

# Understanding, anticipating and managing health risks linked to climate migration

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In this interview, François Gemenne discusses the specific challenges facing climate refugees, who are often wrongly differentiated from economic refugees. These migration movements are driven by sudden disasters (storms, floods, etc.) and incremental changes (rising sea levels, soil impoverishment, etc.) that are heightening the vulnerability of certain regions. Health problems, whether physical or mental, are omnipresent at every stage of these refugees' journeys – all the more when they are women – from the moment the disaster strikes to when they arrive in a new host country.

Constructing policies to adapt to and manage these new flows requires taking account of a number of subjective factors.

People's perceptions of the effects of climate change often have a greater influence on their choice to leave than objective reality. Health, associated with push factors that encourage people to leave, such as the appearance of new diseases, and pull factors that draw refugees toward certain locations, such as access to healthcare, is embedded in a complex web of factors behind the decision to leave. Given this reality, countries can decide to consider and organize these flows in terms of an adaptation strategy, instead of a failure to adapt. Migration can improve the health and security of refugees, but also more broadly the health and security of people in host and home countries.

## HOW WOULD YOU DESCRIBE THE PHENOMENON OF CLIMATE MIGRATION? WHAT IS THE NATURE AND SCALE OF DISPLACEMENTS CAUSED BY THIS PHENOMENON?

We tend to think of the phenomenon of climate migration as a future risk, leading us to neglect the realities of today. However, the scale of climate-related displacements is already striking: in 2023 alone there were over 26 million internal displacements caused by climate disasters, according to the IDMC.<sup>1</sup> This sizeable number considerably exceeds the number of people

fleeing conflict and other forms of violence. It is also necessary to add to this figure all those who become refugees as a result of slower and more gradual changes such as rising sea levels or soil impoverishment. None of the statistics account for this kind of displacements.

And yet we continue to treat climate change and the enforced migration it brings in its wake as distant threats, spatially as well as temporally. The fact is that a large proportion of economic refugees arriving in France today are actually climate refugees: very often these are people no longer able to earn enough from farming in their homeland because of transformations brought

<sup>1</sup> Internal Displacement Monitoring Centre. (2023). Global report on internal displacement 2023. IDMC. <https://www.internal-displacement.org/global-report/grid2023>.

about by climate change. Inevitably, climate and environmental factors intertwine with economic factors. This distinction between economic and climate reasons for migration is a wholly western, not to say artificial, construct since our wages and income in western countries do not depend on environmental conditions and unforeseen climate events.

Three regions of the world are particularly exposed to this phenomenon. Southeast Asia, the most densely populated region in the world, is also currently the most exposed to climate risks. In sub-Saharan Africa, where over half of all families rely on subsistence farming, the effects of climate change are leading to a massive rural exodus as people can no longer earn anything from their farming activities. Lastly, small island states, although home to fewer people, face submersion risks that threaten their very existence.

### WHY ARE CLIMATE REFUGEES PARTICULARLY VULNERABLE TO HEALTH PROBLEMS?

Climate change has profound repercussions for the health of climate refugees at every stage of their journeys. The impacts in their home countries are devastating: lack of water, soil impoverishment, destruction of healthcare infrastructure, etc. These factors have a direct impact on people's health, giving them no option but to migrate. Once they leave, their migration routes are littered with health obstacles. Migrants are forced to live in precarious conditions with limited access to water, food, basic care or decent housing. Refugee camps in particular speed up the propagation of infectious diseases due to poor sanitation conditions, lack of access to care, and overcrowding. Lastly, many refugee camps are located in parts of the world already heavily impacted by climate change. Iran, for example, hosts more migrants than any other country in the world but is one of the most water-stressed of all countries, afflicted by years of drought and appalling water management. Bangladesh hosts over 900,000 Rohingya refugees, but climate change has increased the devastation

*“Aside from the physical risks, the mental health of climate refugees remains very largely ignored. Following an extreme climate event, 25% to 50% of victims experience psychological troubles such as depression or post-traumatic stress disorder.”*

that cyclones and floods cause there.<sup>2</sup> Every year, torrential rains during the monsoon season trigger floods and landslides that threaten to sweep away the refugee camps.

Aside from the physical risks, the mental health of climate refugees remains very largely ignored. Following an extreme climate event, 25% to 50% of victims experience psychological troubles such as depression or post-traumatic stress disorder.<sup>3</sup> This adds to difficult journeys that can expose refugees to further stresses. Many refugees, women in particular, are victims of smuggling and trafficking networks, exposing them to violence, forced labor, and rape which impact their mental health and physical well-being. This is why some migrants arrive on Europe's shores with injuries or burns, or clear signs of sexual violence. Furthermore, climate refugees may also be subjected to intense pressure from their families to supply regular income once they arrive in a host country. These traumas underline the importance of appropriate health care, physical as much as mental.

