoon Haiyan (known locally as super typhoon Yolanda) – many of whom had lost their housing, property and livelihoods and lacked the resources to restore them – were marginalized in the delivery of aid and left out of rehabilitation efforts.<sup>101</sup>

In the USA, the first communities relocating as a consequence of climate change are mostly Native Americans and Alaska Natives. In many cases, these communities live on marginal land that they were forced onto during colonization; land that is particularly vulnerable to the impacts of climate change.<sup>102</sup>

While it is important to acknowledge the disproportionate impact of climate change on indigenous peoples, it is equally important to recognize the leadership role of indigenous peoples worldwide in tackling climate change, and the importance of indigenous knowledge in driving solutions.

## CASE STUDY: TORRES STRAIT ISLANDS

Photos: Brian Cassey/Oxfam, June 2017



**‘We don’t want to leave this place,’ says elder Dennis Gibuma on Boigu Island. ‘Things are changing every year. Our sea wall is no longer any good. When the high tide and strong winds come together, it breaks. We pray we don’t lose our home.’**

The situation facing the Torres Strait Islands in the far north of Australia epitomizes the unequal impact of climate change on indigenous peoples.

Lying between the Cape York Peninsular and Papua New Guinea, this archipelago of 274 islands is home to over 4,000 Torres Strait Islanders with unique history, languages and culture, and a deep connection to their land and sea.

Torres Strait Islanders have contributed almost nothing to the causes of climate change but are truly on the front line of the climate crisis. The islands face a combination of risks, including coastal erosion and inundation from rising seas, damage to the critical marine ecosystems on which islanders’ livelihoods depend, higher temperatures and shifting rainfall patterns.

Boigu Island, with a population of around 300, is a low-lying island just a few kilometres from the coast of Papua New Guinea, and the most northerly inhabited island of the Torres Strait Islands. Periodic flooding has always been a challenge. But with climate change, the community faces ever-greater threats from coastal erosion and inundation. Despite building a sea wall a few years ago, the sea regularly floods the entire village. Erosion and inundation threatens not only homes and infrastructure, but also land that is intrinsic to islanders' culture and identity.



Diana Pabi and Nelly Dau walk through Boigu Island cemetery, where graves are at risk of being washed into the sea.

Masig Island is a low-lying island in the central island group in the Torres Strait. It is 2.7km long and 800m at its widest point, with a population of around 250. The shoreline has been heavily eroded, including a stretch where the road is being washed away.



**'We used to have a road that went all around the island but now it is broken. We will lose our land eventually.'**

Joseph Billy, fisherman, Masig Island

Joseph Billy, a fisherman from Masig Island (above) says: 'Every year we see the land disappearing. For the last five years, every year I have moved my shed back from the beach another few metres. We used to have a road that went all around the island but now it is broken. We will lose our land eventually.'

‘When we talk about relocation, it is very clear this is a last resort,’ says Hilda Mosby, a Masig Island resident and member of the Torres Strait Regional Authority (pictured right). ‘This is our home. No one is willing to leave, to lose their cultural ties, the loved ones they have laid to rest here. We want to try everything we can to keep our community here.’



‘This is our home. No one is willing to leave, to lose their cultural ties, the loved ones they have laid to rest here. We want to try everything we can to keep our community here.’

Hilda Mosby, Masig Island

Torres Strait Islanders are working hard to build their communities’ resilience, but to date have had to rely mostly on local knowledge and resources to attempt to slow the rate of erosion and protect their land. Regional authorities are working with local communities, universities and other partner organizations to improve understanding of climate risks, develop adaptation options and mobilize resources from the state and federal governments. But so far only one island, Saibai, has received funding for improved coastal defences.

Understanding the impact of displacement in the Torres Strait Islands means recognizing not only the threats to security and livelihoods, but above all the profound impact of a community being severed from its ancestral land.

While every possible effort must be taken to enable Torres Strait Islanders to remain where they are, projections for sea-level rise and other climate impacts mean that many in the lower-lying islands may have no option but to relocate to neighbouring islands or to the mainland in the future. In such situations, communities must be enabled to make these complex decisions on their own terms, in consultation with their members, and with support from government and other partners with long-term planning and viable options for managed relocation.

## WOMEN

The impact of climate change is not gender-neutral. In general, women are disproportionately harmed by climate change, disasters and related displacement – particularly women living in poverty or those who are marginalized because of their social status, race, ethnicity or other factors.

