



**Anna Silvia Penteado Setti da Rocha**

Universidade Tecnológica Federal do Paraná-UTFPR, Curitiba, PR, Brasil  
annapsrocha@gmail.com

**Anor Sganzerla**

Pontifícia Universidade Católica do Paraná-PUCPR, Curitiba, PR, Brasil  
anor.sganzerla@gmail.com

**Thiago Rocha da Cunha**

Pontifícia Universidade Católica do Paraná-PUCPR, Curitiba, PR, Brasil  
caixadothiago@gmail.com

**Tatyana Scheila Friedrich**

Universidade Federal do Paraná UFPR, Curitiba, PR, Brasil  
tatyanafriedrich@yahoo.com

## Environmental refugees: global bioethics challenges

*Refugiados ambientais: desafios da bioética global*

**Abstract:** During the 21st century, global environmental changes became recurring, causing many people to move to survive. These displacements have been posed as a real threat because the migration process has a strong impact on human life. This has given rise to a new type of refugee, called an environmental refugee, who has neither a clear and well-defined understanding of international law and national public policy nor widespread acceptance. This lack of conceptual and legal clarity regarding the environmental refugee means that he is not given the proper protection, making his vulnerability even clearer. Given this, through narrative review, this article aims to analyze the concept and nomenclature of “environmental refugees”, providing, through the theoretical approach of global bioethics, some guidelines for addressing this reality that generates vulnerabilities.

**Keywords:** Climate changes, refugees, environment, migration.

**Resumo:** Durante o século 21, as mudanças ambientais globais tornaram-se recorrentes, levando muitas pessoas a se mudarem para sobreviver. Esses deslocamentos constituem uma ameaça real, porque o processo de migração tem um forte impacto na vida humana. Isso deu origem a um novo tipo de refugiado, chamado refugiado ambiental, que não tem um entendimento claro e bem definido tanto no direito internacional, como nas políticas públicas nacionais. Essa falta de clareza conceitual e jurídica em relação ao refugiado ambiental, faz com que ele não receba a proteção devida, tornando a sua vulnerabilidade ainda mais nítida. Diante do exposto, por meio de revisão narrativa, este artigo tem como objetivo analisar o conceito e a nomenclatura de “refugiados ambientais”, proporcionando, através da abordagem teórica da bioética global, algumas diretrizes para o enfrentamento dessa realidade geradora de vulnerabilidades.

**Palavras-chave:** Mudanças climáticas, refugiados, meio ambiente, migração.

## Introduction

The social mobility of people in different nations is a strong practice with impact on a community and on the environment. The deepening process of globalization since the 20th century has resulted in an expressive increase in the movement of people around the world, both due to autonomous motivations, as in the cases of tourism, leisure, employment and education, and to extreme motivations, for example in cases of wars, social collapses and environmental disasters.

Although there have already been sanitary regulations since the beginning of the modern colonization process to prevent disease, epidemics and pests from spreading along with this increased movement, in practice there is a difficulty in ensuring a safe environment for dealing with outbreaks, epidemics and pandemics. On the other hand, the emergence of new restrictive policies imposed by some countries on whole groups of people, such as the US, which since 2017 has restricted the entry of people from certain Islamic countries, poses new ethical challenges for mobility issues.

The anti-refugee discourse contributed heavily to the US election decision, triggering serious ethical issues, both at the individual and collective levels. Innocent people and families are discriminated against and marginalized on the grounds that such action is necessary to protect local citizenship. This type of discourse and segregationist practice is singled out as the best alternative to address the refugee problem. American refugees policies for refugees (in general, the Global North) and Americans (more broadly Westerners) have always tended to the isolationism and distrust of 'foreigners', so it is curious why and how powerful nations of the Global North create, shape, and undo the identities and lives of refugees through policies that often determine no less than the life or death of human beings (Gotlib, 2017). If the intense process of free movement of people in spontaneous way already entails its difficulties, the forced process of mobilization becomes an even more serious and complex problem. Nowadays, the reality of refugees is not a peculiarity. In the 20th century, this practice gained more prominence after the end of World War II, when people were persecuted for political, racial and religious reasons, among others, and that intensified the creation of multilateral bodies to be able to provide protection and assistance (Andrade, 1996). Since then, many bodies and institutions have been created, with emphasis on the UN, through the United Nations High Commissioner for Refugees – (UNHCR), which coordinates actions with international agencies and institutions to deal with refugees.

