

# Environmental refugees: a literature review

Sophia Lima<sup>a</sup>.

<sup>a</sup> School of Philosophy, Language and Human Sciences, Federal University of São Paulo - UNIFESP, São Paulo, Brazil, srlima@unifesp.br.

## Abstract.

The concept of climate change has become well-known by the international community. Its consequences are innumerable, and among them, an impact on migration can be seen. In the last decades, the literature has developed an urge to recognize those displaced due to climate change and ways to define them. In this research, we analyse different factors found in the literature that impact the definition of environmentally displaced persons. We explored the general aspects of the theoretical construction of 'environmental refugees', and the factors that are taken into account for this characterization. It was discussed how to define an environmental refugee based on the previous findings and the importance of this identification.

**Keywords.** Environmental refugees, international migration, displacement, climate changing, migration studies.

## 1. Introduction

Climate change is a widely-recognized problem. Limited natural resources, as well as the increasing intensity of natural disasters, are some well-known problems. Among these, the number of people displaced due to natural disasters is also increasing.

In its report of 2017, the Displaced Monitoring Centre stated that from 2008 to 2016, every year an average of 25.3 million people were displaced by disasters. The report of 2021 calls attention to the misconceptions of disaster displacement, and its negative impact on people and policy response. Because of that, defining the correct nomination for environmentally displaced persons attracted much attention to developing national and international policies for climate-related migration.

According to UNHCR (2021), 70 percent of people displaced within their country come from countries that are most suffering from climate emergencies. The identification of these people is a challenging area, whether they should be considered refugees or migrants. The United Nations' 1951 Convention and 1967 Protocol strictly defines a refugee as someone who, under the fear of persecution due to race, religion, nationality, membership of a particular social group, or political opinion does not find national protection, is forced to flee outside his country of nationality.

Based on that, typically the use of "refugee" represents an urge to address the issue (Brown,

2008), and the use of the word "migrant" could imply that they are not motivated by fear, therefore are not in need of protection. Another problem is that the refugee denomination assumes that those are fleeing persecution, and for that reason, they usually cross their country's border. However, those displaced by climate change can stay within their country's border (Brown, 2008).

Making this identification is the major issue that is attracting widespread interest. Here we base our understanding on El-Hinnawi's (1985) and Jacobson's (1988) works, one of the first scholars to raise the problem of environmental refugees. Nevertheless, we expect to describe the contradictions found in these works by some recent studies. The research question is: how can environmental refugees be identified?

Therefore, the central issue to be discussed here is which method the literature uses to make this distinction between climate-displaced persons. Whether they should be denominated as migrants or refugees, which aspects are taken into account to make this distinction and the mechanisms to identify them. Furthermore, some issues about the theoretical approach, if there are problems found to make these definitions and the articulations between the theoretical and empirical should also be taken into account.

## 2. Methodology

The current investigation involved a textual search

on Google Scholar, Scielo and ScienceDirect using the key words “environmental” “migration” “climate change” “refugees”, between the years of 2000 to 2022. Two main articles were used as base: *Environmental Refugees* (El-Hinnawi, 1985) and *Environmental Refugees: a Yardstick of Habitability* (Jacobson, 1988).

### 3. Results and Discussion

The debate about environmentally displaced persons is quite recent, as well as multi-disciplinary. At first glance, the literature about this matter has its focuses on climate events, but some others highlight the dichotomy of refugee and migrant.

Firstly it is important to call attention to two main works cited in most of the literature about the matter. El-Hinnawi (1985) started the discussion about ‘environmental refugees’, and both he and Jacobson (1988), classified environmental refugees into three different categories of displacement.

**Tab. 1** - Three categories of displacement

First category	Temporary displacement	Once the environmental disruption is over they return to their habitat.
Second category	Permanently displacement	Displacement due to permanent changes, generally man-made, that affect their original habitat
Third category	Seek better livelihood	People who migrate to a new habitat within their own national boundaries, or abroad, in search of a better quality of life

El-Hinnawi (1985) limits his definition to those forced to leave, so all these categories considered the person displaced as an ‘environmental refugee’. The first category involves those displacements by natural disasters, the second characterises displacement by man-made disasters. The third one concerns a more subjective perception, in which the refugee’s habitat does not meet the basic needs of living.