During drought, women in poor rural communities are typically responsible for travelling increasing distances to collect water and food, and are likely to be allocated smaller portions of food when supplies are rationed.<sup>103</sup>

Female-headed households are more likely to be poor, and more likely to rely on rain-fed subsistence agriculture.<sup>104</sup> They are often landless, in very poor areas, and have few able-bodied workers compared with dependants. Women face multiple burdens of caring for agriculture and family, including children, elderly and disabled people.<sup>105</sup>

In cases where climate impacts might otherwise compel people to move, women, particularly poor and marginalized women, are disproportionately likely to be 'trapped' by their circumstances.<sup>106</sup> For example, in the flood-prone Kurigram District of Bangladesh, many female-headed households are often unable to migrate due to lack of resources.<sup>107</sup> Similarly, evidence from Ecuador shows that access to land facilitates migration for men, whereas women have fewer options to move from environmentally degraded areas.<sup>108</sup>

Women are also significantly more likely than men to die during disasters.<sup>109</sup> This is not due to biological difference between women and men, but rather the socially constructed gender roles that render women, particularly poor and marginalized women, more vulnerable in times of crisis. These may include women having less access to information in an emergency, less mobility outside the home and less opportunity to gain important life skills, such as the ability to swim.<sup>110</sup>

Women who are displaced are disadvantaged in many humanitarian and recovery efforts after disasters.<sup>111</sup> For example, following the 2010 floods in Pakistan, protection assessments found that women, particularly single women and female heads of household, were the most likely to lack the national identity cards required to access assistance from the government compensation scheme.<sup>112</sup> Conditions following disaster are often conducive to gender-based violence.

Women are often left out of decision making processes about climate change adaptation, disaster preparedness and relocation. Nonetheless, women often adopt roles as activists and leaders in responding to both sudden and slow-onset hazards. For example, many displaced or relocated women have taken on significant leadership roles in their communities and have become the main breadwinners for their families.<sup>113</sup>

However, while these roles could offer significant opportunities for female empowerment, it is important to recognize that new leadership responsibilities are often translated into increased burdens for displaced or relocated women, in addition to their other responsibilities (which are often made more difficult or time-consuming in the context of displacement).<sup>114</sup>

## CHILDREN

Many of the countries most affected by climate change are characterized by a 'youth bulge': children account for 47 percent of the population in least developed countries.<sup>115</sup> More than half a billion children live in areas with extremely high risk of flooding, 115 million are at high or extremely high risk from tropical cyclones, and almost 160 million are exposed to high or extremely high drought severity.<sup>116</sup> When looking at disaggregated data that shows which groups remain displaced after such events, children feature all too highly. For instance, of the 72,700 people categorized as 'drought displaced' and living in makeshift shelters in

northern Somalia as of December 2015, 72 percent were under 18, including around 16,000 infants under the age of four.<sup>117</sup>

In the immediate aftermath of a disaster, children are at risk of being separated from their families. Without the support of their families, children face heightened risks, such as being trafficked or put into an institution. Children who become separated from their parents and other family members are more likely to experience violence, exploitation or abuse. The long-term implications of psychological and physical childhood trauma can extend to impacts on their health, education and economic wellbeing over their lifetime.<sup>118</sup>

Disasters and displacement put children's education on hold, sometimes indefinitely. School buildings may be damaged beyond repair by flooding or storms, while those that remain safe to enter are often used as shelters for families made homeless by the disaster – as was the case in the 2010 floods in Pakistan.<sup>119</sup> Children who are on the move because of climate change impacts have limited access to education. Already, only half of child refugees globally are enrolled in primary schools.<sup>120</sup>

Children and youth are not only among the most vulnerable – they also play a critical role in helping their families to avoid displacement,<sup>121</sup> further undermining their ability to return to school. For example, following the Pakistan floods, boys took on jobs such as brickmaking or working in small hotels and shops to supplement family incomes, meaning they had little time to resume education.

Even in the absence of a sudden-onset disaster, climate impacts are forcing families to split up in order to cope. Children and young people are among the most likely to be sent away to seek work elsewhere when climate-related events, such as intensifying drought, place untenable pressure on households.<sup>122</sup> Children who are left behind by migrating parents, in the care of relatives, friends or other community members, are at heightened risk of experiencing negative educational, psychological and physical impacts.<sup>123</sup> Children are also disproportionately represented among trapped populations.<sup>124</sup>

## REFUGEES AND PEOPLE DISPLACED BY CONFLICT

Many of the world's 'climate change hotspots' overlap with the regions that host the world's 65.6 million refugees and internally displaced persons,<sup>125</sup> who then face secondary or repeated displacement as a result of climate change impacts. For example, in March 2015, the UNHCR relocated 50,000 South Sudanese refugees from flood-prone camps in Ethiopia.<sup>126</sup> A UNHCR survey in 2015 showed that refugees and internally displaced persons were exposed to 150 disasters in 16 countries between 2013 and 2014, illustrating their vulnerability to disasters associated with floods, severe weather, landslides and wildfires.<sup>127</sup>



## OTHER VULNERABLE GROUPS

Other specific groups that are disproportionately harmed by displacement include older people, disabled people, migrant workers and groups that are historically marginalized.

