



DADAAB'S SILENT CRISIS

An International Call for Climate Justice

A report by the Environmental Justice Foundation





Protecting People and Planet

The Environmental Justice Foundation (EJF) exists to protect the natural world and defend our basic human right to a secure environment.

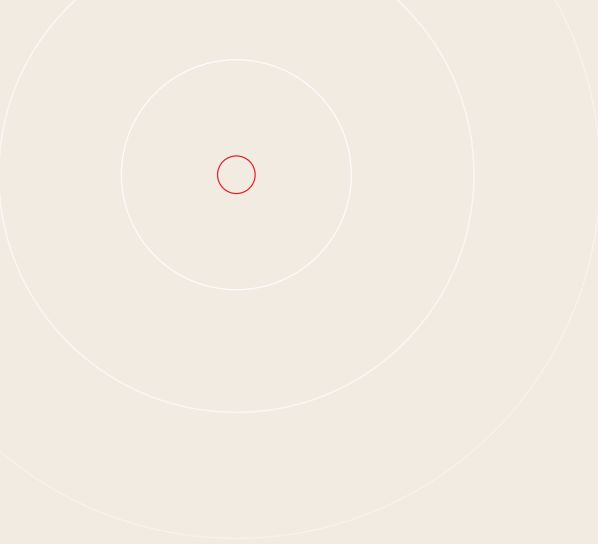
EJF works internationally to inform policy and drive systemic, durable reforms to protect our environment and defend human rights. We investigate and expose abuses and support environmental defenders, Indigenous peoples, communities and independent journalists on the frontlines of environmental injustice. Our campaigns aim to secure peaceful, equitable and sustainable futures.

Our investigators, researchers, filmmakers and campaigners work with grassroots partners and environmental defenders across the globe.

Our work to secure environmental justice aims to protect our global climate, ocean, forests, wetlands, wildlife and defend basic human rights.

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My name is Fardowsa Sirat Gele. My family came to Dadaab refugee camp in 1991, and I was born and raised in the camp. Living conditions in Dadaab are challenging, with overcrowding, limited access to clean water, and shortages of healthcare, education, and livelihood opportunities. The worsening climate crisis further strains Dadaab's resources, as extreme weather, droughts, and floods in the region drive more people to seek refuge. Dadaab symbolizes the intersection of displacement and the climate crisis, highlighting the urgent need for sustainable solutions and international support.

If we fail to address the climate emergency, rising temperatures and extreme weather will continue to displace countless communities, escalating humanitarian crises across borders. Refugee camps and host communities—already strained to the limit—will face even greater pressures from new arrivals fleeing unlivable conditions, crop failures, and water scarcity. The injustice is stark: those who have contributed the least to global emissions are the first to lose everything. Ignoring this urgent call will not only widen the divide between rich and poor nations but will also fuel conflict, poverty, and instability worldwide. We owe it to the most vulnerable—and to future generations—to confront this crisis with bold action and compassion.

We urge world leaders to step up, commit to meaningful action, and prioritize the needs of those on the frontlines of this crisis. A united global response is essential—not only to mitigate future harm but to uphold justice and compassion in the face of this urgent challenge. Let's protect our most vulnerable and ensure a world where all can thrive.

Fardowsa Sirat Gele, reporter for Radio Gargaar



The experiences shared by the residents of Dadaab in this report are deeply personal insights into the reality of the climate crisis on the frontline. These pages are a call to action, urgently evidencing that we must intensify efforts to secure justice for climate refugees globally. A meaningful framework for the protection of climate refugees is essential to provide much-needed legal support to those already impacted by the full force of the climate crisis. Without it, countless people will be left at risk of having their most basic human rights eroded, fuelling global instability and entrenching inequality.

Every day we delay is a failure that magnifies the problems and pains of those experiencing the climate crisis most acutely. Every moment of time we waste inches us forward into a hotter, less stable, and more hostile climate that will only cause humanitarian crises to spiral. The calls from Fardosa and climate refugees across the world make clear the need for swift and justice-led climate action. We must act now in the interest of all of humanity, and we must centre those most impacted on our road to a solution.

Steve Trent, Founder and CEO, Environmental Justice Foundation



Executive summary

The climate crisis is exacerbating existing vulnerabilities and global inequalities. As emissions from human activity continue to rise and the planet continues to heat, extreme weather events will become more frequent and more severe, slow-onset impacts will build up more rapidly, and more people will be forced to flee their homes and seek refuge within their country or abroad. The displacement impacts of the climate crisis can already be seen today. From 2013 to 2023, an average of 23.6 million people each year were displaced within their country due to extreme weather events globally, with 32.6 million internal displacements in 2022.¹ Many more people are also forced to leave their homes due to slow-onset climate impacts, such as desertification and sea level rise. Most of the world's climate refugees come from vulnerable communities in lower-income countries, where environmental degradation and climate change intersect with and exacerbate other stressors such as poverty, oppression and conflict.²

A climate-induced humanitarian crisis has been building in the Horn of Africa, where multiple consecutive years of drought have caused crisis and emergency levels of acute food insecurity,³ and displaced communities within and across borders in the region. In 2022–2023, the Dadaab Refugee Complex in Kenya's North Eastern province experienced an influx of refugees fleeing drought and conflict in Somalia, causing the camp's population to swell from about 234,000 in July 2022⁴ to more than 320,000 people in March 2023, putting additional pressure on already overstretched camp resources.⁵ As the rain finally arrived in 2023, torrential rainfall and flash floods brought measles and cholera outbreaks and impeded the delivery of much-needed relief, causing a sharp rise in malnutrition⁶ and setting the stage for what Médecins sans frontières describes as “a looming health catastrophe”.⁷ Heavy rains in 2024 have displaced tens of thousands of residents, with many who fled drought in Somalia now losing their shelter to flooding in Dadaab.⁸

This report tells the stories of those on the frontlines of the climate crisis. In September 2022, the Environmental Justice Foundation (EJF) partnered with Dadaab-based journalists from Gargaar Humanitarian Radio Station and spent two weeks in the Dadaab Refugee Complex, interviewing refugees, humanitarian service providers from UNHCR and its partner organisations, members of the local Kenyan host community, Kenyan government representatives, educators and members of Dadaab's business community. Dadaab residents told EJF how drought had decimated their cattle and ruined their crops, forcing them to leave their homes and seek refuge in Dadaab. These stories highlight the devastating impacts of the drought in the Horn of Africa and the link between global heating and forced displacement.

EJF defines climate refugees as “persons or groups of persons who are compelled to leave their homes and to seek refuge, temporarily or permanently, within their country or abroad, because of a deterioration of their living conditions and welfare, or a threat to their safety, which are attributable in substantial part to sudden or progressive climate-related change in the environment”. The existing international refugee and human rights protection regime is failing to meet the needs of climate refugees. There remains a deficit of legal and policy frameworks governing climate-induced displacement at the international level to address the various adaptation, disaster risk reduction, humanitarian assistance and legal protection needs of climate refugees and to deliver effective, durable and just solutions for those impacted first and worst by the climate crisis. As climate change intensifies, causing humanitarian crises across the world, those most vulnerable will be left without adequate protection, risking the erosion of human rights achievements and the failure of the 2030 Agenda for Sustainable Development.

