# Climate refugees: A concrete understanding of one of the most pressing twenty-first century challenges

## **Rohit Roy Chowdhury**

Faculty Member, Centre for Corporate and Career Advancement, Sister Nivedita University, New Town, Kolkata, India. rcrcnn@gmail.com

#### **Structured Abstract:**

**Purpose:** The purpose of the paper is to find out the various nuances of the term "climate refugee" under the domain of environmental ethics and the problems arising.

**Methodology:** Qualitative method has been chosen for this study. Numerous research articles were evaluated to arrive at a concrete understanding of the term "climate refugee."

**Findings:** The term "climate refugee" lacks a universally accepted definition. Climate-induced displacement results because of environmental, social, economic, and political factors. The legal status and protection of climate refugees remain contentious due to the lack of universal consensus in the term's definition.

**Value:** The paper will raise a conversation about the ethical aspect of climate refugees so that it becomes a part of mainstream dialogue thereby leading to potential solutions.

**Keywords:** Climate, Refugee, Displacement, Poverty, Inequality.

Paper type: Definition Paper.

## Introduction

Climate change is a global crisis currently impacting billions of people. Starting from sealevel rise to global warming, the effects of it are visible all around us. Human beings over the years have altered the climate beyond repair and this has led to this being one of the most pressing issues of this century. Climate is a multifaceted aspect to reckon with. Without it no civilization would have been possible.

The earth is no stranger to climate swings. The planet has seen many ice ages. In fact, we passed through one such ice age just 10000 years back (Ahmed, 2017). Coincidentally it is the same time that human beings have started settling in large numbers. We started developments in agriculture which led to our static existence instead of moving around as hunters-gatherers.

Things were fine for a considerable number of years when around 300 years back everything changed forever (Ahmed, 2017). The growth of industrial revolution and the benefits brought about by fossil fuels changed the world as we know it. The modern civilizations with all its facets are possible today because of these two developments. Definitely life is much better now if we take into consideration the metrics like life expectancy at birth, overall health of people, literacy rate and other myriad range of developmental factors.

But all of these developments came at a price. The price is climate change. Every child going through formal educational systems these days are familiar with the terms like global warming, greenhouse effect, ozone layer depletion and so on. This points out towards a systematic rot in the overall way we perceive the climate. Unfortunately the effects of climate change are not restricted to textbooks. We can see visible impacts of it everywhere.

Displacement of people due to the effects of climate change like higher number of floods, stronger storms, hurricanes etc has led to a specific category of people known as climate refugees.

In 2022 alone more than 32 million were seen to be forcibly displaced due to climate change (Karaman, 2023). If the figures are taken from 2008 then the total will exceed 350 million. Such a cumulative toll on human beings is beyond comprehension and this is something to be reckoned with due sincerity.

The United Nation anticipates that by 2050, if no concrete steps are taken against climate change then the potential number of people displaced by climate change will exceed 1.2 billion (Karaman, 2023). That is more than 10 percent of the global population of that time. Naturally it is evident that this is a grave crime that is being committed against humanity.

The technical term with which these climate change migrants are addressed is known as climate refugees. However, there are many complications in using this term. Garnering a concrete understanding with the relevant causes and implications of it is pertinent. This article will try to figure out the various nuances associated with the term "Climate refugee" and try to define it.

### Literature review

"Climate refugee" is that term encompassing an increasingly relevant concept to the debate about climate change, yet, to the best of our knowledge, without a generally accepted

definition. This nuance is vital to keep in view at the beginning since it underlines not only the scholarly discourse but also the practical implications within lives touched by climate change-related displacement. Scholars, like Lee and Bautista (2021), have argued that this lack of definition instead creates multiple interpretative constructions of the phenomenon across disciplinary lines.

## **Divergent Definitions**

The rationale behind the divergent definitions is the divergent views on what one deems to be a "climate refugee." Some scholars have defined it as a narrow version, which should be reserved only and only for those persons compelled to leave their homes due to environmental factors such as natural disasters, sea-level rise, or prolonged droughts. Within this constrained view of climate displacement, scholars focus more on direct causation. On the other hand, this approach has a major draw-back: it oversimplifies a complex reality. Practical cases of displacement seldom manifest as the result of one factor that is independent of others.

According to Ahuja (2016), for instance, a Sub-Saharan African farmer feels that the land is becoming less fertile due to changes in the incidences of rainfall associated with climate change. Although a decline in agricultural productivity is basically the primary reason for migrating for the farmer, socio-economic factors like poverty, lack of access to education, and inadequate infrastructure decisively influence the decision to leave. These interrelated factors suggest that the concept of climate refugees cannot be labeled strictly due to their diversified nature of living experience.