Older people are more likely to suffer from health problems that are brought on or worsened by displacement.<sup>128</sup> Prolonged displacement can have a devastating impact on the family ties and community support that many older people rely on.<sup>129</sup> People with disabilities may face many additional hurdles in accessing assistance and protection, and are often the most neglected people in situations of displacement.<sup>130</sup>

Migrant workers often have to live in areas exposed to climate risk, including low-lying land that is susceptible to floods, storms or landslides; and many live in poorly constructed housing, compounding their vulnerability. For example, migrant workers in Thailand were among those most seriously affected by floods in 2011, yet did not receive adequate access to assistance. More than 800,000 migrants were affected by the floods, while 600,000 were 'stranded in areas without food, water or electricity'.<sup>131</sup>

When disasters strike, groups that are historically marginalized in a society may face further discrimination and be unable to access the support they need. In India and other countries of South Asia, Dalits, who face continued oppression and are typically already at heightened risk of disasters and displacement due to landlessness and poverty, may face further discrimination during disaster recovery.<sup>132</sup> For example, while Dalit families were the group worst hit by flooding in Tamil Nadu in 2015, they were reportedly neglected during relief efforts.<sup>133</sup>

# 3 RESPONDING TO THE CHALLENGES

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Responding to displacement in the context of climate change requires an integrated global agenda that aims to minimize displacement, uphold the rights of people on the move, and support strategies for ensuring the safe and dignified movement for those who may be forced to move in the future.

Achieving this will require a coordinated set of responses in the global arena, as well as actions and frameworks at the regional and national levels. Before presenting specific recommendations on the complementary roles of the Paris Agreement, the 2018 Global Compacts on migration and refugees, and a range of regional and national measures, we first identify four broad areas of action that must be prioritized. A list of the various frameworks, institutions and processes relevant to addressing displacement in the context of climate change is presented in Annex 2.

Fundamentally, responding to these challenges demands solidarity and compassion from the international community – especially from rich developed countries that bear the historical responsibility for climate change and have the capacity to support communities bearing the brunt of its impacts. It requires collaborative action from all actors, including governments, research institutes, civil society, and local and international NGOs. It requires full recognition of the impacts of displacement, and a commitment to upholding the rights and dignity of those on the frontlines of the climate crisis.

## MINIMIZING DISPLACEMENT

First and foremost, we must focus on minimizing displacement by addressing the root causes of climate change and enabling communities to build resilience to the impacts that can no longer be avoided. Relocation is almost always an option of last resort, and all possible measures must be taken to avoid people being forced to move.

This demands that developed countries in particular immediately step up action to cut global climate pollution, in line with limiting warming to 1.5°C. It is also essential that developing countries are supported in implementing their ambitious renewable energy strategies, recognizing the benefits of strong climate action for development, livelihoods and reducing inequality.<sup>134</sup> Increasing international finance for climate change adaptation is needed, beyond existing commitments to Official Development Assistance (ODA).<sup>135</sup> This finance should be focused on meeting the needs of the most vulnerable communities, supporting disaster risk reduction measures,<sup>136</sup> and enabling strong and inclusive adaptation planning at the national and local levels. This includes ensuring that women have a full and equal role in decision making.

From the Pacific to Africa, climate-vulnerable nations are leading the way in building community resilience to the impacts of climate change. For example,

Pacific Island countries have developed a world-first regional framework that integrates climate change adaptation and disaster risk management into an overall vision of inclusive, sustainable development for the region – the Framework for Resilient Development in the Pacific.<sup>137</sup> However, the need for adequate, accessible and appropriate financial support for climate change adaptation and resilience building is urgent and growing.<sup>138</sup> Addressing this need is fundamental to minimizing the risk of forced displacement in the context of climate change.

## UPHOLDING RIGHTS FOR PEOPLE ON THE MOVE

The majority of people displaced by the impacts of climate change remain within their countries as internally displaced persons (IDPs). National policies for the protection of IDPs, based on the *Guiding Principles on Internal Displacement*,<sup>139</sup> are therefore paramount. Strengthening protections for IDPs also makes it less likely that people displaced by disasters and climate change will be forced to move across borders.

However, people who are forced to move across borders as a result of disasters and climate change may face a legal void. There are, generally speaking, significant differences between the circumstances of people displaced across borders by disasters and climate change, and those of ‘refugees’, as defined by the 1951 Refugee Convention.<sup>140</sup> But many of their needs may be similar: they may have lost their homes, been separated from family, or be in need of medical assistance. The individual protection needs of women, men, boys, girls and people with particular vulnerabilities can be significant irrespective of whether they have been displaced because of armed conflict, persecution, disasters or climate change.<sup>141</sup>

The negotiation of new Global Compacts by September 2018 – one on safe, orderly and regular migration, and one on refugees – provides a critical opportunity to strengthen rights and protection for those displaced across borders by disasters and in the context of climate change, as well as supporting long-term strategies for those who may be forced to move in the future.

## SUPPORTING LONG-TERM STRATEGIES FOR SAFE AND DIGNIFIED MIGRATION

While all possible measures must be taken to avoid and minimize displacement from climate change, in cases where migration may become the only option, it is necessary to plan now to ensure that people forced to move in the future are able to migrate safely, with dignity, and on their own terms. This involves creating expanded channels for regular migration. This could include establishing special visa categories for people at risk of permanent displacement due to climate change, or humanitarian visas for people displaced by disasters. It could also involve ensuring that opportunities for family reunification and education are targeted towards communities that are highly vulnerable to climate change.