Recommendations

EJF calls on the international community to give effect to the COP28 commitments⁹ and urgently work together to address climate-induced displacement, by mitigating global heating through rapidly decarbonising the global economy and developing adequate and effective protections for those most impacted by the climate crisis, first and foremost climate refugees. All climate actions and agreements must address the issue of climate adaptation and recognise climate-induced displacement as a form of adaptation in need of international support and action. These actions must include:

- The near-term development of a comprehensive, global framework for the support and protection of climate refugees. Such a framework must take place entirely outside of the scope of the 1951 Convention Relating to the Status of Refugees, in order to preserve the integrity of existing refugee protection mechanisms.
- Effective implementation of states' obligations under applicable international and regional human rights instruments to respect, protect and fulfil the human rights of all persons subject to their jurisdiction, irrespective of nationality.
- Recognition and effective implementation of the universal human right to a clean, healthy and sustainable environment.
- Full implementation of the Paris Agreement to keep global temperature rise to 1.5°C above pre-industrial levels.
- Delivery and scaling up of international climate finance commitments to fund mitigation, adaptation, loss and damage, disaster risk reduction and resilience programmes (including emergency support) which deliver dignified, durable and just solutions for people most impacted by the climate crisis.
- Investment in new data collection and monitoring systems to better understand, predict and support the needs of climate refugees.
- Action to ensure deliberations and negotiations for mitigation and adaptation to the climate crisis are fully inclusive, specifically seeking wider representation from the Global South, including climate refugees, and marginalised and under-represented communities.



Introduction

The climate crisis is the defining issue of our time — it is unfolding here and now, and our collective success in mitigating and adapting to global heating will determine not only the well-being of people today, but the course of humanity's future on Earth. Communities in all countries will be impacted: the climate crisis is a universal challenge, and we all have a common shared interest to act with far greater urgency and ambition now to avert the worst impacts of climate breakdown. However, it is critical to recognise that it is the people and countries that have historically contributed the least to greenhouse gas emissions and benefited the least from carbon-fuelled economic growth, that are suffering first and worst from the impacts of global heating.

The climate crisis is also a threat multiplier. In addition to creating new global inequalities, it will exacerbate existing divisions and inequalities, driving a vicious cycle whereby low-income and marginalised communities will be rendered increasingly vulnerable by climate change¹⁰ — patterns which we are already seeing today from over 1°C of warming.¹¹ Global heating will have nonlinear physiological and socioeconomic impacts, which are likely to have knock-on effects¹² as tipping points are reached¹³ and ecological and human systems collapse.

A climate-induced humanitarian crisis has been building in the Horn of Africa, where multiple years of failed rainy seasons have caused crisis and emergency levels of acute food insecurity¹⁴ and displaced communities within and across borders in the region. The Dadaab Refugee Complex, in Kenya's North Eastern province, has experienced an influx of refugees fleeing drought and conflict in Somalia. In just nine months between July 2022 and March 2023, 86,000 refugees arrived in Dadaab, bringing the camp population to over 320,000 people.¹⁵ 2023 finally saw the long-awaited arrival of rain, marking the end to three years of drought.

But the rains also brought a new crisis, with heavy rainfall intensified by El Niño causing flash flooding across the Horn of Africa. Nearly 2.5 million people were impacted in Somalia alone, with 1.2 million displaced from their homes in 2023,¹⁶ and an additional 136,000 people displaced in Kenya.¹⁷ Far from bringing relief to Dadaab's residents, torrential rains brought measles and cholera outbreaks and impeded the delivery of much-needed supplies, causing a sharp rise in malnutrition¹⁸ and setting the stage for "a looming health catastrophe".¹⁹ Heavy rains returned in 2024, forcing 4,000 residents to shelter in six schools and displacing 20,000 within the camp, many of whom fled drought in Somalia.²⁰ Several farms have lost all of their crops and damage to roads continues to impact access to supplies, causing food prices to spike.²¹ Numerous Dadaab residents were forced here by climate-crisis-induced drought but continue to grapple with the impacts of extreme weather on their livelihoods, shelter and security.



“The farms we depended on suffered drought. When our animals died, we lost what we had ... The farms are now abandoned, people have left them, and there are no people there now.”

Haliimo Borow Ahmed, Somali climate refugee, arrived in Dadaab in 2022.



Stories from the frontlines of the climate crisis

Halima Hassan Ibrahim fled to Dadaab from the Bu'ale District of Somalia in the Juuba River Valley when consecutive years of drought dried up her farm and killed her livestock. A disabled single mother of seven, Halima is living on the outskirts of Dagahaley with her children in makeshift accommodation and without regular access to clean water or sanitation facilities. Halima told EJF:

“We suffered from four years of drought. We used to cultivate our fields ... We had 10 cows and 50 goats ... All of the cows and goats [died] and everything else [was] destroyed and because of that, we came to the refugee camps ... I'm a mother and a father for my kids, and I don't have anything for them.”



Halima and her children inside their makeshift shelter. Dagahaley sub-camp, Dadaab Refugee Complex, September 2022.



Somali climate refugees are on the frontlines of the climate crisis, yet in 2019 Somalia had a per capita carbon footprint barely one-fifth of the EU's,²² and the entire continent of Africa only contributes around 3.8% of global greenhouse gas emissions.²³ The stories of climate refugees in Dadaab exemplify the need for dignified, rights-based and sustainable solutions to the growing threat of climate-induced displacement.

Migration is one form of adaptation to the devastation wrought by the climate crisis. Although isolating a single cause for migration can be challenging, there can be no doubt that the climate crisis is making life more dangerous and difficult, threatening the welfare and safety and eroding the human rights of communities around the world. Global and national-level human mobility policies must consider the impacts of the climate crisis; conversely, climate change mitigation and adaptation policies must consider impacts on human mobility. There is a growing international acceptance of the link between global heating and human mobility, yet different actors and institutions disagree on how to conceptualise and act on this emerging issue. Climate displacement can be framed as a security threat, as a humanitarian crisis, or as a climate adaptation strategy — how it is framed will influence the shape of global governance solutions for climate displacement.²⁴ Yet without the urgent development of a robust framework designed to effectively protect those most vulnerable to the climate crisis, the reality is that millions of people across the world will remain in effect deprived of their most basic human rights. It is time to accelerate efforts away from debate and towards constructive, practical solutions to protect the rights and dignity of climate-displaced communities within and across borders, along migration routes and wherever they seek shelter.

A note on definitions

EJF defines climate refugees as “persons or groups of persons who are compelled to leave their homes and to seek refuge, temporarily or permanently, within their country or abroad, because of a deterioration of their living conditions and welfare, or a threat to their safety, which are attributable in substantial part to sudden or progressive climate-related change in the environment.”

This report is not an invitation to reopen a debate on terminology to refer to those displaced by climate change, nor is it a suggestion that the 1951 Geneva Convention Relating to the Status of Refugees should be renegotiated. Rather, we are seeking to expose the climate catastrophe unfolding in the Horn of Africa and its impacts on patterns of displacement in the region; to highlight existing protection gaps in our international legal system; and to contribute to urgently needed solutions to meet the needs of communities displaced by the climate crisis. By using the term “climate refugee”, EJF is guided by fundamental principles of humanitarian protection and justice: irrespective of debates over terminology, climate refugees are victims of anthropogenic climate change, needing and deserving assistance as well as the full protection and effective implementation of all human rights.