The beginning of the 21st century brings newness to the definition of refugees, as a new deal has been imposed on many people and groups as a result of environmental changes. It is the environmental refugee, which is related to the effects of climate changes that are constantly erupting and are increasingly common in the present times (Avila, 2007). The emergence of this new group did not erase the traditional concept of refugee, related to persecution, but created a new modality in which people are forced to move due to environmental issues such as desertification, droughts, environmental accidents, floods, earthquakes, among others. These environmental disasters have produced “more refugees than wars and conflicts, and global warming, caused by man, is one of the main causes of environmental problems that our world is facing today, even though it is not the only one” (Lopes et al., 2012).

Environmental changes are becoming more frequent (Andrade, 1996), and thus they promote more vulnerable social groups, demanding emergency measures to protect the human dignity of those involved. Although such changes appear to be detrimental to all, in practice the most vulnerable of the poorest regions are those that suffer the most from extreme events because of poor infrastructure. Thus, if climate balance promotes health for all, the “imbalance affects mainly the poorest” (Sganzerla & Pessini, 2016). It is estimated that in the first decade of the 21st century 50 million people were forced to leave their territories due to natural disasters and that by 2050 the number of environmental refugees will be between 250 million and 1 billion human beings (Esquivel, 2009).

The World Bank report entitled “Shock Waves Managing the Impacts of Climate Change on Poverty” in 2016 points out that the poorest countries, especially women and children, will be the first part of the world’s population to feel the effects of climate change, with increased diseases, health problems, lack of food, higher incidence of malnutrition, water shortage, lack of housing, etc. Among these poor countries, the nations located in the tropical regions and including the Horn and West Africa are among those most affected by these conditions. In addition, the poor who will be the most disadvantaged are the least responsible for the problem, because their consumption, lifestyle, industrial production itself, are not on the same level as the rich countries. Many of the poorest live in tropical latitudes, while some of the richest live in mid-latitudes. And in regions of low latitudes, since distances are lower, when compared with higher latitudes, the signs of climate change will appear very fast and the increase in final heat will also happen very quickly. The study also shows that much less cumula-

tive emissions are required for the fifth of the poorest global population to undergo and experience extreme heat compared with the fifth of the richest population. In addition, richer countries are more able to deal with impacts.

In Brazil, according to data from the National Committee for Refugees (CONARE), an interministerial body chaired by the Ministry of Justice and dealing mainly with the formulation of policies for refugees in the country, in 2016 there was a 12% increase in the total number of recognized refugees, with a total of 9,552 refugees from 82 nationalities (Brasil, 2017). According to data from the Ministry of Foreign Affairs in Brazil, there are currently more than 8,800 refugees from 79 different nationalities, with the five largest communities coming in descending order from Syria, Angola, Colombia, the Democratic Republic of Congo and Palestine. Brazilian law is more comprehensive than the 1951 Convention, as it also provides for the granting of refuge in cases of serious and widespread human rights violations. A significant portion of those who seek refuge in Brazil originate in countries that have been affected by conflicts or internal turmoil, and to facilitate in dealing with these issues more accessible norms have been created for granting visas to individuals affected by the conflict in Syria and who wish to seek refuge in Brazilian territory, recognizing for refugees the right to work, education, health and mobility in the national territory, among other rights, thus allowing them to more easily rebuild their lives in the country (Ministério das Relações Exteriores, 2017).