### YOU MENTIONED THE SPECIFIC RISKS FACED BY WOMEN. WHAT IS IT THAT MAKES THEM MORE VULNERABLE DURING MIGRATION JOURNEYS? ARE THEY ALSO MORE RESTRICTED IN THEIR ABILITY TO DECIDE WHETHER TO STAY OR GO?

I am not always at ease with the way that women are said to be vulnerable. It is more that they are exposed to vulnerabilities that men do not face, which are above all the result of economic and social constructs. Climate disasters tend to exacerbate gender inequalities and fuel the factors driving violence. Women and children are, according to UN Women, often the first victims of natural disaster, fourteen times more likely to die than men.<sup>4</sup> They are also more likely to be victims of sex trafficking. Families who are left with no source of income following a climate disaster find themselves with no choice other than to sell their daughters to sex traffickers or force them into marriage so that they receive a dowry. In Bangladesh, for example, there is an established link between flooding that occurred between 1998 and 2004 and the rising number of child marriages recorded in the country.<sup>5</sup>

Eventually, migration is itself a gendered phenomenon. Men are more likely to migrate as it is easier for them to find work, or because migration is dangerous. But this discrepancy leads to a modification and imbalance in gender relations. Women who stay behind will have to shoulder more tasks and responsibilities.



2 UNHCR. (2024). UNHCR and partners rush support to Rohingya refugees affected by deadly landslides in Bangladesh. <https://www.unhcr.org/news/briefing-notes/unhcr-and-partners-rush-support-rohingya-refugees-affected-deadly-landslides>.

3 Centre Virchow-Villermé, Matlin, S. A., Depoux, A., Gemenne, F., Philibert, A., El Aouad, R., Kowalski, C., & Flahault, A. (2016). Climate change, human migration and health: Bridging from dialogue to action. Charité – Universitätsmedizin Berlin.

4 UN Women, Women's Resilience to Disasters – Concept Note. [https://wrd.unwomen.org/sites/default/files/2021-11/WRD%20Concept%20Note\\_November%202021\\_v8.pdf](https://wrd.unwomen.org/sites/default/files/2021-11/WRD%20Concept%20Note_November%202021_v8.pdf).

5 University of Cambridge, Extreme weather and climate events likely to drive increase in gender-based violence.

When women decide to migrate, sexual violence seems to be an almost inevitable part of their migration: two in three women experience sexual violence or rape, especially by smugglers. Enduring these acts of violence or rape becomes almost a bargaining counter, a condition for their passage. Sexual violence, just like in every other lawless or conflict zone, is an omnipresent feature of the migration journeys of climate refugees.



**YOU STUDY THE INFLUENCE OF CLIMATE CHANGE ON MIGRATION AS PART OF THE HABITABLE PROJECT.<sup>6</sup> ARE THE REASONS LEADING PEOPLE TO MIGRATE ROOTED IN THE CONSEQUENCES OF CLIMATE DISASTERS AND THE GRADUAL IMPACTS OF CLIMATE CHANGE ON HABITABILITY?**

When you study these questions it is important to take account of the points of view of displaced people themselves. To migrate is a decision made by people, meaning it is necessarily a reaction to subjective factors. In our studies we observe that people's perceptions of the impacts of climate change do not correspond to the reality of impacts observed in the field. The decision to migrate is primarily influenced by subjective perceptions: people leave because they feel that it rains less, when in reality it rains more. These perceptions will weigh more heavily than objective reality when deciding whether to migrate.

Habitability, or habitability thresholds, are defined using climate models that, for example, will judge certain regions no longer habitable once a threshold temperature is reached. Climate policies, where they exist, will therefore mostly rely on climate models arbitrarily setting habitability thresholds that fail to reflect reality or people's perceptions. This shows that it is crucial for climate policies to take into account subjective perceptions of the impacts of climate change reflecting, in particular, the cultural influence on risk perception.

<sup>6</sup> Habitable, a project coordinated by the Hugo observatory at the University of Liège, is the biggest research project in this field, with a 6.7-million euro budget and 22 partner organizations from 18 countries.

**HOW CAN THIS LEARNING BE TRANSLATED IN HEALTH TERMS?**

Perceptions on health when making choices about whether or not to migrate and move are an important dimension, with two distinct aspects. On the one hand, health itself should be considered, with all the problems associated with climate change such as communicable diseases and mortality, even excess mortality. There has been a fivefold increase in the number of climate disasters over the past 50 years, leading to a sharp rise in the number of deaths, 90% of them in developing countries.<sup>7</sup> On the other hand, we need to look at the question of access to health systems and adaptations to health infrastructure, which also influence migration decisions.