A crisis today, a crisis tomorrow: figures and projections of climate displacement

Discussions around the nexus between environment and mobility have been evolving since at least the 1980s,²⁵ but the acceleration of the climate crisis has brought increased urgency to defining and protecting the status of a specific class of environmentally displaced people — climate refugees.²⁶ According to the UNEP's 2023 Emissions Gap report, there is currently no credible pathway to 1.5°C in place, and existing commitments to reduce greenhouse gas emissions still put our planet on a path to around a 2.5–2.9°C increase this century.²⁷ One study predicted that this level of global heating could translate to around one-third of the global population living outside of the historically habitable temperature niche for the human species²⁸ — a significant proportion of these people would be forced to flee their homes in order to survive. The World Bank has predicted that by 2050, the climate crisis may cause as many as 216 million people to be internally displaced across Latin America, North Africa, Sub-saharan Africa, Eastern Europe and Central Asia, South Asia, and East Asia and the Pacific.²⁹

It is important to caveat all projections of climate refugee numbers: all models produced thus far rely on complex extrapolations based on economic theories. One of the major gaps in designing and delivering effective protections to climate refugees is the lack of sufficient data on the scale of climate displacement, mobility and adaptation strategies, or outcomes once arrived at their location of shelter.³⁰ What is clear is that a significant number of people will need specifically designed protections as a result of displacement caused by the climate crisis. The purpose of modelling displacement figures is not to induce security-motivated panic or provide ammunition to those who stoke fear of migration as a political tool. By estimating potential flows of climate refugees, we are illustrating the scale of human suffering that the climate crisis will trigger, and making an urgent case for protective action across both mitigation and adaptation policies, and specifically for including support to climate refugees.



“We are just waiting for the rain”: drought and devastation in the Horn of Africa

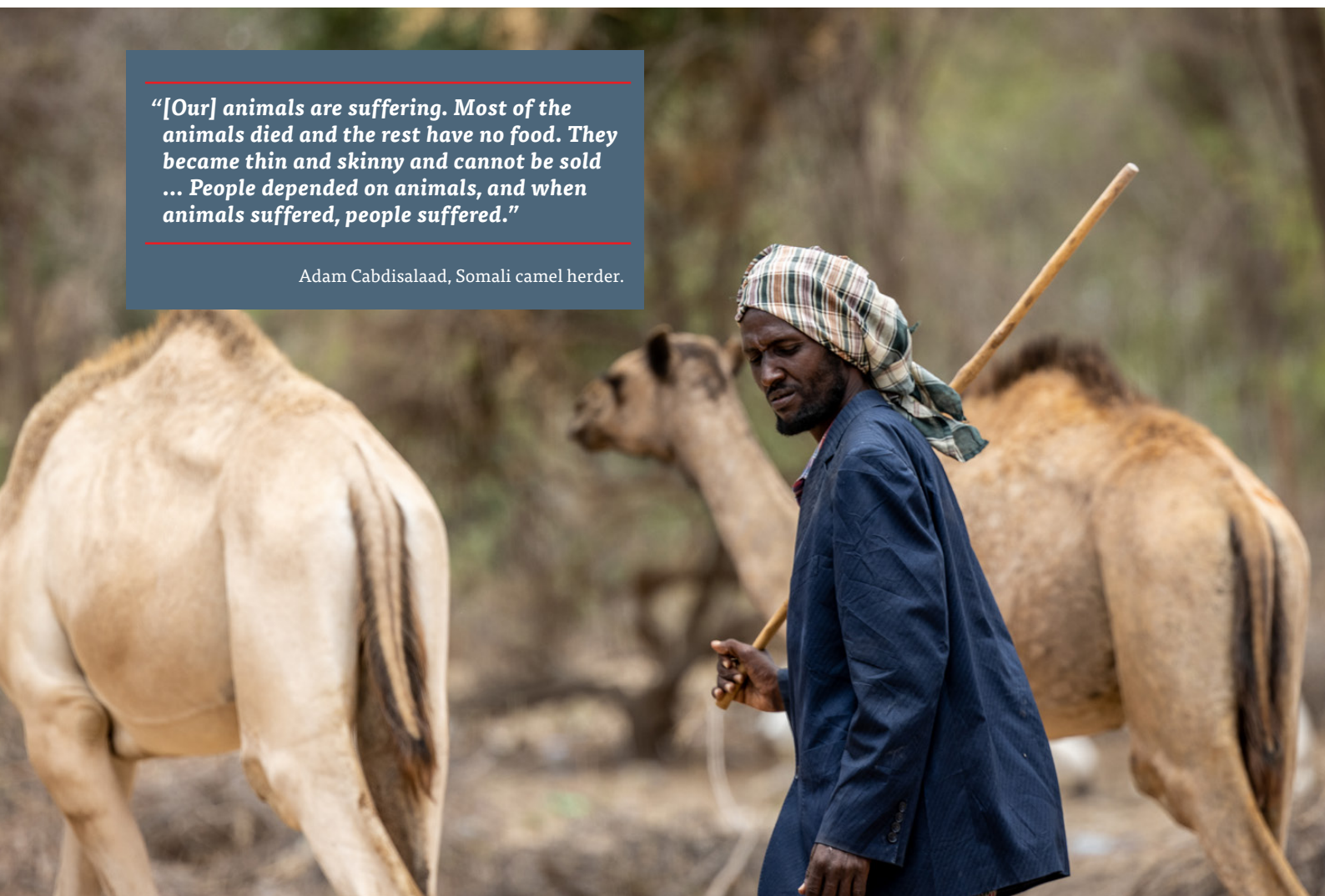
The Horn of Africa region in East Africa encompasses Ethiopia, Eritrea, Djibouti, Somalia, and more broadly parts of Kenya, Sudan and South Sudan. The region experiences a range of climates, including hot desert, semi-arid, tropical, as well as temperate.³¹ A high proportion of the region’s population are farmers and pastoralists — people who are especially vulnerable to the impacts of the climate crisis yet contribute very little to global emissions. As the region is characterised by low levels of economic diversification, wealth and government infrastructure, drought is more likely to lead to famine, especially in circumstances where existing conflict prevents the delivery of effective relief services.³² The Sixth IPCC Assessment recognised with “high confidence” the clear climate injustice by which “Africa is one of the lowest contributors to greenhouse gas emissions causing climate change, yet key development sectors have already experienced widespread losses and damages attributable to human-induced climate change, including biodiversity loss, water shortages, reduced food production, loss of lives and reduced economic growth.”³³

Somalia in particular is one of the region’s most vulnerable to global heating. Somalia is generally arid and semi-arid with a mean annual temperature close to 30°C, and two rainfall seasons,³⁴ which are critical to sustain its largely agro-pastoralist economy in which livestock alone generally accounts for around 40% of GDP.³⁵ Around 69% of Somalia’s population are estimated to live below the poverty line.³⁶ In 2021, Somalia was ranked the world’s most vulnerable country (out of 185 countries studied) based on a measure of exposure, sensitivity and ability to adapt to the negative impacts of climate change.³⁷ All Horn of Africa countries (excluding Djibouti) ranked in the top 22% of vulnerable countries.³⁸

As one of the world’s most vulnerable regions to global heating, the Horn of Africa has previously experienced climate disasters which have spurred widespread displacement. In 2011, 13 million people were affected across Somalia, Ethiopia and Kenya by drought³⁹ when two consecutive rainy seasons failed in late 2010 and spring 2011, which at the time represented the driest period since 1995.⁴⁰ The worst affected were the region’s pastoralists and agro-pastoralists, whose livelihoods depend on regular rainfall and who lost their farms and their livestock over the extended period without rain.

“[Our] animals are suffering. Most of the animals died and the rest have no food. They became thin and skinny and cannot be sold ... People depended on animals, and when animals suffered, people suffered.”