Further in this research, we will see the different implications found in each category, and the problems the literature found about them.

#### 3.1 Climate factors to migration: towards an ‘environmental refugee’ definition

The OECD Glossary of statistical terms defines Environmental refugees as “a person displaced

owing to environmental causes, notably land loss and degradation, and natural disaster”. Despite that, there is little understanding of what an environmental refugee means (Black, 2001).

Some scholars take into account the difference between climate factors as the drive to migration (Adamo, 2010; Black 2001; Gemenne, 2011; Piguët et. al. 2011). According to Black (2001), to distinguish an environmental refugee from any migration due to climate change, evidence of the increase of these displacements where several environmental degradations occur is needed. Appropriately enough, he calls attention to the interaction between ‘natural’ events and human-induced degradation. The author points out that the terminology ‘environmental refugees’ describes the effect of human-induced climate change (Black, 2001, p7).

Both authors compare different climate events, and raise arguments of whether it can induce the appearance of environmental refugees or not.

**Tab. 2** - Climate events x forced displacement explanation

Climate factor	Explanation
Desertification	Migration as part of the economic and social structure, rather than a response to environmental decline.
Tropical cyclones	Lead overwhelmingly to short-term internal displacements
Sea-level rise,	A catastrophic event that may be permanent, due to a failure to observe principles of good environmental management.

They demonstrate, by citing previous studies, sea-level rising as being one of the drives to forced migration, as it is considered a long-term phenomenon as well as a human-induced problem, while both desertification and tropical cyclones are not human-induced and do not lead to a permanent displacement. Therefore, environmental migration is heterogeneous, and the level of vulnerability also has to be taken into account (Gemenne, 2011). It goes against what was proposed by El-Hinnawi (1985) once it considers that the environmental refugee term does not cover those displaced due to natural disasters that are not human-induced.

Methodologically speaking, Piguët et. al. (2011, p.16) provides insight into how the impact of environmental factors should consider the socio-cultural perception of these threats. However, while Piguët et. al. (2011) considers migration as an adaptation strategy, and both he and Black (2001) do not discuss the implications of having these persons called “refugees” or “migrants”, Gemenne (2015) raises the question of what about those who

would like to stay but are forced to flee?

The main focus of some scholars is on discussing the implications of the use of “refugee” instead of “migrant” (Gemenne, 2015; Bates, 2002; Biermann and Boas, 2010).

The central element of the term ‘refugee’ is the need to flee persecution (Gemenne, 2015). According to The United Nations’ 1951 Convention and 1967 Protocol relating to the status of refugees, some aspects that define a regular refugee are not taking into consideration those displaced by natural disasters. The fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinion; the person is unwilling to avail himself of the protection of their own country; therefore, cross an internationally recognized border; and finally, tends to imply a right of return once the persecution that triggered the original flight has ceased.

Renaud et al. (2007) agree that this definition is not suitable for those who flee due to climate factors, once those people do not fear persecution. However, some scholars consider that climate factors induce some security threats (Black, 2001; Castles, 2002; Volger, 2002). Even so, there are no legal instruments that protect people who flee environmental threats (Docherty and Giannini, 2009).

Gemenne (2011) observes that when talking about environmental factors, there are refugee-like situations and migrant-like ones. The refugee-like situation involves no control and high vulnerability. On the same basis, Burson (2010) argues that environmental degradation collides with issues such as poverty and inequality.

Moreover, some aspects are taken into account by scholars when defining environmental refugees, as can be seen in Tab 3.

**Tab. 3** - Environmental refugees characterization

<b>Movement type</b>	<b>Relocation type</b>	<b>Character of environmental change</b>
Compelled to relocate	Permanent	Human-made
Voluntary	Temporary	Natural

Here we decide to specify the character of environmental change between natural and human-made, nevertheless, scholars create subcategories for each type of environmental harm. Also, there is a debate about the reallocation type, whether should be considered displacements within the state boundary as describing a movement of refugees more than just internally displaced persons (Docherty and Giannini, 2009), once environmental factors can lead to refugee-like situations but the

displacement can be inside their own country.