In some cases, greater opportunities for labour migration may form part of proactive, long-term strategies for addressing displacement. Increased

opportunities for labour migration may allow communities to diversify their livelihoods and increase resources available for adapting to the impacts of climate change and other needs. However, Oxfam notes that existing labour migration schemes are not without problems. For example, they may result in more men migrating, leaving women behind and facing more work. Those targeting unskilled and low-skilled workers may expose workers to exploitation and abuse. And overall, schemes may be too small in scope to deliver significant benefits.<sup>142</sup> It is therefore vital that schemes or policies aiming to increase and enhance labour migration opportunities for people impacted by climate change are driven by the needs of families and communities, including women; have robust safeguards in place to prevent exploitation; and provide opportunities for permanent as well as seasonal migration.

## PROVIDING FINANCE AND RESOURCES FOR PEOPLE FORCED TO MOVE

Lastly, the international community has a responsibility to provide adequate finance and resources to those forced to move – both through immediate humanitarian support, climate risk insurance, and by mobilizing finance to address loss and damage resulting from climate change, including displacement.

People forced to leave their homes need humanitarian support in the near term: food, water and shelter. In 2017, humanitarian needs across the globe are at an unprecedented level. As of June 2017, only around one-quarter of the funds required to respond to those in need of humanitarian assistance had been made available.<sup>143</sup>

In addition to countries providing their fair share of humanitarian assistance, it is essential to begin mobilizing funds to address loss and damage from climate change, beyond the funding already promised to support mitigation and adaptation actions. Vulnerable countries and communities, which have typically contributed negligible amounts to the causes of climate change, are already facing loss and damage from its impacts, including the loss of land, homes and livelihoods. Most lack the resources to recover and, if necessary, relocate from harm's way. This year's UN Climate Change Conference (COP23)<sup>144</sup> offers a critical opportunity to make progress on action and support to address loss and damage, including developing a mechanism to raise much-needed finance for loss and damage.

# RECOMMENDATIONS

## INTERNATIONAL CLIMATE NEGOTIATIONS – THE PARIS AGREEMENT

### Mitigation

In aggregate, current nationally determined contributions (NDCs) fall a very long way short of the scale and pace of action necessary to limit warming to the 1.5°C and 2°C goals set out in the Paris Agreement,<sup>145</sup> putting us on a path to a catastrophic 3°C of warming.<sup>146</sup> While 1.5°C is by no means 'safe', achieving this goal will substantially curb the increase in large-scale displacements. The Facilitative Dialogue 2018, mandated to take stock of the collective efforts of countries towards the Paris Agreement's long-term temperature goal, is a key opportunity to enhance collective ambition and ensure the strengthening of national commitments. In line with the UNFCCC's equity principles, and as they have greater historical responsibility for climate change and capacity to act, developed countries must aim to achieve zero emissions well before mid-century, and increase funding and technological support to enable developing countries to implement their NDCs.

- At COP23, Parties must lay the ground rules for a robust Facilitative Dialogue 2018 and ensure a substantial strengthening before 2020 of collective efforts to end global climate pollution. This should be informed by the IPCC's Special Report on 1.5°C, and the principles of common but differentiated responsibilities and respective capabilities.

### Adaptation

Supporting vulnerable countries and communities to adapt to the impacts of climate change means increasing the scale, accessibility and effectiveness of international finance for adaptation. Crucially this means:

- In line with the Paris Agreement, developed countries need to commit to 'significantly increase adaptation finance from current levels' and balance mitigation and adaptation finance. Adaptation finance must scale up to at least \$35bn in public finance by 2020, including a significant increase in grant-based support, towards the ultimate goal of 50 percent of international climate finance being allocated towards adaptation;
- All climate finance providers should prioritize simplified access to funding for climate-vulnerable communities; support the building of local capacity to access and manage funds; and support the engagement of women and vulnerable groups in the design and implementation of programmes.

### Loss and damage

In addition to supporting the work of the Taskforce on Displacement, Parties must ensure that vulnerable populations receive financial support for addressing loss and damage, including displacement.

- COP23 must reaffirm: the necessity of finance for loss and damage, above and beyond the \$100bn already promised for adaptation and mitigation; that there must be predictable and fair means for generating adequate loss and

damage finance (including through innovative sources such as a fossil fuel levy); and that a new loss and damage finance mechanism will be established within two years.

- COP23 should call for other migration and displacement processes, including the new Global Compacts on migration and refugees, to work towards strong and meaningful outcomes for addressing migration and displacement in the context of climate change.