Adam Cabdisalaad, Somali camel herder.





“The farms dried out and the cattle died off due to famine. We had 40 goats – all of them have died.”

Fahia Abdullahi, Somali climate refugee, arrived in Dadaab Refugee Complex in 2022.

Armed conflict across the region further compounded chronic ecological and economic vulnerability, which escalated the crisis and limited people’s survival and recovery choices, illustrating the devastating nature of global heating as a threat multiplier. In Somalia, an estimated 253,000 people fled as refugees to Kenya and Ethiopia, while 167,000 became internally displaced mostly in and around the capital of Mogadishu.⁴¹ Children were especially vulnerable, with the UN reporting increased rates of malnutrition and a spike in school dropouts.⁴² Experts have determined that although the natural climate phenomenon known as La Niña is strongly linked to the failure of the first rainy season in late 2010, human influence increased the probability of a rainy season being as dry as, or even drier, as that which followed in 2011 and caused famine across the Horn of Africa.⁴³ This attribution study demonstrates how global heating magnifies threats and stressors into full-blown disasters, hammering the world’s most vulnerable populations.

The most recent drought in the Horn of Africa has been even more severe than the devastation caused by the 2011 drought. At the peak of the drought in May 2023, over 23.5 million people were suffering high levels of acute food insecurity in the region, and at least 31.9 million people were in urgent need of life-saving assistance, including 8.25 million in Somalia — almost half the country’s population — and 6.4 million in Kenya.⁴⁴ In Somalia alone, 43,000 people are estimated to have died due to the drought, with half the deaths among children under five years old.⁴⁵ Over 13.2 million livestock died due to drought, including more than 3.8 million in Somalia, leaving at least 1.4 million children under five without the customary daily cup of milk.⁴⁶

"This current drought is much worse than the previous one ... During the first drought, we had livestock ... Now, we don't have that."

Hassan Noallim Adan, Somali climate refugee, first arrived in Dadaab Refugee Complex in 2011, repatriated, and forced to return to Dadaab.



Stories from the frontlines of the climate crisis

Hassan Noallim Adan, a father heading a family of ten, has been displaced twice to Dadaab. His family first fled the drought in 2010, and then opted for voluntary repatriation after five years in the camp. They returned to Somalia and restarted farming their land and built up a new herd, until the recent drought killed all the livestock and multiple harvests in a row failed, and they were forced to flee once again. Hassan had to walk with his family for 18 days back to Dadaab. He told EJF:

"We loved our country and we wanted to stay. But suffering, droughts and hardships made us flee our country."



Hassan and three of his sons in front of their makeshift shelter. Hassan's family was forced to flee drought and seek support in Dadaab Refugee Complex for the second time. Ifo sub-camp, Dadaab Refugee Complex, September 2022.

The IPCC states that “in many regions, the frequency and/or severity of floods, extreme storms and droughts is projected to increase in coming decades, especially under high emissions scenarios, raising future risk of displacement in the most exposed areas”.

Climate modelling reveals that as a conservative estimate, events like the drought that unfolded in the Horn of Africa are 100 times more likely due to human-induced climate change, and suggests that the low rainfall experienced by the region would not have led to drought in a world that had been 1.2°C cooler.⁴⁷

“This is the worst drought, the driest it’s ever been in 40 years. So, we are entering a whole new phase in climate change.”

Michael Dunford, World Food Programme’s
Regional Director for East Africa

The IPCC states that “in many regions, the frequency and/or severity of floods, extreme storms and droughts is projected to increase in coming decades, especially under high emissions scenarios, raising future risk of displacement in the most exposed areas”, and lends support to the case for improved protection and governance of climate-displaced populations by asserting that “future migration and displacement patterns in a changing climate will depend not only on the physical impacts of climate change, but also on future policies and planning at all scales of governance.”⁴⁸ One recent study used climate modelling techniques to further investigate the drought-linked displacement under various degrees of global heating: it found that under an emissions scenario aligned with the Paris Agreement, drought-induced displacement could increase by 200% from current levels, and up to almost 500% under a business-as-usual worst-case scenario.⁴⁹ As the arid and semi-arid regions of the Horn of Africa will get increasingly drier under each degree of heating,⁵⁰ this predicts a dangerous future in which the number of drought-displaced communities in the region will increase without urgent action to reduce emissions.

While the long-awaited arrival of rain in 2023 has provided relief to some in the region, it has also brought new devastation, with excess rains causing flash flooding. Food insecurity is far from over as torrential rain and flooding destroy crops and disrupt the delivery of supplies.

“Dadaab my country, my home”: profile of a refugee camp on the frontlines of the climate crisis

The first refugee camp in Dadaab, Kenya, was established in 1991 to provide shelter to Somali refugees fleeing civil war. Many of these first refugees remain in the camps which make up Dadaab Refugee Complex today and have seen children and grandchildren born into the camp — caught in a long-term encampment situation designed for temporary shelter, these second- and third-generation refugees have never known a life outside of Dadaab. The camp was originally designed to accommodate around 90,000 people,⁵¹ but today it has a population over three and a half times this size. Dadaab is more than just a humanitarian hub. It features buzzing markets, dozens of schools and places of worship, and by one 2010 estimate, is home to at least 5,000 businesses ranging from petty traders to larger outfits trading across the border with Somalia and throughout Kenya.⁵²

To date, the population of Dadaab Refugee Complex remains almost entirely of Somali origin, but the factors pushing new refugees into the camp have evolved over time. Subsequent waves of refugees have peaked corresponding to spikes in violence, the rise of Islamist extremist terrorist group Al-Shabaab, and drought conditions which threatened pastoralist and agricultural livelihoods and stoked conflicts over resources, including the 2011 drought which drove around 130,000 people to seek refuge in the camp.⁵³

“I lived the difficult life of a refugee and worked hard jobs ... Farming has brought us good income [but] in the last three years, many droughts have come. The farm’s production has decreased and the water has decreased ... everything we had was destroyed”

Magacaygu waa Cabdi Mohamed Aden, farmer and refugee,
arrived in Dadaab Refugee Complex in 1992.

The camp experienced another wave of refugee arrivals in 2022–2023, causing the camp population to swell from about 234,000 refugees in July 2022⁵⁴ to more than 320,000 people in March 2023.⁵⁵



“We used to get maize [from our farm]. But now the frequency of droughts has increased, so there is nothing to be found ... The crops failed, and when the summer came, the harvesting failed. So, we went to where the people were going [and] came here.”

Maryam Mohamoud Hassan, Somali climate refugee, arrived in Dadaab in 2022.

As large numbers of new climate refugees arrived in the camp, increased pressure was put on already overstretched camp facilities and resources. Lack of space and suitable shelters forces overcrowding as newly arrived refugees move in with relatives, while those who have no other option have to rely on makeshift shelters on the outskirts of the camp where water and sanitation facilities are grossly inadequate or completely non-existent.⁵⁶

“You see where we live, we have nothing. The luckiest people here live in a plastic tent. The others have it worse.”

Mohamed Ahmed Abdullahi, Somali climate refugee, arrived in Dadaab in 2022 with his wife, eight children and his aged parents.