This phenomenon, in both its dimensions (health and access to healthcare), is a tangible reality. Senegal is one example, east Africa is another: in Kenya and Ethiopia, malaria is becoming entrenched in regions previously spared from the disease, such as the high plateaus of Ethiopia and northern Kenya, leading local people to move to areas free from the disease or equipped to treat them. The appearance or propagation of diseases leads to new migratory flows motivated by two types of factors: push, encouraging people to leave, and pull, attracting them toward certain areas, particularly regions where they believe they will enjoy better access to care and health provision. This means that in small island states like Tuvalu, many women decide to give birth in Australia or New Zealand where they will have access to better health facilities and their children will gain New Zealand or Australian citizenship, a form of life insurance in case their island were to disappear beneath the waves. Similar dynamics are operating within countries: we observe countless migration movements from rural areas to urban locations where people, lacking necessary resources to survive, hope to find a better quality of life and improved healthcare. This highlights how challenging it is to distinguish migration reasons, as they are deeply interconnected and mutually influence one another. No single factor on its own is sufficient to explain the choices made by migrating people. It is not only the quality of medical care that encourages migrants to settle in a country, but a combination of objective and subjective factors that together shape their decisions.

<sup>7</sup> United Nations. (2021). Climate and weather-related disasters surge five-fold over 50 years, but early warnings save lives. UN News. <https://news.un.org/en/story/2021/09/1098662>.



### DO MIGRATION FLOWS REPRESENT MAJOR HEALTH AND SECURITY CHALLENGES FOR STATES?

It all depends on how the migration flows are handled. There is no doubt that disorganized or unsupervised flows will create additional demographic pressures on already scarce resources, potentially leading to security risks. Many regions around the world that host migrants driven by climate change are located in developing countries where health resources are already inadequate for meeting the needs of local populations.

Indeed, certain states sometimes deliberately choose to restrict access to healthcare, lending credence to the implicit argument that access to healthcare can create an “attraction mechanism” (pull factor) for migrants. But no statistics, no data and no studies actually support this assertion.

*“Faced with the scale of climate displacements in the future, we need to plan ahead for reconfigurations in the world’s population, which will involve inter- and intra-state reorganizations.”*



On the other hand, some states manage to structure migration flows to make them part of genuine adaptation strategies that deliver benefits not only to the migrants, but to their home and destination regions too. Migration is often considered as a threat to security. A perception which overlooks the fact that migration improves the security of the people who migrate as well as for those who remain, since migrants may send extra funds that will help people in their home country adapt to climate change. It is a very strong dimension which is emerging today in the literature. Migration should not be viewed only as an adaptation *failure*, it is also an adaptation *strategy*. Colombia and Spain, for instance, have a migration labor agreement that allows people living in regions impacted by climate change to work in sectors facing labor shortage, such as horticulture and agriculture. In 2023, Spain alone accounted for close to a third of all new jobs created in the euro zone, with most of them filled by people coming from outside

the country. Similarly, New Zealand has labor agreements with most Pacific small island states, enabling people to work in agriculture in New Zealand for a few months, helping out at harvest time and earning money that will then help families to deal with their own poor harvests. These long-term integration strategies can be set up between or within countries to encourage seasonal and pendular migration. Working upstream, anticipating displacement routes remains crucial to protecting people who are or will be at risk of displacement, along the lines of the work carried out by the

Platform on Disaster Displacement<sup>8</sup> or the UNHCR’s strategic plan for climate action. There are in fact a very large number of programs tackling this issue.

### DO YOU OBSERVE SIGNIFICANT DISPARITIES IN TERMS OF PREPARATIONS FOR CLIMATE MIGRATION, PARTICULARLY REGARDING HEALTHCARE ARRANGEMENTS?

According to the 1951 Convention relating to the Status of Refugees, refugees should not receive different treatment from the host population regarding access to healthcare. Health is a basic human right for everybody, refugees included. However, the practical application of this principle varies considerably from one country to another. These disparities are often a result of the choices and political sensitivities of authorities and governments; for instance, is the ministry of health alert to these issues?

Given the scale of future climate-induced displacements, we need to plan ahead for reconfigurations in the world’s population, which will involve inter- and intra-state reorganizations. Partly because some parts of the world will become uninhabitable, but also because internal migration will have to be handled based on environmental factors, and this includes Europe. People forced to move every five years because of flooding will ultimately become very angry. When this happens, what will be the pleasant, safe, and comfortable places to live?

### IN CONCLUSION, ARE THERE ASPECTS OF CLIMATE-LED MIGRATION AND ITS IMPACTS ON HEALTH THAT REMAIN NEGLECTED OR INSUFFICIENTLY STUDIED?

The biggest challenge is that climate, migration, and health are dealt with separately. They are often treated in pairs: climate and migration on one side, migration and health on the other, but rarely all together. The challenge lies in connecting them together as a triangle. And there is still too little study of internal displacements within national borders. Currently, governments and the media are only interested in international migration. The two migratory phenomena, internal and international, are treated as if they were distinct movements, whereas the latter is often a continuation of the former.

<sup>8</sup> The Platform on Disaster Displacement is a state-led initiative that works with partners toward better protection for people displaced or at risk of displacement due to climate disasters.