## **THE 2018 GLOBAL COMPACTS ON MIGRATION AND REFUGEES**

September 2018 will see the adoption of two new Global Compacts: one on safe, orderly and regular migration, and one on refugees. The two Compacts must help to ensure safety, dignity and lasting solutions for those displaced or at risk of displacement as a result of the impacts of climate change. In particular, both must work to ensure that international, regional and national responses to displacement linked to climate change uphold human rights and are grounded in the perspectives and priorities of affected communities. This includes ensuring solutions are driven by and are responsive to the needs and concerns of women, who are disproportionately harmed by climate change and related displacement. Below are specific recommendations for each Compact.

### **The Global Compact on Safe, Orderly and Regular Migration should:**

- Strongly reaffirm the international responsibility to minimize displacement by addressing the root causes of climate change and factors in vulnerability, including: pursuing efforts to limit the global average temperature rise to 1.5°C; increasing financial support for climate change adaptation and for loss and damage, focusing in particular on the needs and capacities of women and other vulnerable groups; and strengthening disaster risk reduction measures;
- Include explicit recognition of the multiple forms of movement linked to climate change – including forced displacement with the intention of return, seasonal migration to build resilience to climate change impacts, and permanent relocation;
- While recognizing that relocation is an option of last resort, support long-term strategies for safe and dignified movement for those who may be forced to move due to climate change;
- Encourage expanded channels for safe and regular migration for people affected by climate change, including the creation of special visa categories for those at severe risk of displacement;
- Progressively develop new norms for addressing displacement in the context of climate change and gaps in legal protection, specifically:
  - A two-year process to identify a protection and reception strategy that includes legal recognition and status for people forced to cross borders due to disasters, including extreme weather events;
  - A longer term process to address migration and displacement across borders related to ‘slow-onset’ impacts of climate change;

- Focus on upholding the rights of all people forced to move in the context of climate change, and on supporting the ability of women, men, boys and girls to migrate safely, with dignity, and on their own terms.

## The Global Compact on Refugees

- The Comprehensive Refugee Response Framework, which will form the basis of the Global Compact on Refugees, should be applicable to people displaced across borders by sudden-onset disasters, including extreme weather events.
- The Global Compact on Refugees should recognize climate change as an exacerbating factor in many situations of conflict and violence.

## REGIONAL AND NATIONAL RESPONSES

While action at the global level to cut climate pollution, mobilize resources for climate change adaptation and address displacement is critical, most movement linked to climate change is local – either within countries or between neighbouring countries. National, bilateral and regional approaches therefore have a vital role in addressing human mobility in the context of climate change.

Regional and bilateral agreements can, among other things: provide greater opportunities for seasonal mobility for climate-vulnerable communities, thereby strengthening livelihoods and raising incomes for climate change adaptation and other needs; provide safe pathways for movement in the wake of disasters; and create expanded channels for permanent migration.

National-level action plans have a key role in minimizing displacement through adaptation and disaster risk reduction; supporting women and smallholder farmers; addressing gender inequalities in access to rights and resources; supporting intra-country relocations when appropriate; and ensuring that communities have access to information on which to make informed choices and have ownership over decisions.

Regional and national responses should:

- Encourage the establishment and strengthening of regional mobility agreements, ensuring that these are driven by the needs of communities, include robust safeguards to prevent exploitation of migrants, and support those countries and communities most impacted by climate change;
- Through bilateral and multi-country agreements, expand opportunities for safe and regular migration for those who may be forced to move permanently. This should include special visa categories and open-access agreements between developed countries and countries facing a high risk of displacement linked to climate change;
- While recognizing relocation as an option of last resort, governments should consider including strategies to address climate-induced displacement in their National Adaptation Plans, including: early identification of communities at risk of displacement; consultation with and full participation of affected communities; and strategies to support successful planned relocation, when appropriate, based on upholding human rights and protecting livelihoods and culture, among other factors.

## ANNEX 1: METHODOLOGY

The calculations underpinning Figure 1 and the statement that ‘on average people in low- and lower-middle-income countries were around five times more likely to be displaced by sudden-onset extreme weather disasters than people in high-income countries’, are based on the dataset of the Internal Displacement Monitoring Centre (IDMC) for disaster-related new displacements 2008–2016,<sup>147</sup> counting only displacement from weather-related disasters (storms, floods, etc.) and excluding geophysical disasters (earthquakes, volcanic eruptions, etc.).

We began by calculating the percentage of the population displaced across each income group each year, using yearly population data from United Nations DESA/Population Division,<sup>148</sup> and countries’ World Bank economy listing (income classification) for the given year. We then took an average for each income group across the nine years to give the final result.