"Too little water, too much water": drought and floods wreak devastation

In 2022, food insecurity remained at crisis levels in Kenya’s Garissa county,⁵⁷ where Dadaab is located, impacting camp residents and host communities alike. The International Rescue Committee reported a 147% increase in severe acute malnutrition cases between August to November 2022 in Dadaab,⁵⁸ especially among the newest arrivals. In addition to the strain on water and food supplies, overcrowding and lack of sanitation facilities create a dangerous cocktail for potentially deadly infectious diseases, with cholera and measles outbreaks reported at the end of 2022.⁵⁹



Heavy rains in late 2023 caused the few existing latrines to overflow, spreading water-borne diseases, and made roads impassable, preventing urgently needed relief from being delivered to Dadaab.⁶⁰ According to MSF, residents are now facing “a serious health risk” as many are left without shelter, clean drinking water or food supplies.⁶¹

The wave of new arrivals prompted the Government of Kenya to announce the reopening of two sub-camps in Dadaab to absorb the influx and manage pressures on existing infrastructure.⁶² These two sub-camps were built in 2011 to house the first wave of climate refugees, but had been closed as part of a repatriation

drive. The UN and its partners sought to rapidly scale up support services, but were and remain constrained by lack of funding. As of May 2023, only 23.5% of funding requirements for the Horn of Africa drought response had been met.⁶³ In 2024, funding shortfalls to the UN’s World Food Programme have led to severe cuts to food vouchers and rations for Dadaab residents, creating widespread hunger and a potential rise in malnutrition across all age groups.⁶⁴ This example also illustrates how the burden of protecting climate refugees falls disproportionately on developing countries, which historically contributed very little to the climate crisis, and often lack the resources for protecting those displaced by climate change.





Magacaygu waa Cabdi Mohamed Aden, refugee farmer. Hagadera sub-camp, Dadaab Refugee Complex, September 2022.

Stories from the frontlines of the climate crisis

Magacaygu waa Cabdi Mohamed Aden, who goes by the nickname of Pili Pili (or ‘hot pepper’ in Swahili), is a farmer and long-term refugee resident of Dadaab. Pili Pili arrived in Dadaab as a teenager in 1992, fleeing the civil war in Somalia with his brother and his grandfather. Having grown up on a farm in Somalia and watching his parents working the land before their deaths during the war, Pili Pili dreamed of starting his own farm one day to continue in his family’s footsteps. After many years in the camp, he was able to secure support from several UN agencies and non-profits to establish a farm in Hagadera sub-camp, which produced fruits, vegetables, goats, chickens and eggs to be sold in the camp markets. At its peak, the farm employed 12 workers and supported their families. However, the recent drought posed many of the same challenges to Pili Pili’s farm as across the border in Somalia. Without rainfall and with his access to irrigation rationed as the aid agencies’ budgets were increasingly stretched, only around a quarter of the farm’s arable land could be cultivated, and many of the crops he used to grow were no longer viable. Pili Pili told EJF:

“In the last three years, everything we had was destroyed ... Before the drought, my hope was that I would be here for the rest of my life since I came to this refugee camp when I was young. I have a family and my children go to school here ... I decided to have this farm and spend the rest of my life here, I [dreamed of getting] integration, life and residence in [Kenya]. We had our hopes high, but then the drought came and it ruined our lives. We have nowhere else to go.”



Pili Pili’s farm only produced from a fraction of its land due to water shortages. The drought threatened farming livelihoods, as farmers struggled to find sufficient water for their crops and livestock. Hagadera sub-camp, Dadaab Refugee Complex, September 2022.

The case of long-term refugees in Dadaab and the recurring waves of drought-displaced families provides a poignant example of the multitude of risks faced by climate refugees, and how the climate crisis magnifies and intersects with other threats such as armed conflict and ethnic- and gender-based violence and associated human rights violations. Climate change can generate or exacerbate conflict over land and natural resources, fuelling violence and persecution against politically marginalised groups in a context of weak or failed governance.⁶⁵ The prevailing context of violence in Somalia and the flow of refugees fleeing the country are a reminder of the severe social and political risks associated with climate change. Even once climate refugees reach the relative safety of Dadaab Refugee Complex, the reality is that many will never leave the camp as the climate crisis and associated conflicts render life at home impossible. Instead of returning home, many will live out their lives in what has been described as an “open-air prison” by long-term refugee residents.⁶⁶ Multigenerational encampment is not a just or sustainable solution for climate-displaced people whose homes are no longer safe or livable.

“The basis of human life is water ... but people [here] don’t have water. And it seems like the world is tired of the refugees and they don’t care as much as before ... The number of refugees have multiplied, and they are coming constantly, [but] they are not helped as people were helped in [previous years]”

Anab Geedi Geedi Mohammed, Ifo Youth Association
Chairwoman and refugee, arrived in Dadaab Refugee
Complex in 1992.

Existing legal and institutional frameworks are failing to provide durable solutions to displaced Somali refugees fleeing a constellation of climate impacts, violence and human rights violations, laying bare a protection gap which requires urgent action.

“So the world turned away from these people”: the climate refugee protection gap

There is currently no dedicated legal framework to protect climate refugees, and existing instruments and mechanisms are inadequate to address the protection needs of climate refugees.⁶⁷ As climate change intensifies, causing humanitarian crises across the world, those most vulnerable will be left without adequate protection, risking the erosion of human rights achievements and the failure of the 2030 Agenda for Sustainable Development.

International refugee law, as codified by the 1951 Geneva Convention Relating to the Status of Refugees and its 1967 Protocol, is not designed to provide protection to those displaced by the climate crisis. It only applies to persons who can demonstrate “a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion”.⁶⁸ In the particular circumstances where climate change fuels violence and persecution against vulnerable groups and causes mass displacement, such as in Somalia, displaced persons may be eligible for *prima facie* refugee status based on criteria developed by the UNHCR,⁶⁹ and therefore should, at least in theory, benefit from some protection under international law. However, most climate refugees elsewhere in the world cannot rely on the narrow definition of the Geneva Convention, and are therefore not eligible for protection under international refugee law.

Other legal or soft-law instruments which govern displacement — such as the 1954 Convention Relating to the Status of Stateless Persons, the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Their Families, the 1998 Guiding Principles on Internal Displacement, the 2018 Global Compact on Migration and the 2018 Global Compact on Refugees — also fail to provide adequate protection for climate refugees due to issues of applicability or enforceability.

Finally, while international and regional human rights instruments are supposed to apply to all persons within the jurisdiction of states parties, irrespective of nationality,⁷⁰ they were not designed to address the specific protection needs of climate refugees and fail to provide viable and durable solutions for climate-induced displacement. Moreover, human rights instruments are not uniformly ratified and most are notably difficult to enforce, with an often poor record of compliance.

“No one knows about the refugees who come now ... There are many [new arrivals] in need in this refugee camp, they don’t have toilets, shelter, health care, water, or education. We ask the world to pay attention to this suffering, and we ask that human rights be protected.”

Siyaad Ali Gadhlow, camp leader and refugee, arrived in Dadaab Refugee Complex in 2011.

Stories from the frontlines of the climate crisis

Wiilo Ibrahim and **Iasha Abukar Hassan** are both single mothers and unregistered Somali refugees who live on the outskirts of the Dadaab Refugee Complex, with no access to water, food, toilets or healthcare. They both came here after the crops on their farm had failed for several years. Iasha told EJF ***“We would cultivate the land then the crops failed due to the drought and lack of rainwater. We ran away from drought, we had nothing to eat, our children would die of starvation”***.