Other scholars like Atapattu (2020) argue for a more liberal interpretation of the term, such that in fact it includes those displaced by a mix of socio-economic challenges and environmental factors. In this view, displacement is related to a package of vulnerability and change in the environment, not only environmental but also regional like the African sub-Saharan regions, where social and economic dynamics feature. In such a situation, displacement cuts across several aspects of life, such as governance and resource distribution, among others, and past inequalities.

# **Implications of Definition Ambiguity**

Climate refugees lack clear definition, which gives way to some very grave consequences in terms of legal recognition, protection, and policy response. On one hand, the absence of a definition which could be uniformly adopted by all avoids the legal framework that provides protection to displaced people. As of now, international refugee law focuses more on cases of persecution due to political, ethnic, and religious grounds, leaving many displaced people for climate-related factors stranded in limbo with their respective legal jurisdictions (Berchin et al., 2017). This model excludes the concept of climate refugees and leaves them without rights or protection under this system of law.

Further, definitional vagueness from this makes policy-making at national and international levels complicated. In the absence of a clearly identifiable population to assist governments and organizations find it problematic to come up with meaningful interventions. This problem is graver in developing countries where resources are already stretched too far, and policymakers might short-change long-term planning measures meant to offset climate displacement in favor of more urgent humanitarian demands.

# **Causes of Climate Displacement**

Multiple interlinked factors must be analyzed to determine the causes for climate-induced displacement. Climate displacement arises from the complex interaction among environmental, social, economic, and political factors. Temperature rise, increased levels of precipitation, and sea level changes reduce agricultural productivity, water supply, and habitability are some of the other factors. Environmental changes may present extreme circumstances that drive people and populations to move.

## **Environmental Factors**

Environmental factors are becoming more and more prominent in displacement across the world. For instance, an elevated sea level is imposing a threat on homes and livelihood in many coastline areas, compelling residents to shift their homes to inland areas. Then, regions of drips for extended periods will see a sharp decline in crop yield, which is a definite precursor to food insecurity and economic instability. The Intergovernmental Panel on Climate Change has warned that these trends are expected to worsen and displace millions in the years ahead (Dreher & Voyer, 2015).

Natural disasters, now more and more climate-change-influenced, also increasingly drive people out of their homes. That the event at hand might be a hurricane flood, or wildfire makes that immediate destruction more likely. The affected individual is also likely to face monumental challenges rebuilding his life as there simply are not social networks to draw on after disaster has passed.

### **Socio-Economic Vulnerabilities**

However, environmental factors alone are not enough to explain the nuances of climate-displaced people. There are socio-economic vulnerabilities such as poverty, inequality, and limited adaptive capacity that enhance vulnerability in situations of environmental change, and these impacts fall more forcefully on certain groups in the community. Low-resourced individuals are most likely to not withstand shocks from climate and most likely to migrate as a survival mechanism.

For example, in the majority of Africa, the conjunction of poverty and environmental degradation results in a vulnerability culture; rural subsistence farmers get entangled in protracted crises as climatic change demoralizes their livelihoods. In such a situation, one tends to realize a part of rural-urban migration where people run to cities in search of better opportunities to meet needs but get confronted by new elements of urban poverty, unemployment, and housing inadequacy (Faber & Schlegel, 2017).

According to Farbotko and Lazrus (2012), General historical and structural inequalities present in societies significantly determine the vulnerability of the individuals. Climate change impacts fall predominantly on marginalized groups, which are basically women, indigenous populations, and ethnic minorities, as they do not have access to many resources and decision-making capabilities or adaptive capacities. So, climate displacement cannot be analyzed purely in an environmental context; it has to be understood comprehensively in socio-economic and political contexts of displacement.

This further complicates the issue of climate-induced displacement as developed economies fail to meet their counterparts in other regions. Both transnational and intranational inequality becomes a governing force behind climate displacement. The resources and infrastructures to minimize or counteract climate impacts and populations affected are predominantly held in the hands of the world's rich nations, hence other poorer nations find it hard to respond to immediate effects of environmental change.

The inequality can take many forms (Merone and Tait, 2018). For instance, it expresses differences in preparedness during disasters or availability of technology, not to mention investments made on climate resilience. In the case of hurricanes, the developed country end

is better equipped with systems of emergency response as well as infrastructures that help protect people living in such a country. In contrast, the developing country will sometimes lack resources toward effective realization of disaster management, and its citizens will be more susceptible to displacement.