Figure 2 and the statement that ‘around 3.2 million people in low-income countries were displaced by extreme weather disasters over the first nine months of 2017 (January–September), of whom 1.9 million, or more than half, were displaced by drought’, is based on:

- The Internal Displacement Monitoring Centre’s 2017 mid-year data (January–June) for new displacements from weather-related disasters (not including drought);<sup>149</sup>
- Information from drought displacements from the sources in Table 1. We have assessed the data available and the main sources were chosen based on the depth of detail in the data provided, access to primary data, methodologies applied, and the time period covered (January–September 2017, or as close as possible);
- Estimates of new displacements over July–September from the Internal Displacement Monitoring Centre’s internal displacement updates 21, 22, 23, 24 and 25;<sup>150</sup>
- The International Organization for Migration’s Displacement Overview Estimates Post-Hurricanes Irma and Jose.<sup>151</sup>

A full table of the data and calculations is available here: <http://bit.ly/2xisOZW>

We undertook this exercise in order to provide a more complete estimate of displacement linked to weather and climate-related events. Most published displacement figures usually skew towards storms, floods and other sudden-onset disasters, as the organizations collecting data do not often attribute displacement to drought, given the complexity of the interface between drought, conflict and other factors. However, we considered that including an estimate of drought displacement gives a better overall perspective on the true impact of climate change and displacement. We caution that this is only a first and rough attempt to incorporate data on drought displacement into an assessment of displacement linked to weather and climate-related events. We expect that our figures are an understatement of overall drought displacement, as information could not be gathered on all countries experiencing drought, including other countries in Africa, and countries in Central and South America and Central Asia.

We recognize the excellent work done by the organizations in this field, including the Internal Displacement Monitoring Centre, International Organization for Migration, United Nations Office for the Coordination of Humanitarian Affairs, and Office of the United Nations High Commissioner for Refugees. We acknowledge the difficulties of collecting and reporting on drought displacement and encourage



them in their efforts to include estimates of drought displacement in their upcoming reports, and to persuade governments to collect such data.

COUNTRY	Number we are using for people newly displaced by drought	Main source	Other supporting and contextual evidence
<b>Ethiopia</b>	387,949	<p>387,949 people displaced from drought in Ethiopia, and a further 455,418 displaced by conflict. (The latter is not included in our number for drought displacement.)</p> <p><i>Horn of Africa: Humanitarian Impacts of Drought</i>, Issue 9 (UNOCHA, 10 August 2017)  <a href="https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017">https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017</a></p> <p>We are using this number as it is purposefully separated between drought and conflict displacement, is recent, and is an authoritative source.</p>	<ul style="list-style-type: none"> <li>• <b>387,949 people displaced from drought</b>  <i>Ethiopia Humanitarian Requirements Document, 2017 Mid-Year Review</i> (Joint Government and Humanitarian Partners' Document, August 2017)  <a href="http://reliefweb.int/sites/reliefweb.int/files/resources/ethiopia_humanitarian_requirements_document_mid-year_review_2017.pdf">http://reliefweb.int/sites/reliefweb.int/files/resources/ethiopia_humanitarian_requirements_document_mid-year_review_2017.pdf</a></li> <li>• <b>600,000 displaced people, including 2016 and 2017</b>  <i>Ethiopia: Humanitarian Response Situation Report No. 10</i> (Disaster Risk Management Technical Working Group, March 2017)  <a href="https://www.ecoi.net/file_upload/1788_1492005178_eth.pdf">https://www.ecoi.net/file_upload/1788_1492005178_eth.pdf</a></li> <li>• <b>220,000 people displaced by drought</b>            (total of 843,367 internally displaced persons, including those displaced by conflict)  <i>Horn of Africa: Humanitarian Impacts of Drought</i>, Issue 6 (UNOCHA, 16 June 2017)  <a href="http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017">http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017</a></li> </ul>
<b>Somalia</b>	1,466,986	<p><i>IOM Displacement Tracking Matrix (DTM)</i>  <a href="http://www.globaldtm.info/somalia/">http://www.globaldtm.info/somalia/</a>            (folder: downloads / Round 5 May 2017 and Round 6 September 2017)</p> <p>We are using this data from IOM because it accounts for multiple drivers of displacement and provides a nuanced assessment of why people have been forced to move. Note that we have only included those people for whom drought was recorded as their primary driver of displacement.</p> <p>We acknowledge that our final estimate is higher than that reported by some other sources, including UNHCR's Protection and Return Monitoring Network (PRMN), see right. However, we believe the IOM data provides a more complete estimate of people displaced by drought, and note the PRMN's acknowledgement that their displacement figures can be seen as</p>	<ul style="list-style-type: none"> <li>• <b>738,600 people have been displaced by drought between November 2016 and May 2017.</b>            Of these, nearly 46,000 were displaced in May, a significant decrease in new drought-related displacements compared with previous months.  <i>Horn of Africa: Humanitarian Impacts of Drought</i>, Issue 6 (UNOCHA, 16 June 2017)  <a href="http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017">http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017</a></li> <li>• <b>766,000 people displaced since November 2016 in Somalia by the effects of drought</b>, as well as humanitarian access constraints in areas controlled by al-Shabab.  <i>Horn of Africa – Complex Emergency Fact Sheet no. 8</i> (USAID, August 2017)  <a href="https://www.usaid.gov/crisis/horn-of-africa/fy17/fs08">https://www.usaid.gov/crisis/horn-of-africa/fy17/fs08</a></li> <li>• <b>766,000 people displaced from drought</b>, plus 334,000 displaced by conflict.  <i>Horn of Africa: Humanitarian Impacts of Drought</i>, Issue 9 (UNOCHA, 10 August 2017)  <a href="https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017">https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017</a></li> <li>• <b>837,000 people displaced by drought since the start of 2017</b>  <i>UNHCR PRMN: Somalia Internal Displacements Dashboard</i>, 30 September 2017</li> </ul>