The Global Trends Report shows that forced displacement caused by war, violence and persecution in 2016 reached the highest number ever recorded. At the end of 2016, there were about 65.6 million people forced to leave their home territories and in need of international protection. This number includes: refugees, internally displaced persons and asylum-seekers. According to the UNHCR, 84% of refugees are in medium- or low-income countries, with 4.9 million people receiving them in less developed countries. Syria had the largest number of displacements in the world (12 million people), followed by Colombians (7.7 million), Afghans (4.7 million), Iraqis (4.2 million) and South Sudanese. Among refugees, children make up more than 50% and are often unaccompanied by the family, further increasing vulnerability and suffering (UNHCR, 2017). Although the migration process can also be seen as an opportunity and a challenge, forced displacement due to climate change is imposed on people, with no alternatives for survival. This displacement due to climate change has an individual but also a collective dimension, when entire communities lose their habitat and livelihoods due



to desertification, as well as floods, droughts and other environmental changes. And this requires a lot of planning and action by the countries, to make plans for confrontation (Warner et al., 2014). Forced displacement due to climate issues is not yet seen with particular attention on the political agenda of protecting people in vulnerable conditions, and thus, although it is understood as a human mobility right, in practice this has weak national and international legal protection with ethical implications.

On the integration in South American countries of their national laws and policies in relation to the recommendations of international agendas dealing with human mobility in the circumstances of disasters and climate change, Yamamoto et al. (2017) report some advances in human mobility through humanitarian visas for displaced persons and the inclusion of the subject in the Disaster Risk Reduction (DRR) strategies, but without the development of specific actions in this regard. Their progress still requires that national norms and policies to be harmonized with international guidelines for greater protection of people in the context of disasters and climate changes, since in South America disasters and environmental changes put the lives of millions of people and their livelihoods at risk and are thus important triggers of displacement that strongly affect human mobility in the region (IPCC, 2007). The differentiation carried out by contemporary law, especially in its international aspect, demands a closer look at the different processes of human displacement. However, today's global standards have made the understanding of these phenomena even more complex because many families move with the prospect of a better economic future that does not always materialize, which ultimately makes these people vulnerable. Therefore, through the narrative review, this paper seeks to distinguish concepts related to the issue of human mobility in the international dimension, defending, from the perspective of bioethics, the urgency of establishing specific theoretical and normative consensus for the protection of environmental refugees. At first, the reflection that shows what the international documents mean by the expression refugee; Next, we intend to show that the internal displacement that has occurred in many countries due to environmental issues is not classified as a refuge movement; The next step seeks to analyze the issue of environmental refugees in the light of global bioethics.

## Refugee

Refugees are people fleeing conflict or persecution. They are defined and protected in international law, and must not be expelled or returned to situations where your life and freedom are at risk (UNHCR, 2002). On the other hand, the Geneva Conven-

tion Refugees reduces the refugee criterion only to the person who escapes because of race, religion, nationality or political conviction.

The Brazilian Federal Law number 9474/97 is broader in relation to the 1951 Refugee Convention, as it also provides for the granting of refuge in cases of serious and widespread human rights violations. The same law extends the effects of refugee status to spouse, ascendants and descendants, as well as on the other members of the family group on whom the refugee depends economically, provided they are in national territory. Exclusion of refugee status is given by law for those who already enjoy protection or assistance from a United Nations Organization or institution other than the United Nations High Commissioner for Refugees (UNHCR) who are resident in the national territory and have rights and obligations related to the national status of Brazilian; who have committed a crime against peace, war crime, crime against humanity, heinous crime, participated in terrorist acts or drug trafficking; and to be found guilty of acts contrary to the purposes and principles of the United Nations. The National Committee for Refugees (CONARE) is the Brazilian organization responsible for examining applications and declaring the recognition, in the first instance, of refugee status, as well as for guiding and coordinating the actions necessary for effective protection, assistance and support to refugees, with Brazilian law being recognized as one of the most advanced in this area. It has served as a model for countries in the region, recognizing refugees as conditions for the right to work, education and health, thus contributing to better integration and the possibility of reconstruction their lives.

Accordingly, a refugee is understood as the person or group that moves or leaves its place and/or home in an involuntary way, that is, against their will (Coimbra, 2006). They need to move to save their lives and their freedom, because they have no protection from the State, and the State itself often poses a threat to them. If the other countries do not provide the necessary protection and assistance, they may be sentenced to death or an unbearable life without a guarantee (UNRIC, 2011).