In this regard, the connection between climate change and inequality promotes vicious cycles of disadvantage in which vulnerable groups are increasingly more exposed to and vulnerable to risks in their adaptation to changing conditions. Such dynamics focus more on embedding equity into discussions around climate-induced displacement and the associated policy response as an important measure in protecting the most vulnerable peoples.

## Conceptualizations and Gaps in Understanding Climate-Induced Displacement

Despite the growing attention to climate-induced displacement, there is much still unknown about drivers of it, impacts it triggers, and dynamics of what drives its occurrence. There is a clear need to examine areas of intersection between environmental, social, and economic factors in migration decision-making processes and outcomes. "A more nuanced understanding of these dynamics will facilitate crafting effective interventions to meet the needs of displaced populations," suggests Behrman and Kent (2023).

There are also few empirical studies in evaluating measures for adaptation and mitigation to minimize displacement and safeguard affected populations. Along with several initiatives in building community resilience, the question still remains: will these measures, on their own, avoid the displacement of people? If based on selected successful examples, such policies and measures can effectively focus on priority needs and produce more effective results.

## The Requirement for Thorough Definitions

So, what is called for to disentangle the intricacies involved is therefore a definition that accounts for both environmental and socio-economic driving forces? It would be instrumental in making policies and legal frameworks all the more holistic so that all needs of the displaced populations are taken into account. It would even encourage interdisciplinary research on the complex nature of factors leading to climate displacement, it thus would offer a greater depth of understanding of the phenomena.

# Methodology

**Research Design:** This qualitative study is set on a mixed-methods approach about the use of document analysis and participatory observation to understand and define climate change. The broad scope of this investigation can capture the extensive understandings and conceptualizations of climate change through the workings of already existing texts and community interactions relevant to the topic, without necessarily using direct interviews. This would allow for the possibility of framing how climate change might be approached across different contexts, generating further insight into the complexities around the question of definition.

**Document Analysis:** The primary mode of data collection entailed an in-depth study of documents. The type of documents to be chosen is highly heterogeneous and encompasses:

- Scientific Literature: Scientifically-based articles from peer-reviewed journals, reports by Intergovernmental Panel on Climate Change, and climate assessments, which present scientific definitions and data.
- **Policy Documents:** Policies of national and local governments, climate action plans, and international agreements, such as the Paris Agreement, which present official definitions and strategies about climate change.
- **Media articles:** News reports, opinion pieces, and editorials that appear in newspapers, magazines, periodicals, and other media outlets as a record of public debate and collective thinking on climate change.
- **Community materials:** pamphlets, community meeting notes, and output from non-governmental organizations that convey local perceptions and responses to climate change.

These documents are sourced systematically from academic databases, government websites, media archives, and community organizations. Analysis has been done on identifying the themes, usage of language, and framing techniques in terms of defining climate change.

# **Data Analysis**

The data analysis procedure followed the following stages:

- **1. Familiarization:** The researcher read through all the documents that were collected to know the scope and depth of the information obtained in relation to the definitions of climate change.
- **2. Coding:** A thematic coding framework was developed to group data in themes and concepts continually repeated in the text. It encompasses open coding, which discovers emergent themes, and axial coding, through an examination of relationships between themes. Key categories included scientific definitions, socio-economic implications, policy frameworks, and public perceptions.

- **3. Theme Development:** The coded data were developed into more general themes that will reflect the different understandings of climate change. These include definitions that were contrasted between scientific and lay perspectives, as well as regional variations that varied according to local experiences.
- **4. Relevant Literature Review:** Thematic finding was deduced in relation to the existing literature on the definition of climate change and discourse. The research was to not only express the definitions but also the values and assumptions that were reflected in different documents.

## **Participatory Observation**

Apart from the document analysis, the activity also involved participatory observation by attending community forums and public events about climate change discussions, such as town hall meetings, community workshops, and rallies for climate action. This will enable one to see how, in the communal discourse, climate change is defined and therefore be able to capture the language held by all kinds of stakeholders and interactions among the members of the community.

Field notes were collected to note the observations, which would capture the group dynamics, catchphrases, and emotional tones in the discussions. These contextual inputs through field notes enriched the information gathered while analyzing the document.

#### **Ethical Consideration**

Ethics were an integral part of the study. All documents analyzed were public, and hence no confidential information was made public. In community settings, the researcher was allowed to attend and observe events with permission from the organizers and take notes while being candid about their purpose for this research.

### **Discussion**

**Impacts on Host Communities:** The influx of climate refugees poses a complex set of challenges for host communities, changing their social and economic topography significantly. With unrelenting rises in climate-induced displacement worldwide, there is a need to understand what happens to these affected communities so that proper responses can be fashioned and social cohesion enhanced.