Taking these refugee-like situations and linking them to sea level rise cited as one drive to forced migration, McAdam, (2011) argues that those who live in “Small island developing states (SIDS)” will be the first climate refugees by 2050, as these places will become uninhabitable. Some authors take a step towards a possible empirical analysis of environmental refugees by looking into these SIDS (McAdam, 2011; Docherty and Giannini, 2009; Friedmann, 2009; Mollah et al., 2014).

Places such as Kiribati, Tuvalu, and Bangladesh face a vulnerability problem, followed by rapid population growth. Flooding and rising seas can be considered the main reasons for displacement there, however, while Kiribati and Tuvalu are more likely to produce international displacement, in Bangladesh most people are displaced inside the country (McAdam, 2011; Friedmann, L., 2009).

This empirical and theoretical articulation shows an important method to make the distinction between environmental migrants and refugees, which was not taken into account by some other authors.

In order to raise an explanation to the question of how an environmental refugee could be defined, our results provide compelling evidence that the sociological concept and the debate about refugees should be supported by empirical evidence; analysing the place where the displacement is happening and the social as well as climate factor conditions.

It is appropriate to say that scholars have several disagreements on this matter, whether environmental factors are really the main cause for displacement or if this is just one of the consequences; they are sceptical about the denomination of ‘environmental refugee’. Others appear to comprehensively put climate factors together with other problems such as inequality and poverty and call for a ‘refugee’ definition.

How it was shown, some authors raised the evidence of human-induced climate situations. It was pictured that these problems can lead to a permanent displacement, all because of the political inability to deal with the climate change problem.

In the present study we encourage the use of the term environmental refugees, because it is not just semantic, it adds urgency to the issue. As it was presented by The UN Refugee Agency (UNHCR), at the 26th UN Climate Change Conference of the Parties (COP26), the climate crisis is a human crisis, and those displaced by these crises are in need of any kind of protection.

## 4. Conclusion

Since the first definition regarding environmental refugees, proposed by El-Hinnawi (1985), many

scholars have raised different aspects to make this definition and other mechanisms to recognize them. The discussion about climate change and migration calls attention to those in the most vulnerable situations and has the potential to raise a discussion about inequality and climate change as the main drive to displacement. This study provides support for the 'environmental refugee' term considering the idea of climate change as a form of persecution against those who suffer from poverty and inequality.

As it was seen, to identify a refugee-like situation there should be any type of relocation caused by human-made disasters that compelled a reallocation movement. The problem found is to define what is specifically a human-made disaster, as some climate factors nowadays are directly caused by the human failure to observe principles of good environmental management. Further investigation is needed to address this issue, and to contribute to more accuracy when defining an environmental refugee.