## **Internal Displacement**

UNHCR defines the country's internally displaced persons not as refugees, even if they have fled for reasons similar to refugees, such as armed conflict, widespread violence, human rights violations. Legally internally displaced persons remain under the protection of their own government, although this government may be the cause of the escape. As citizens, they retain all their rights and are protected by human rights

and international humanitarian law. The United Nations Human Rights Commission, in The Guiding Principles on Internal Displacement in 1998, addresses the specific needs of internally displaced persons throughout the world, with a view to identifying the rights and guarantees relevant to the protection of displacement, as well as protection and assistance during displacement, promoting their reinstallation and reintegration with society. To this end, they identify internally displaced persons as persons or groups of persons who are forced to flee or leave their homes or places of habitual residence, particularly as a consequence of or in order to avoid the effects of armed conflict, situations of widespread violence, human rights violations or human or natural disasters, and who have not crossed an internationally recognized border of a State. While acknowledging that primary responsibility rests with national authorities, the Guiding Principles recast sovereignty as a form of national responsibility toward one's vulnerable populations with a role provided for the international community when governments did not have the capacity or willingness to protect their uprooted populations (Cohen, 2004).

The majority of new displacements in 2016 took place in high-risk environments characterized by low coping capacity, high levels of socio-economic vulnerability, and high exposure to natural and human made hazards<sup>18</sup>. Because of this disengagement, there is a likelihood that, as political efforts focus on strengthening borders, less attention will be paid to what happens within them. This has implications not only for refugees and migrants in transit and for those who are returned to their countries of origin, but also for those left behind (GRID, 2017).

## Environmental Refugees

The term “environmental refugee” is complex and controversial within the juridical normalization by some fundamental factors. It is understood that the situation of vulnerability arising from environmental issues is not provided for in Refugee Statute of 1951, since, as seen, the statute limits the understanding of refugee to a person or group that fears persecution due to religious option, race, nationality or political opinions, and mentions neither the word environment nor the expression climate change. The popularization of the term “environmental refugee” began in 1985 with Essam El-Hinnawi, a researcher at the United Nations Environment Program (UNEP). The document that approved its creation introduced the term Environmental Refugees with the understanding that refugees are persons who have been obliged to temporarily or



permanently leave the area where they have traditionally lived because of the visible decline of the environment (for natural or human reasons) by disturbing their existence and/or their quality in such a way that their livelihood is endangered (El-Hinnawi, 1985). This definition that was incorporated into UNEP was extremely important because it opened the way for the debate on people who are forced to move because of environmental problems. Despite the commitment of UNHCR and UNEP to ensure assistance to environmental refugees in terms of shelter, protection and elimination of life-threatening factors, it is still quite uncertain who is responsible for protecting the rights of environmental refugees, since they involve political and environmental issues, with strong consequences for the present and the future. Both governments of migrant and immigrant countries are far from being prepared for this phenomenon. The International Organization for Migration (IOM) uses the following definition for environmental refugee: "it is persons or groups of people who, because of sudden or progressive changes in the environment, have been adversely affected in their lives and, owing to the conditions, decide or are forced to leave their homes" (IOM, 2012).

Renaud et al. (2008) define the forced environmental migrant as a person who "has" to leave his or her place of habitual residence because of an environmental factor, being opposed to an environmentally motivated migrant who can decide to change by environmental factors. According to Oliveira et al. (2010, p. 125) within the universe of environmental refugees can be found three categories that are a consequence of forced displacement:

[a] Those who have been temporarily displaced due to environmental pressures, such as a seismic shock, a cyclone (or drilling), or a storm that causes flooding - and that afterward the inhabitants of the region will probably return to their natural habitat; [b] Those who have moved permanently due to definitive changes in their habitat, such as dams or artificial lakes; and (c) Those who move permanently in search of better quality of life, since their natural habitat is unable to provide them with their minimal needs due to progressive degradation of their basic natural resources.