**Strain on Scarce Resources:** Among the immediate effects of climate refugees on host communities, the strain on resources already scarce tops the list (Methmann & Oels, 2015). Besides the shortage of primary services, including health and education, many receiving sites are already resource-scarce, with limited clean water, arable land, and other

essential resources. Climate refugee influx would exacerbate these shortages, thus offering more competition for these fundamental resources. For instance, on land where water is scarce, the inflow of migrants might increase competition for the utilization of the same amount of water-the emotional tension within communities increases while their social relationships continue to deteriorate.

This can ignite conflicts between the host population and the refugees. For example, in sub-Saharan Africa, which has been affected by global warming in the form of increased drought levels and reduced agricultural output, the displacement people seeking farmable land may ignite communal conflicts among local farmers. Such clashes not only compromise food security but may also cause social estrangement, as settled communities feel their livelihoods and existence are being compromised.

Over-Extended Infrastructure: In many host communities, their infrastructure may be completely unprepared to sudden swings in population. Public services may get stretched beyond their limit, keeping the standards low and exclusionary for the native population as well as the migrants. For example, schools can become overcrowded, with negative consequences for the educational outcomes of children from both groups (Stanley et al., 2021). The healthcare facilities may not have the capacity to accommodate the great population, especially in areas with high rates of incidence of communicable diseases or existing health issues.

Climate refugees' inflow tends to stress the already existing conflicts over housing in urban settings. Most cities already face low numbers of housing stock and increasing rentals; more demand usually leads to informal settlers or slum-dwellers, where living conditions are usually very poor. This further affects the health and wellbeing of the refugees but also calls out local governments due to the inadequacies in infrastructure, which may be adding on to the burden and diverting much-needed resources to other relevant sectors.

**Economic Competition:** Livelihood competition is another big issue that the host communities face. Climate refugees usually arrive with very meager belongings, and with fewer job opportunities at their disposal, they will tend to compete with the locals in getting low-wage employment. This situation might lead to people thinking that these refugees are taking away employment opportunities from the host population, which in turn attracts more resentment and social division among the host populations. In many

instances, economic insecurity of the natives fuels anti-immigrant sentiments, complicating integration efforts (Ahmed, 2017).

There is another dimension in the economic contributions of refugees. In fact, as competition for jobs might be intense on the earlier side, refugees might bring skills, labor, and entrepreneurial spirit to the benefit of the host community. Some years back, refugees revived some local economies through new businesses and contribution to labor force in some areas. Thus, there should be recognition and support for these contributions toward positive relations between refugees and host populations.

Cultural Tensions and Identity Conflicts: The settlement of climatic refugees can also cause cultural conflicts and identity crises. The settlers' language, customs, and social behavior may be from another culture, and these can likely cause complexities for these people to get integrated and live peacefully because they will misunderstand the new environment. The local communities may become prone to forgetting their cultural identity, while the refugees struggle to understand the new cultural climate. This situation contributes to social fragmentation, which creates divisions between "natives" and "immigrants," and blow up existing grievances and discordance.

Integration and assimilation efforts between refugees and other people in the country may, on a large scale, improve these tensions. Community interactions, cultural exchange, as well as mutual support, help foster understanding and solidarity among both groups of people. Such efforts not only make the refugees feel at home but also strengthen communities, where diversity is strength rather than weakness.

**Legal and Policy Frameworks:** Climate refugees are an issue that is contentious with legal status and protection within international law. The national and local response continues to be complicated. Existing frameworks--such as the 1951 Refugee Convention-largely protect individuals fleeing persecution on grounds of politics, ethnicity, or religion and do not explicitly refer to displacements brought about by climate change (Ahmed, 2017). This sparks worries in the host country regarding its level of obligation towards climate refugees.

Important steps toward acknowledging and protecting climate refugees include new legal instruments such as the Global Compact on Refugees and the Global Compact for Safe, Orderly, and Regular Migration. These compacts will foster international cooperation and

provide frameworks for protecting populations that are now fleeing due to climatic reasons. Where these international agreements translate into national and regional policies remains a challenge. The legal frameworks and resources for most countries are deficient to support climate refugees, thus producing inconsistent and ineffective responses.

National policies may also not be suitable for the special needs of climate refugees, especially concerning integration and access to services. It is critically important that local authorities are well-equipped with tools and resources to address newcomers in a positive manner and to help to dissipate any adverse effects that may derive from those influxes on host communities.

Adaptation and Resilience: Addressing the root causes of climate-induced displacement requires integrated, multi-faceted strategies that combine adaptation with resilience building. Investments in climate-resilient infrastructure, sustainable land management practices, and social protection mechanisms all build on the resilience of communities to withstand environmental shocks and reduce migration. For example, improving water management and investment in renewable energy sources can, for instance, alleviate some of the pressures that migrate people in the first place.