Displaced women face immense risks in relocation sites, due to unsafe living conditions and systemic discrimination. Wiilo told EJF that she and other girls must stay alert at night, as they are at risk of being robbed or sexually assaulted. Wiilo told EJF about their fears of violence in the camp as they try to provide for their children, and about how some men had ***“chased [them] away [from the woods]. Some [other] girls were beaten up badly.”***



Newly arrived climate refugees Wiilo and Iasha standing outside their tent with their youngest children. Ifo sub-camp, Dadaab Refugee Complex, September 2022.



As the existing legal framework fails to meet the unique protection needs of those displaced by the climate crisis, new effective, durable and just solutions are urgently needed. However, opening up the 1951 Geneva Convention for renegotiation to widen its scope would present an unacceptable risk of undermining existing protection mechanisms. Therefore, it is critical that a new legal framework for the protection of climate refugees be created entirely outside of the scope of the 1951 Convention.

Such a legal framework is required to give effect to the universal human right to a clean, healthy and sustainable environment recognised by the UN General Assembly and the Human Rights Council, which mandates measures to protect “those who are particularly vulnerable to environmental degradation”.⁷¹

Conclusion and recommendations

The international legal framework as it stands is not fit for the humanitarian challenge of protecting climate refugees. The stories of climate-induced displacement told by refugees from Dadaab, presented in this report, are just one example of how the climate crisis is now driving families from their homes, threatening social cohesion and eroding human rights globally. If emissions continue to rise unchecked, more people across the world will be displaced: with each fraction of a degree that the planet heats, climate disasters will occur more frequently and with greater intensity, slow-onset impacts will build up more rapidly, and more lives and livelihoods will be threatened.⁷²

The 28th Conference of the Parties to the Paris Agreement, taking stock of action urgently needed to tackle the climate crisis and “noting with alarm and serious concern [that] those who have contributed the least to climate change [are] most vulnerable to the impacts”, called on states “to improve [...] efforts pertaining to disaster risk reduction, humanitarian assistance, rehabilitation, recovery and reconstruction, and displacement, planned relocation and migration, in the context of climate change impacts”, and to respect and consider their human rights obligations, in particular the right to a clean, healthy and sustainable environment, when taking action to address climate change.⁷³

EJF calls on the international community to give effect to the COP28 commitments and urgently work together to address climate-induced displacement, by mitigating global heating through rapidly decarbonising the global economy, and developing adequate and effective protections for those most impacted by the climate crisis, first and foremost climate refugees. All climate actions and agreements must address the issue of climate adaptation and recognise climate-induced displacement as a form of adaptation in need of international support and action. These actions must include:

- The development of a new legal framework for the protection of climate refugees. Such a framework must take place entirely outside of the scope of the 1951 Convention Relating to the Status of Refugees, in order to preserve the integrity of existing refugee protection mechanisms.
- Effective implementation of states’ obligations under applicable international and regional human rights instruments to respect, protect and fulfil the human rights of all persons subject to their jurisdiction, irrespective of nationality.
- Recognition and effective implementation of the universal human right to a clean, healthy and sustainable environment.
- Full implementation of the Paris Agreement to keep global temperature rise to 1.5°C above pre-industrial levels.
- Delivery of and scaling up of international climate finance commitments to fund mitigation, adaptation, loss and damage, disaster risk reduction and resilience programmes (including emergency support) which deliver dignified, durable and just solutions for people most impacted by the climate crisis.
- Investment in new data collection and monitoring systems to better understand, predict and support the needs of climate refugees.
- Commitment to inclusive deliberations and negotiations for mitigation and adaptation to the climate crisis.



Khaira Hassan Mohammed has lived in the camp since the 2011 famine, and is now 101 years old and in need of medical care. She had 6 children but she has buried them all. When asked about what she expects from the future, she said:

“Don’t ask me about my life, I don’t receive anything, nobody helps me.”