Although national and international movements have already determined how urgent establishing a conception on environmental refugees will become, to date there is no international law on refugee law and the UN to promote effective material and legal protection for environmental refugees (El-Hinnawi, 1985). Thus, while there are international documents and conventions in defense of refugees, these do not apply to



environmental refugees. International Refugee Law “is nothing more than the domestic law of the State to determine who is a refugee and who is not” (Lopes, 2012). This lack of legal protection associated with the lack of knowledge of climate threats (IPCC, 2007) and the lack of resources means that governments have not yet found viable mechanisms to deal with this reality. The scarcity of environmental resources and the global warming process are the main causes of the emergence of the environmental refugee. Thus, the vulnerability of the environmental refugee cannot be understood in isolation from the socio-environmental, political and economic vulnerability, since it is these structures that produce at the same time precarious living conditions and deteriorated environments that oblige citizens to leave their place of life (Freitas et al., 2012).

Since climate is a common good, a good of all and for all, climate change as a result of human intervention on nature is more detrimental to the poorest because their survival depends on the reserves of natural resources and on the so-called ecosystem services such as agriculture, fisheries and forest resources. Without natural resources, the poor are forced to emigrate to uncertainty and threats in order to survive. According to the Intergovernmental Panel on Climate Change (IPCC, 2012), the rise of migrants is very tragic due to “aggravated misery of environmental degradation, who, not being recognized as refugees in international conventions, carry the weight of their abandoned life without any normative tutelage”. The consequences of climate events for society and sustainable development, as well as the reaction of climatic, environmental and human factors that can lead to impacts and disasters, are important for risk management. The nature and severity of extreme climate impacts depend not only on extremes but also on exposure and vulnerability, which is greater in developing countries. According to the Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX), harmful impacts are considered to be disasters when they cause damage or serious changes in the normal functioning of communities or societies. Climate extremes, exposure and vulnerability are influenced by a wide range of factors, including anthropogenic climate change, natural climatic variability, and socioeconomic development. Disaster risk management and adaptation to climate change focus on reducing exposure and vulnerability and increasing resilience to the potential harmful impacts of extreme weather events, even if the risks cannot be completely eliminated (IPCC, 2012)

The United Nations High Commissioner for Refugees presented the policy on climate change, considering that this phenomenon and its associated natural disasters would increase in scale and complexity, impacting human mobility and displace-

ment, with scientific aspects of climate change being insufficient to understand the factors involved and to alleviate the destructive impact on human activity. The document highlights that some scenarios of cross-border movements can be addressed within the existing international refugee framework, which has shown flexibility in recent decades, but other cases may require new approaches based on new forms of interstate cooperation, sharing solidarity and responsibility internationally. The decision to migrate involves different contexts (UNHCR, 2009). Black, questions the value given by “authors” of international policies when speaking of “environmental refugees”, being a significant group of migrants, deserving international attention. There are discussions about the fact that while environmental degradation and catastrophe may be important factors in the decision to migrate, their reason as the main cause of forced displacement is unnecessary in practical terms, legally making the subject vulnerable. To Black, three categories of supposed “environmental refugees”: those who escape “desertification”; those displaced (or potentially displaced) by rising sea levels; and victims of “environmental conflict”. It is true that there are varied concepts of “environmental refugees” and “environmental migrants”, but little agreement or understanding of what these categories really mean. Practical concern about the situation of poor people who have left fragile environments has not translated into solid evidence of the extent or root causes of their problems. This is not to say that environmental changes are not factors that affect large-scale (and sometimes involuntary) migration. At this point, there is a paradox: without a clear definition of who is an “environmental refugee”, it is not easy to say that this category of people is increasing; On the other hand, in a multidimensional world, where people’s decisions to migrate (or remain) are influenced by a huge variety of factors, an adequate definition does not seem very likely (Black, 2001).