		indicators of potentially larger movements.	<a href="https://data2.unhcr.org/es/documents/details/60281">https://data2.unhcr.org/es/documents/details/60281</a> (Notes on methodology: <a href="https://data2.unhcr.org/en/documents/details/53888">https://data2.unhcr.org/en/documents/details/53888</a> )
<b>Kenya</b>	39,265	39,265 people displaced from drought in Kenya, and a further 269,935 displaced by conflict.  (The latter is not included in our number for drought displacement.)  <i>Horn of Africa: Humanitarian Impacts of Drought</i> , Issue 9 (UNOCHA, 10 August 2017) <a href="https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017">https://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-9-10-aug-2017</a>  We are using this number as it is purposefully separated between drought and conflict displacement, is recent, and is an authoritative source.	<ul style="list-style-type: none"> <li>• <b>39,000 people remain displaced due to conflict over resources, insecurity and drought</b> <i>Horn of Africa: Humanitarian Impacts of Drought</i>, Issue 6 (UNOCHA, 16 June 2017) <a href="http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017">http://reliefweb.int/report/somalia/horn-of-africa-humanitarian-impacts-drought-issue-6-16-june-2017</a></li> <li>• <b>2.2 million people in Kenya at crisis level food insecurity</b>, with families noted as 'on the move'.  <i>Kenya: Humanitarian Dashboard</i> (UNOCHA, 26 May 2017) <a href="http://reliefweb.int/sites/reliefweb.int/files/resources/KEN_Dashboard_26May2017.pdf">http://reliefweb.int/sites/reliefweb.int/files/resources/KEN_Dashboard_26May2017.pdf</a></li> </ul>
<b>South Sudan</b>	0	We do not include any estimate of people displaced by drought in South Sudan, as not enough information is available to separate out drought displacement from other forcers.	<ul style="list-style-type: none"> <li>• <b>1,951,473 people displaced due to a range of reasons including drought, floods, insecurity and violence.</b> <i>CIA Field Listing: Refugees and Internally Displaced Persons</i>, CIA: <a href="https://www.cia.gov/library/publications/the-world-factbook/fields/print_2194.html">https://www.cia.gov/library/publications/the-world-factbook/fields/print_2194.html</a></li> </ul>
<p><b>Regional information</b> (for further context):</p> <p><i>Mixed Migration in the East Africa &amp; Yemen Region</i> (Regional Mixed Migration Secretariat, East Africa and Yemen, Danish Refugee Council, June 2017) <a href="http://regionalmms.org/monthlymaps/RMMS%20Mixed%20Migration%20Monthly%20Map%20June%202017.pdf">http://regionalmms.org/monthlymaps/RMMS%20Mixed%20Migration%20Monthly%20Map%20June%202017.pdf</a></p>			

## ANNEX 2: KEY MIGRATION AND DISPLACEMENT CONCEPTS

This paper is concerned with people displaced or at risk of displacement in the context of climate change. This includes displacement linked to extreme weather disasters exacerbated by climate change, slow-onset changes including desertification and sea-level rise, or a combination of hazards. In most cases, displacement results from a combination of factors, including underlying vulnerability, with climate change magnifying existing threats.

Some people displaced in the context of climate change may return home, while others may remain permanently displaced. The majority of people displaced in the context of climate change remain within their own countries and are IDPs, while some are forced to move across borders.

While displacement is often sudden, due to a disaster, and clearly forced and involuntary, sometimes communities move pre-emptively, away from areas where they are highly exposed to the impacts of climate change. However, we caution against characterizing any movement in the context of climate as 'voluntary', since the move is being coerced at least in part by climate change.

Below are short definitions of key concepts in migration and displacement.

**Displacement** is when people are *forced* to move away from their homes. Often displaced people rely on humanitarian assistance to meet their immediate needs and to protect their rights. The majority of people forced to leave their homes stay within their own country and are internally displaced persons.

**Migration** refers broadly to the movement of people from one location to another. In the widest sense, this includes the movement of refugees and displaced persons, as well as economic migrants, and people moving internally or across borders. Migration can be 'successful', where people have agency over their decisions, their migration is largely short-term, their communities remain in-situ for them to return to, and their situation improves. The term 'survival migration' can be used to describe people moving to avoid severe food insecurity, violence or other threats, yet who still just get by and are unable to escape poverty. The term 'erosive migration' can be used to describe instances where the decision to migrate leaves households more vulnerable or deeper in poverty.<sup>152</sup>

**Seasonal/temporary migration:** Individuals or family groups often move to cope with environmental stress. For example, in times of drought in southern Africa individual members of the family move to gain off-farm income, returning home once the drought, or employment, ends. In many Pacific Island countries, some people move for temporary employment, allowing them to send remittances and reducing pressure on resources at home.