References

- 1 Data from the International Displacement Monitoring Centre's Global Internal Displacement Database, <https://www.internal-displacement.org/database/displacement-data> (accessed 26 June 2024).
- 2 Hoffman, R., Dimitrova, A., Muttarak, R., Crespo Cuaresma, J., & Peisker, J. (2020) 'A meta-analysis of country-level studies on environmental change and migration', *Nature Climate Change*, 10, pp. 904–912, <https://doi.org/10.1038/s41558-020-0898-6>.
- 3 IPC (2023) *IPC Acute Food Insecurity and Acute Malnutrition Analysis August–December 2023*, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Somalia_Acute_Food_Insecurity_Malnutrition_Aug_Dec2023_Report.pdf; IPC (2022) *Nearly 8.3 million people across Somalia face Crisis (IPC Phase 3) or worse acute food insecurity outcomes*, [https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/Multi-Partner-Technical-Release-on-Updated-IPC-Analysis-for-Somalia-fo-October-2022-to-June-2023-Final-\(English\)-13-Dec-2022.pdf](https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/Multi-Partner-Technical-Release-on-Updated-IPC-Analysis-for-Somalia-fo-October-2022-to-June-2023-Final-(English)-13-Dec-2022.pdf).
- 4 Reach & NRC (2022) *Actors, services and infrastructure mapping: Dadaab refugee complex, Garissa County, Kenya*, <https://reliefweb.int/report/kenya/actors-services-and-infrastructure-mapping-dadaab-refugee-complex-garissa-county-kenya-may-2022#:~:text=Attachments&text=Dadaab%20Refugee%20Complex%20is%20located,from%20Somalia%20resided%20in%20Dadaab>.
- 5 UNHCR (2023) 'Kenya's Dadaab camp swells with Somalis fleeing drought, conflict', <https://www.unhcr.org/news/kenyas-dadaab-camp-swells-somalis-fleeing-drought-conflict> (accessed 12 December 2023).
- 6 MSF (2023) 'Kenya: Flood-hit refugees in Dadaab in urgent need of aid', <https://reliefweb.int/report/kenya/kenya-flood-hit-refugees-dadaab-urgent-need-aid> (accessed 12 December 2023).
- 7 MSF (2023) 'Looming health catastrophe in Kenya's Dadaab refugee camps', <https://www.msf.org/looming-health-catastrophe-kenya%E2%80%99s-dadaab-refugee-camps> (accessed 12 December 2023).
- 8 UNHCR (2024) 'Heavy rainfall in East Africa forces thousands of refugees from their homes', <https://www.unhcr.org/uk/news/briefing-notes/heavy-rainfall-east-africa-forces-thousands-refugees-their-homes> (accessed 03 July 2024).
- 9 Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (2023) *Outcome of the first global stocktake, 13 December 2023*, Doc. no. FCCC/PA/CMA/2023/L.17, <https://unfccc.int/documents/636608>.
- 10 Islam, S. N. & Winkel, J. (2017) *Climate Change and Social Inequalities*, DESA working paper no. 152, Doc. no. ST/ESA/2017/DWP/152. New York: UN Department of Economic and Social Affairs, https://www.un.org/esa/desa/papers/2017/wp152_2017.pdf.
- 11 IPCC (2023) *Climate Change 2023: Synthesis Report, Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, <https://doi.org/10.59327/IPCC/AR6-9789291691647>.
- 12 McKinsey Global Institute (2020) *Climate risk and response: Physical hazards and socioeconomic impacts*, <https://www.mckinsey.com/capabilities/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts>.
- 13 Armstrong McKay, D. I., Staal, A., Abrams, J. F., Winkelmann, R. et al. (2022) 'Exceeding 1.5°C global warming could trigger multiple climate tipping points', *Science*, 377, eabn7950, <https://doi.org/10.1126/science.abn7950>; Lenton, T. M., Held, H., Kriegler, E., Hall, J. W. et al. (2008) 'Tipping elements in the Earth's climate system', *Proceedings of the National Academy of Sciences*, 105, pp. 1786–1793, <https://doi.org/10.1073/pnas.0705414105>.
- 14 IPC (2023) *IPC Acute Food Insecurity and Acute Malnutrition Analysis August–December 2023*, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Somalia_Acute_Food_Insecurity_Malnutrition_Aug_Dec2023_Report.pdf; IPC (2022) *Nearly 8.3 million people across Somalia face Crisis (IPC Phase 3) or worse acute food insecurity outcomes*, [https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/Multi-Partner-Technical-Release-on-Updated-IPC-Analysis-for-Somalia-fo-October-2022-to-June-2023-Final-\(English\)-13-Dec-2022.pdf](https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/Multi-Partner-Technical-Release-on-Updated-IPC-Analysis-for-Somalia-fo-October-2022-to-June-2023-Final-(English)-13-Dec-2022.pdf).
- 15 UNHCR (2023) 'Kenya's Dadaab camp swells with Somalis fleeing drought, conflict', <https://www.unhcr.org/news/kenyas-dadaab-camp-swells-somalis-fleeing-drought-conflict> (accessed 12 December 2023).
- 16 Federal Government of Somalia (2024) *Deyr Floods Somalia 2023: Rapid Post-Disaster Needs Assessment*, https://www.undp.org/sites/g/files/zskgke326/files/2024-06/somalia_deyrfloods_r-pdna_executive_summary_07062024.pdf.
- 17 UN OCHA (2023) *Kenya: Humanitarian impact of heavy rains and flooding – Flash Update no. 2 (20 November 2023)*, <https://www.unocha.org/publications/report/kenya/kenya-humanitarian-impact-heavy-rains-and-flooding-flash-update-2-20-november-2023>.
- 18 MSF (2023) 'Kenya: Flood-hit refugees in Dadaab in urgent need of aid', <https://reliefweb.int/report/kenya/kenya-flood-hit-refugees-dadaab-urgent-need-aid> (accessed 12 December 2023).
- 19 MSF (2023) 'Looming health catastrophe in Kenya's Dadaab refugee camps', <https://www.msf.org/looming-health-catastrophe-kenya%E2%80%99s-dadaab-refugee-camps> (accessed 12 December 2023).
- 20 UNHCR (2024) 'Heavy rainfall in East Africa forces thousands of refugees from their homes', <https://www.unhcr.org/uk/news/briefing-notes/heavy-rainfall-east-africa-forces-thousands-refugees-their-homes> (accessed 03 July 2024).
- 21 Danish Refugee Council (2024) 'Q&A on the flooding status of Dadaab Refugee Camp in Kenya', <https://pro.drc.ngo/resources/news/q-a-on-the-flooding-status-of-dadaab-refugee-camp-in-kenya/> (accessed 03 July 2024).
- 22 Calculated in tCO₂e based on Climate Watch, 'Historical GHG Emissions', https://www.climatewatchdata.org/ghg-emissions?breakBy=regions&calculation=PER_CAPITA&end_year=2019&gases=co2®ions=SOM%2CEUU§ors=total-including-lucf&start_year=1990.
- 23 CDP (2020) *CDP Africa Report: Benchmarking progress towards climate safe cities, states, and regions*, https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/023/original/CDP_Africa_Report_2020.pdf?158385467.
- 24 Vanhalla, L. & Calliari, E. (2022) 'Governing people on the move in a warming world: Framing climate change migration and the UNFCCC Task Force on Displacement', *Global Environmental Change*, 76, 102578, <https://doi.org/10.1016/j.gloenvcha.2022.102578>.
- 25 El-Hinnawi, E. (1985) *Environmental Refugees*. Nairobi: UN Environment Programme, <https://digitalibrary.un.org/record/121267?ln=en>.
- 26 Berchin, I. I., Valduga, I. B., Garcia, J. & de Andrade Guerra, J. B. S. O. (2017) 'Climate change and forced migrations: An effort towards recognizing climate refugees', *Geoforum*, 84, pp. 147–150, <https://doi.org/10.1016/j.geoforum.2017.06.022>; Apap, J. & Harju, S. J. (2023) *The concept of 'climate refugee': Towards a possible definition*. Brussels: European Parliamentary Research Service, [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2021\)698753](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2021)698753).
- 27 UNEP (2023) *Emissions Gap Report 2023: Broken Record – Temperatures hit new highs, yet world fails to cut emissions (again)*. Nairobi: UN Environment Programme, <https://doi.org/10.59117/20.500.11822/43922>.
- 28 Lenton, T., Xu, C., Abrams, J. et al. (2023) 'Quantifying the human cost of global warming', *Nature Sustainability*, 6, pp. 1237–1247, <https://doi.org/10.1038/s41893-023-01132-6>.
- 29 Clement, V., Kumari Rigaud, K., de Sherbinin, A., Jones, B. et al. (2021) *Groundswell Part 2: Acting on Internal Climate Migration*. Washington, DC: The World Bank, <https://openknowledge.worldbank.org/handle/10986/36248>.
- 30 Ghosh, R. J. & Orchiston, C. (2022) 'A systematic review of climate migration research: gaps in existing literature', *SN Social Sciences*, 2, 47, <https://doi.org/10.1007/s43545-022-00341-8>.
- 31 Richardson, K., Calow, R., Pichon, F., New, S. et al. (2022) *Climate risk report for the East Africa region*. London: Met Office, ODI, FCDO, <https://www.metoffice.gov.uk/services/government/international-development/east-africa-climate-risk-report>.
- 32 Randall, A. (n. d.) 'Unpacking climate change and the Horn of Africa crisis', *Climate Migration*, <https://climatemigration.org.uk/climate-change-horn-africa-crisis/> (accessed 11 December 2023).
- 33 IPCC (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press, <https://doi.org/10.1017/9781009325844>.
- 34 World Bank Climate Change Knowledge Portal, 'Somalia – Climatology', <https://climateknowledgeportal.worldbank.org/country/somalia/climate-data-historical#:~:text=Somalia%20is%20generally%20arid%20and,months%20of%20April%20through%20June> (accessed 12 December 2023).