Surely, in the literature there are contradictions about who is the “environmental refugee” and the importance of this specific concept. Morrissey, adds that the debate should not be around the legitimacy of the term “environmental refugee” but about the real connection between environmental changes and human mobility. For the defenders of the term, the concern is to respond to those who are victims of imminent environmental crises with consequent human vulnerability that such crises may imply, not caring about the details of how environmental change is manifested in migration. On the other hand, those who reject the term “environmental refugee” are associated with the discourse of possible anti-immigrant sentiment that may be masked, damaging the rights of asylum seekers. But on both sides of the “debate” there is agreement on

the fact that environmental changes may play an important role in mobility decisions; there is also agreement that other factors influence those decisions, that mobility can generate different degrees of constraint. However, what they do not agree on is the relevance with which such characteristics validate the usefulness of the term “environmental refugee” (Morrissey, 2012).

Another factor to be highlighted is extraterritoriality, present in the refugee recognition conditions. Therefore, situations of forced displacement, whether due to climate or not, within borders, receive less protection for the same vulnerability. According to Raiol, “leaving one’s traditional place” is not necessarily dependent on leaving one’s country of nationality behind, and this belonging may be lost within the territorial limits of origin, believing that there is no need to recognize the refugee only when this human displacement crosses borders (Raiol, 2010).

The discussion on “environmental refugees” is in line with Ramos, due to the urgency of the debate on climate change, in which the global warming dilemma is an irreversible root cause in the context of environmental changes, cause of flight, which is often permanent (Ramos, 2011). Even if there is no agreement on the term to be used for people displaced by the climatic factor, they must have guarantees of protection, either on the point of view of International Human Rights Law, International Refugee Law or even International Environmental Law. Thus, there is no national or international legal status that allows the classification of people who move due to natural issues with the status of environmental refugee. However, the term environmental refugee continues to be widely used to raise awareness on the state of vulnerability in which these people live, but with few practical results.

According to Mayer, when seeking international protection for environmental refugees in analogy with the protection for refugees from other causes, such an analogy seems to be precarious as the circumstances that lead to migration are too distinct between the needs of environmental migrants and refugees, as well as the needs of each category. According to the same author, refugees who may be called “traditional” require more individualistic and uniform protection, while environmental refugees need collective and differentiated protection (Mayer, 2011). The view that the factors that compel people to seek refuge and, consequently, require a different treatment are distinct is also advocated by McAdam (2005); however, regardless of the proposed solution, it is important to consider the particularities of the different types of refugees, instead of being dependent on standards that are inadequate and inefficient to meet



the new needs, since the same rules are not capable of producing satisfactory results. Finally, this author suggests that, since there is no specific international protection for environmental refugees, it is at least required to apply the protection provided by States through human rights standards.

## **Challenges of Global Bioethics Toward Environmental Refugees**

The history of bioethics is quite recent. The origin of the term is controversial because although Van Ranssealer Potter first used the word in 1970 in a global sense, concerned with planetary ethical issues, Dutchman André Hellegers also used the concept in the same period to address issues involving clinical ethics. To this double paternity must be added the researches of Hans-Martin Sass, a German-born German bioethicist who reveals that Fritz Jahr was the first author to coin the bioethical neologism in 1926 (Pessini, 2013). Despite this controversy as to the origin of the term, the meaning given to the word bioethics is different between the names in question. According to Potter, bioethics articulates at the macrobiotic level, ethical thinking that goes beyond the realm of human life and includes the challenges of cosmic-ecological life. On the other hand, Hellegers focuses on the problems of microbioethics, linked to clinical ethics, issues of biomedical ethics, with the mainstream paradigm. And Fritz Jahr's bioethical thinking can be summed up in the idea: respect every living being as a principle and end in itself and treat it, if possible, as such (Pessini, 2013). When we try to understand the challenges of global bioethics in relation to environmental refugees, we approach the conception of bioethics proposed by Potter, that is, in the sense of macrobioethics. Although Potter has used different expressions to say what he understood as bioethics (survival science, bridge to the future, global bioethics, deep bioethics) his proposal has always been concerned to show that the life of the planet in both anthropological and ecological dimensions is not understood in an isolated way, therefore the need to unite interdisciplinary knowledge, to give account of the human, social and environmental reality. Reducing the meaning of global bioethics in the decades after its creation, limiting it to dealing with the old ethical issues directed at the individual in a short-term view, especially with health issues, displeased Potter himself. In determining the problem, Potter came to use the term medical bioethics to refer to this limited sense of bioethics, thus ensuring the macrobiotic sense of his proposal. Potter says:



The time has come to recognize that we can no longer examine medical options without taking into account ecological science and the problems of society on a global scale... Global bioethics is therefore 'the unification of medical bioethics with ecological bioethics'... The two branches of this knowledge need to be harmonized and unified to arrive at a consensual vision that can be called global bioethics, highlighting the two meanings of the global term, namely: a system of ethics is global, on the one hand, if it is unified and, on the other, to embrace the whole world (Potter, 1988, p. 72 e 78).