**Planned relocation** is when the whole or part of a community relocates. Sometimes communities make the decision to move themselves and are supported to do so; while in many cases communities have been moved largely against their will.

**Trapped populations** are people who might wish to, or need to, move but are unable to do so due to lack of financial or social resources<sup>153</sup> and so they face a double risk: they are more vulnerable to disasters, but less able to move away

from them.<sup>154</sup> Typically the poorest people, they are likely to become increasingly vulnerable over time.<sup>155</sup>

**‘Sudden-onset’ and ‘slow-onset’:** Displacement in the context of climate change may be linked to a ‘sudden-onset’ event, such as a storm, flood, or wildfire, or to ‘slow-onset’ changes including sea-level rise and desertification, or a combination of factors. However, the distinction between sudden and slow-onset hazards can blur. For example, sea-level rise increases the risk of damage from tropical cyclones, as storm surges are exacerbated by higher sea levels. Drought is usually considered to be a slow-onset hazard, though does not fit easily into either classification.

**Refugees** are defined in the 1951 Refugee Convention as people who are outside their country of nationality and unable to return due to a well-founded fear of persecution.<sup>156</sup>

**Internally displaced persons (IDPs)** are people who have been forced or obliged to flee their homes, in particular as a result of armed conflict, violence, violation of human rights, or disasters, and who have not crossed international borders.<sup>157</sup>

**Stateless people** are people who are not considered as nationals by any state.<sup>158</sup> In the long term, and in the absence of legal solutions, climate change could render some people stateless through the loss of sovereign territory.

**Loss and damage** refers to the impacts of climate change that go beyond what people can adapt to. While migration is sometimes regarded as an aspect of climate change adaptation, even successful migration may mean the loss of ancestral lands, cultural ties, traditional livelihoods, homes, and other assets. Displacement is therefore closely linked to the issue of loss and damage from climate change.

## **ANNEX 3: WHERE IS MIGRATION AND DISPLACEMENT FROM CLIMATE CHANGE BEING DISCUSSED?**

### **The 2018 Global Compacts on Migration and Refugees**

In September 2016 the United Nations General Assembly adopted the New York Declaration for Refugees and Migrants<sup>159</sup> – a broad set of commitments to enhance the protection of refugees and migrants. Two new Global Compacts will be finalized in 2018 – one on safe, orderly and regular migration, and one on refugees. The Declaration reaffirmed the obligation of States to fully respect the human rights of refugees and migrants, the need for a comprehensive approach to human mobility and the importance of international cooperation and responsibility sharing. Consultations towards the new Global Compacts are underway, with a separate process for each Compact. Neither Compact will be legally binding, though they offer a critical opportunity to establish new norms for addressing displacement in the context of climate change and disasters and increasing international solidarity and cooperation.

### **WIM Taskforce on Displacement**

In adopting the Paris Agreement, Parties agreed to establish a Task Force under the Warsaw International Mechanism on Loss and Damage (WIM) to ‘develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change’. The Task Force will present its recommendations at COP24 in 2018. At the time of writing, the Task Force has held one meeting and established a two-year work plan with activities focused on mapping of existing initiatives and policies, and data collection.

### **Human Rights Council**

The Human Rights Council is undertaking work to ensure that climate change is appropriately addressed in the Global Compact on Safe, Orderly and Regular Migration, and to support the work of the WIM Taskforce on Displacement. This includes hosting discussions with a wide range of stakeholders and undertaking a study in early 2018 to support the process of the Global Compact and the WIM Taskforce on Displacement.

### **Platform on Disaster Displacement**

The objective of the Platform on Disaster Displacement is to continue the work of Nansen Initiative towards a protection agenda for those displaced across borders by climate change and disasters. Core elements of the Nansen Initiative Protection Agenda include admission and stay of cross-border disaster-displaced persons, reducing vulnerability in countries of origin, addressing the needs of internally displaced persons, and enabling migration with dignity. The Platform on Disaster Displacement is a state-led, multi-stakeholder that is closely engaged with consultations on the new Global Compacts and supporting the work of the WIM Taskforce on Displacement.

## Regional responses

Regional and bi-lateral policies and initiatives will play an increasingly important role in addressing human mobility in the context of climate change. Examples include the African Union Policy Framework on Pastoralism, which supports cross-border mobility of pastoralists,<sup>160</sup> and enhancing labour mobility agreements between Australia/New Zealand and Pacific Island countries.<sup>161</sup>

## National responses

Policies and actions at national and local levels are essential both to minimizing displacement and to enabling successful intra-country relocations when appropriate. For example, the Fiji government has worked closely with communities to create a plan for relocation for villages affected by sea-level rise.<sup>162</sup> The process of National Adaptation Plans (NAPs) under the UNFCCC provides an opportunity to strengthen national actions to minimize and address displacement, including mobilizing international support.

# NOTES

All URLs were accessed in October 2017.

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