- 35 Moody's Analytics, 'Somalia – Economic Indicators', <https://www.economy.com/somalia/indicators> (accessed 12 December 2023).
- 36 World Bank (2019) *Somali Poverty and Vulnerability Assessment: Findings from Wave 2 of the Somali High Frequency Survey*, Report no. AUS000407, <http://hdl.handle.net/10986/32323>.
- 37 Vulnerability score from ND-GAIN, 'ND-Gain Country Rankings', <https://gain.nd.edu/our-work/country-index/rankings/> (accessed 12 December 2023).
- 38 Ibid.
- 39 Slim, H. (2012) *IASC Real-Time Evaluation of the Humanitarian Response to the Horn of Africa Drought Crisis in Somalia, Ethiopia and Kenya*. New York: UN Inter Agency Standing Committee, https://www.unocha.org/sites/unocha/files/dms/Documents/RTE_HoA_SynthesisReport_FINAL.pdf.
- 40 UN OCHA (2011) *Eastern Africa Drought Humanitarian Report no. 3* (10 June 2011), <https://reliefweb.int/report/burundi/eastern-africa-drought-humanitarian-report-no-3>.
- 41 Slim, H. (2012) *IASC Real-Time Evaluation of the Humanitarian Response to the Horn of Africa Drought Crisis in Somalia, Ethiopia and Kenya*. New York: UN Inter Agency Standing Committee, https://www.unocha.org/sites/unocha/files/dms/Documents/RTE_HoA_SynthesisReport_FINAL.pdf.
- 42 UN OCHA (2011) *Eastern Africa Drought Humanitarian Report no. 3* (10 June 2011), <https://reliefweb.int/report/burundi/eastern-africa-drought-humanitarian-report-no-3>.
- 43 Lott, F. C., Christidis, N. & Stott, P. A. (2013) 'Can the 2011 East African drought be attributed to human induced climate change?', *Geophysical Research Letters*, 40, pp. 1177–1181, <https://doi.org/10.1002/grl.50235>.
- 44 UN OCHA (2023) *Horn of Africa Drought Regional Humanitarian Overview & Call to Action*, <https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-26-may-2023>.
- 45 London School of Hygiene and Tropical Medicine (2023) *From Insight to Action: Examining Mortality in Somalia*, <https://www.lshmt.ac.uk/newsevents/news/2023/somalia-drought-deaths-could-exceed-2017-18-levels-forecasts-show>.
- 46 UN OCHA (2023) *Horn of Africa Drought Regional Humanitarian Overview & Call to Action*, <https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-26-may-2023>.
- 47 Kimutai, J., Barnes, C., Zachariah, M. et al (2023) *Human-induced climate change increased drought severity in Horn of Africa*, The Grantham Institute, Imperial College London, <https://doi.org/10.25561/103482>.
- 48 IPCC (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press, <https://doi.org/10.1017/9781009325844>.
- 49 Smirnov, O., Lahav, G., Orbell, J., Zhang, M. et al. (2022) 'Climate Change, Drought, and Potential Environmental Migration Flows Under Different Policy Scenarios', *International Migration Review*, 57, pp. 36–67, <https://doi.org/10.1177/01979183221079850>.
- 50 Haile, G. G., Tang, Q., Hosseini Moghari, S.-M., Liu, X. et al. (2020) 'Projected impacts of climate change on drought patterns over East Africa', *Earth's Future*, 8, e2020EF001502, <https://doi.org/10.1029/2020EF001502>.
- 51 UNHCR (2012), 'Dadaab - World's biggest refugee camp 20 years old', <https://www.unhcr.org/news/stories/dadaab-worlds-biggest-refugee-camp-20-years-old> (accessed 12 December 2023).
- 52 Talukder, N., Al Mahmud Shogag, A., Haque, E., Hossain, I. et al. (2021) *Economic opportunities for refugees: Lessons from five host countries*. Dhaka: Population Council, https://knowledgecommons.popcouncil.org/cgi/viewcontent.cgi?article=2585&context=departme nts_sbsr-pgy.
- 53 UNHCR (n. d.) 'Dadaab Refugee Complex', <https://www.unhcr.org/ke/dadaab-refugee-complex> (accessed 12 December 2023).
- 54 Reach & NRC (2022) *Actors, services and infrastructure mapping: Dadaab refugee complex, Garissa County, Kenya*, <https://reliefweb.int/report/kenya/actors-services-and-infrastructure-mapping-dadaab-refugee-complex-garissa-county-kenya-may-2022#:~:text=Attachments&text=Dadaab%20Refugee%20compl ex%20is%20located,from%20Somalia%20resided%20in%20Dadaab>.
- 55 UNHCR (2023), 'Kenya's Dadaab camp swells with Somalis fleeing drought, conflict', <https://www.unhcr.org/news/kenyas-dadaab-camp-swells-somalis-fleeing-drought-conflict> (accessed 12 December 2023).
- 56 UNHCR (2022) 'Drought, conflict force 80,000 Somalis to shelter in Kenya's Dadaab refugee camps', <https://www.unhcr.org/news/drought-and-conflict-force-80-000-flee-somalia-kenyas-dadaab-refugee-camps> (accessed 12 December 2023).
- 57 Data from the IPC Mapping Tool, <https://www.ipcinfo.org/>. The situation improved slightly in 2023.
- 58 IRC (2022) '55 fold increase in cholera cases and an outbreak of measles in Kenya's refugee camps strain health resources, warns IRC', <https://www.rescue.org/press-release/55-fold-increase-cholera-cases-and-outbreak-measles-kenyas-refugee-camps-strain> (accessed 12 December 2023).
- 59 Ibid.
- 60 MSF (2023) 'Kenya: Flood-hit refugees in Dadaab in urgent need of aid', <https://reliefweb.int/report/kenya/kenya-flood-hit-refugees-dadaab-urgent-need-aid> (accessed 12 December 2023).
- 61 Ibid.
- 62 Ombati, C. (2023), 'Why Kenya reopened two refugee camps in Dadaab', *The Star*, 11 January 2023, <https://www.the-star.co.ke/news/2023-01-11-why-kenya-re-opened-two-refugee-camps-in-dadaab/>.
- 63 UN OCHA (2023) *Horn of Africa Drought Regional Humanitarian Overview & Call to Action*, <https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-26-may-2023>.
- 64 Anyadike, O. (2024) 'Dadaab voices: Despair as refugee food rations in Kenya slashed by 60%', *The New Humanitarian*, 13 June 2024, <https://www.thenewhumanitarian.org/news-feature/2024/06/13/dadaab-voices-despair-refugee-food-rations-kenya-cut-60> (accessed 04 July 2024).
- 65 Raleigh, C. (2010) 'Political Marginalization, Climate Change, and Conflict in African Sahel States', *International Studies Review*, 12, pp. 69–86, <https://doi.org/10.1111/j.1468-2486.2009.00913.x>;
- Njeri Njiru, B. (2012) 'Climate Change, Resource Competition, and Conflict amongst Pastoral Communities in Kenya' in Scheffran, J., Brzoska, M., Brauch, H. G., Link, P. M. et al. (eds.) *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability*. Berlin: Springer, pp. 513–527.
- 66 EJF, Interview with Fardowsa Gelle, Dadaab Refugee Complex, September 2022.
- 67 The shortcomings of the existing legal framework are analysed in EJF (2021) *No shelter from the storm: the urgent need to recognise and protect climate refugees*, https://ejf.foundation.org/resources/downloads/EJF_Climate-Refugee-Report_2021_final.pdf.
- 68 Convention Relating to the Status of Refugees, Article 1(2).
- 69 UNHCR (2015) Guidelines on International Protection no. 11: Prima Facie Recognition of Refugee Status, Doc. no. HCR/GIP/15/11, <https://emergency.unhcr.org/protection/legal-framework/prima-facie-approach-recognition-refugee-status>.
- 70 See, for the International Covenant on Civil and Political Rights: UN Human Rights Committee (1986) *General Comment no. 15: The Position of Aliens Under the Covenant*, <https://www.refworld.org/docid/45139acfc.html>.
- 71 UN General Assembly (2022), Resolution 76/300, 28 July 2022, Doc. no. A/RES/76/300, <https://digitallibrary.un.org/record/3983329?ln=en>; UN Human Rights Council (2021), Resolution 48/13, 8 October 2021, Doc. no. A/HRC/RES/48/13, <https://digitallibrary.un.org/record/3945636?ln=en>.
- 72 IPCC (2023) AR6 Synthesis Report: Climate Change 2023, <https://www.ipcc.ch/ar6-syr/>.
- 73 Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (2023), Outcome of the first global stocktake, 13 December 2023, Doc. no. FCCC/PA/CMA/2023/L.17, <https://unfccc.int/documents/636608>.



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