Making the transition from microbioethics to macrobioethics has become a challenge for contemporary approaches to bioethics, since it is necessary to guarantee the dignity of the individual both in the collective sphere and in nature as a whole. In this sense, ethical issues involving environmental refugees cannot be understood independently of nature, society, culture, and the politics of their societies, since the condition and the refugee cannot be classified as choice alternatives, but as something that imposes itself arbitrarily. On the other hand, if the condition of environmental refugees has a strong impact on public health, politics, economy, and the social organization of the societies in which they live, their personal refugee status is even more vulnerable. How to ensure human dignity when it seems that there are no more common moral references for collective decision-making? This is the challenge of global bioethics.

The harmony and balance of nature, the preservation of systems and a dignified human life would be under its power and responsibility. Life as such is oriented towards ends, and with conscience these ends will take on signification and values. It is, therefore, to live with nature and no longer under or over nature. It is also necessary for bioethics to denounce the passivity of political structures and societies, which, although some of them have some timid reaction of generosity towards environmental refugees, passively accept their slow and silent death due to poverty, malnutrition, as happens in these societies. It should be stressed that environmental refugees are not an isolated problem of the world political and economic choice, but a consequence of this way of thinking and acting. Only with a new economic policy that respects the nature, the man, the culture, the religiosity of each society, and has the concern for future generations, is it possible to face the problem of environmental refugees and think of programs that can be needed.

## Conclusions

International protection for people who are victims of forced displacement due to climate and environmental factors is not successful as a problem in some communities and societies, although in some of them the situation is more evident. It is necessary to adopt the assumption that such victims are a consequence of law (and lack thereof) related to global choices in the sphere of politics, economics, technology, the globalization process, especially in societies where production and consumption activities are more intense. This globalizing conception, aimed at seeking immediate results, has not taken into account the destructive consequences of its way of acting, both for man and nature in general.

The globalization process has made all humanity capable of connecting to everything in real time, and, in this way, it became possible to know the world without leaving home. Although this represents a great human achievement with numerous benefits, this process in which everything is interconnected also has consequences, if not negative, at least dangerous, as in the sphere of economics or politics, when the pronouncement of some world leaders causes economic instabilities and political conditions worldwide. Something similar happens for the man and nature relationship, that is, small changes in the nature cycle have promoted impacts beyond their territoriality, which means that local and global can no longer be thought of as independent spheres. The warning given by Ulrich Beck (1988) entitled “Think globally and act locally”, reinforces the need to create an ethical background between the global and the local, promoting a shared solidarity of responsibility between the public and private spheres in order to guarantee a sustainable future for humans and the planet.

Although environmental refugees are obliged to leave their communities to seek survival, usually in larger cities, these cities of their choice also suffer from the consequences of the socio-environmental crisis, due to the presence of a large number of these we call environmental refugees, who cannot be immediately absorbed into the world of work, education, housing, health and basic needs. However, despite the difficulties of cities themselves, effective mechanisms for absorbing environmental refugees must be found in centers capable of offering them decent living conditions.

An impoverished nature due to human devastation and exploitation will also promote an impoverishment of human nature. The human and natural environment are degraded together, and it is not possible to face environmental degradation if one

does not also consider the causes that have promoted human and social degradation. This all becomes even more serious when the most affected of this degradation are the most fragile on the planet. Therefore, an ecological approach to be true should always take into account a social approach, because the cry of the most vulnerable in the case of land and the poor also needs to be heard. The attempt of modern science and philosophy to understand man apart from nature has contributed to the fact that none of the realities were understood. We are part and fruit of nature, and thus we must know how to live with nature.