Supporting rights and agency among affected populations, especially women, children, and indigenous communities, is fundamental to developing inclusive and equitable adaptation strategies. Enabling the above-mentioned groups not only makes them more resilient but also allows their particular inputs into the policy and planning processes (Lister, 2014). For example, women have essential responsibilities in managing household resources and agriculture, which would make them highly indispensable in decision-making processes that result in more effective climate adaptation strategies.

Research Gaps and Future Directions: Despite a real surge in the concern that climate change in fact creates or has caused environmental-induced displacement, important gaps remain in understanding its drivers, impacts, and dynamics. More exploration into the intersectionality of environmental, social, and economic factors will shape how migration decisions are made and by what mechanisms they take place; thus, it becomes essential to understand how communities differentially experience and interact with climate change so that interventions can be effectively and targeted differently.

There is a scarcity of empirical research studies that assess the effectiveness of various adaptation and mitigation measures in stopping the displacement process and facilitating assistance for affected persons. In this regard, there is a need to focus research on best practices and relevant case studies that document effective integration strategies and resilience-building measures.

Future research must engage much more meaningfully with the voices and experiences of climate refugees in co-designing more solidly grounded policy responses to their needs, aspirations, and rights. Better involving refugees in their own research and decision-making might make interventions more relevant and impactful and generally lead to a more inclusive approach to dealing with climate-induced displacement.

#### Conclusion

The literature on climate refugees reflects a growing recognition of the complex challenges posed by climate-induced displacement and the need for multidisciplinary approaches to address them. By examining the causes, impacts, and responses to climate-related migration, scholars, policymakers, and practitioners can work towards developing more effective strategies for mitigating displacement, protecting vulnerable populations, and promoting sustainable development in a changing climate.

#### References

- Ahmed, B. (2017). Who takes responsibility for the climate refugees?. *International Journal of Climate Change Strategies and Management*, 10(1), 5-26.
- Ahuja, N. (2016). Race, human security, and the climate refugee. *English Language Notes*, 54(2), 25-32.
- Atapattu, S. (2020). Climate change and displacement: protecting 'climate refugees' within a framework of justice and human rights. *Journal of Human Rights and the Environment*, 11(1), 86-113.
- Behrman, S., & Kent, A. (2023). Climate Refugees. Cambridge University Press.
- Berchin, I. I., Valduga, I. B., Garcia, J., & De Andrade, J. B. S. O. (2017). Climate change and forced migrations: An effort towards recognizing climate refugees. *Geoforum*, 84, 147-150.
- Biermann, F., & Boas, I. (2008). Protecting climate refugees: the case for a global protocol. *Environment: Science and Policy for Sustainable Development*, 50(6), 8-17.
- Dreher, T., & Voyer, M. (2015). Climate refugees or migrants? Contesting media frames on climate justice in the Pacific. *Environmental Communication*, *9*(1), 58-76.

- Faber, D., & Schlegel, C. (2017). Give me shelter from the storm: Framing the climate refugee crisis in the context of neoliberal capitalism. *Capitalism Nature Socialism*, 28(3), 1-17.
- Farbotko, C., & Lazrus, H. (2012). The first climate refugees? Contesting global narratives of climate change in Tuvalu. *Global environmental change*, 22(2), 382-390.
- Jakobeit, C., & Methmann, C. (2012). 'Climate refugees' as dawning catastrophe? A critique of the dominant quest for numbers. In *Climate change, human security and violent conflict: Challenges for societal stability* (pp. 301-314). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Karameşe, E. (2021). The expectations of legal regulations from the United Nations and Turkiye in terms of climate change refugees. *Dergisi*, 23(4), 133–150. <a href="https://doi.org/10.16953/deusosbil.1055646">https://doi.org/10.16953/deusosbil.1055646</a>
- Lister, M. (2014). Climate change refugees. Critical Review of International Social and Political Philosophy, 17(5), 618-634.
- Merone, L., & Tait, P. (2018). 'Climate refugees': is it time to legally acknowledge those displaced by climate disruption?.
- Methmann, C., & Oels, A. (2015). From 'fearing' to 'empowering' climate refugees: Governing climate-induced migration in the name of resilience. *Security Dialogue*, 46(1), 51-68.
- Stanley, S. K., Ng Tseung-Wong, C., Leviston, Z., & Walker, I. (2021). Acceptance of climate change and climate refugee policy in Australia and New Zealand: The case against political polarisation. *Climatic Change*, 169(3), 26.