## 5. References

- [1] Adamo, Susana B. (2010). *Environmental migration and cities in the context of global environmental change*, 2(3), 161–165. doi:10.1016/j.cosust.2010.06.005
- [2] Bates, D. C. Environmental Refugees? Classifying Human Migrations Caused by Environmental Change. *Population and Environment*. 2002; 23 (5):465-77.
- [3] Bell, D. Environmental refugees: What rights? Which duties? *Res Publica*. 2004; 10:135-52.
- [4] Berchin, I. I.; Valduga, I. B.; Garcia, J.; de Andrade Guerra, J. B. S. O. *Climate change and forced migrations: An effort towards recognizing climate refugees*. *Geoforum*, 2017; 84(), 147–150. doi:10.1016/j.geoforum.2017.06.022
- [5] Biermann, F., and Boas, I. Preparing for a Warmer World. Towards a Global Governance System to Protect Climate Refugees. *Global Environmental Politics*. 2010; 10 (1):60-88.
- [6] Black, R. Environmental Refugees: myth or reality? In *New issues in refugee research*. Geneva: UNHCR. 2001.
- [7] Brown, O. "Migration and Climate Change." In *IOM Migration Research Series*. Geneva: IOM. 2008.
- [8] Burson B. Environmentally Induced Displacement and the 1951 Refugee Convention: Pathways to Recognition. In: Afifi T., Jäger J. (eds) *Environment, Forced Migration and Social Vulnerability*. 2010. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-12416-7\\_1](https://doi.org/10.1007/978-3-642-12416-7_1)
- [9] Castles, S. Environmental change and forced migration: making sense of the debate. *New Issues in Refugee Research*. Working Paper No. 70. United Nations High Commissioner for Refugees (UNHCR), Geneva. 2002.
- [10] Docherty, B., Giannini, T. Confronting a rising tide: a proposal for a convention on climate change refugees. *Harvard Environ. Law Rev.* 2009; 33, 349–403. Available at: <[http://www.law.harvard.edu/students/orgs/elr/vol33\\_2/Docherty%20Giannini.pdf](http://www.law.harvard.edu/students/orgs/elr/vol33_2/Docherty%20Giannini.pdf)> .
- [11] El-Hinnawi, E. *Environmental Refugees*. Nairobi: United Nations Environment Programme. 1985.
- [12] Friedmann, L. How Climate Change is Making Refugees in Bangladesh. 2009. Available at: <<http://www.scientificamerican.com/article/climate-change-bangladesh2/>>
- [13] Gemenne, F. How they became the human face of climate change. Research and policy interactions in the birth of the 'environmental migration' concept. In E. Piguat, A. Pécoud, & P. De Guchteneire (Eds.), <em>Migration and Climate Change</em>. Cambridge, United Kingdom: Cambridge University Press. 2011.
- [14] Horsti, K. *The Politics of Public Memories of Forced Migration and Bordering in Europe* || . 2019, doi:10.1007/978-3-030-30565-9
- [15] Hugo, G. Environmental Concerns and International Migration. *International Migration Review*. 1996; 30 (1):105-31.
- [16] IDCM. Global Report on Internal displacement. 2017. Available on <<https://www.internal-displacement.org/global-report/grid2017/>>
- [17] IDCM. Global Report on Internal displacement. 2021. Available on <<https://www.internal-displacement.org/global-report/grid2021/>>
- [18] Jacobson, J. L. *Environmental Refugees: a Yardstick of Habitability*. *Bulletin of Science, Technology & Society*. 1988; 8(3), 257–258. doi:10.1177/027046768800800304
- [19] Mcadam, J. Swimming against the Tide: Why a Climate Change Displacement Treaty is Not the Answer. *International Journal of Refugee Law*, 2011; 23(1), 2–27. doi:10.1093/ijrl/eeq045
- [20] Micko, B. Riegl, M. *Towards a Schmittian Theory of Border Hardening: Nomos, Sovereignty, Political Unity and Barriers in the Middle East*. *Geopolitics*. 2020; 1–32. doi:10.1080/14650045.2020.1749840
- [21] Mollah, K.; Molla, N.; Alic, G.; Fungladda, W.; Wongwit, W., Tomomi, H. Quantifying disease burden among climate refugees using multidisciplinary approach: a case of Dhaka, Bangladesh. *Urban Clim*. 2014; 8, 126–137.

<http://dx.doi.org/10.1016/j.uclim.2014.02.003>.

[22] OECD. Glossary of Statistical Terms. Environmental Refugees  
<<https://stats.oecd.org/glossary/detail.asp?ID=839>>

[23] Piguet, E.; Pecoud, A.; de Guchteneire, P. *Migration and Climate Change: An Overview. Refugee Survey Quarterly*. 2011; 30(3), 1–23. doi:10.1093/rsq/hdr006

[24] Renaud, F., J. Bogardi, O. Dun, and K. Warner. Control adapt or flee: How to face environmental migration? *Intersections* No. 5. UNU-EHS, Bonn. 2007.

[25] Spijkerboer, T. The human costs of border control. *Eur. J. Migration & L.* 2007;9:127.

[26] Vogler, J. The European Union and the 'securitisation' of the environment. In: Page, E.A., and Redclift, M. (eds.), *Human Security and the Environment*. Edward Elgar, Cheltenham. 2002; pp. 179–198.

[27] Williams, A. *Turning the Tide: Recognizing Climate Change Refugees in International Law*. 2008; 30(4), 502–529. doi:10.1111/j.1467-9930.2008.00290.x