It is necessary to think of an ethics for international relations, because the strong inequality affects not only individuals but whole societies. The pressure that the richer societies exert on developing societies, in search of raw material, endangers both the present and the future of these countries. However, we cannot think of responsibility in the same way, since more developed societies are more able to reduce their environmental impact, such as with sustainable development policies and programs. We can no longer think that scientific and technological progress can happen independently of the universe of ethics. The bridge left by Potter when thinking about bioethics must be based on the recognition of the promotion of sustainable means of production and consumption, motivating and raising awareness of international agreements with references to respect for human dignity, human rights and social and environmental responsibility, and recognition of specificities of environmental refugees in the context of today's planetary organization, still based on a colonial relationship. If protection in the international legal framework and in national public policies does not address environmental refugees in legal terms, protection must be given by established norms of international human rights law, international humanitarian law, international migration law and international refugee law. On the other hand, legal protection for environmental refugees is necessary but not sufficient because these refugees need to have access to the receiving country's justice system with equal rights, in other words, besides legal protection, there is also a need for public policies that guarantee their dignity. Creating a "global agenda" to address environmental refugees and related issues has become an urgent challenge. And for this need Bioethics plays a fundamental role, both in the perspective of promoting dialogue between different sciences and public policies, as well as your global perspective. In addition, its concern with the creation of new political and economic paradigms in order to protect the future of humanity and of nature makes Bioethics an indispensable interlocutor in order to guarantee the dignity of the most vulnerable.



## Referências

1. Andrade JHF. Direito Internacional dos Refugiados: Evolução Histórica. (1921 - 1952). Rio de Janeiro: Renovar. 1996.
2. Avila AM. “Uma Síntese Do Quarto Relatório Do IPCC.” Revista Multiciência 2007; 8: 163–68. Acessível em: [http://www.multiciencia.unicamp.br/artigos\\_08/r01\\_8.pdf](http://www.multiciencia.unicamp.br/artigos_08/r01_8.pdf).
3. Benk, U. Qué es la globalización? Falacias del globalismo. Respuestas a la globalización. Barcelona: Paidós, 1988.
4. Black R. Environmental Refugees: Myth or Reality? Unhcr 2001; 34: 1–19.
5. Brasil. Lei N 13.445. Institui a Lei de Migração. Diário Oficial [Da] República Federativa Do Brasil, Poder Executivo, Brasília, DF, 24 Maio. 2017.
6. Cohen R. The Guiding Principles on Internal Displacement: An Innovation in International Standard Setting. Global Governance. 2004; 10: 459–480.
7. Coimbra P. Geografia: uma análise do espaço geográfico. São Paulo: Harbra; 2006.
8. Esquivel AP. Poluidor na Corte de Haia. Revista Veja; 2009.
9. in: El-Hinnawi E. Environmental Refugees. Nairobi: United Nations Environment Programme. 1985.
10. Freitas CM, Carvalho ML, Ximenes EF, et al. Vulnerabilidade socioambiental, redução de riscos de desastres e construção da resiliência - lições do terremoto no Haiti e das chuvas fortes na Região Serrana, Brasil. Ciência & Saúde Coletiva 2012; 17(6): 1577-86.
11. Gotlib A. Refugees, Narratives, or How To Do Bad Things with Words. Kennedy Institute of Ethics Journal 2017; 27(2): 65-86.
12. GRID (Global Report on Internal Displacement). Internal Displacement Monitoring Center. 2017. Acessível em: <https://reliefweb.int/sites/reliefweb.int/files/resources/2017-GRID.pdf>
13. IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 976pp.
14. IPCC (Intergovernmental Panel on Climate Change). 2012. Summary for Policymakers. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation [Field C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, NY, USA, 1-19.



15. Lopes A, Martin L, Ab'Saber AN, Hossne WS. O conceito de refugiado ambiental: é uma questão bioética? *Revista Bioethikos* 2012; 6(4): 409 –15.
16. Mayer B. Pour en finir avec la notion de réfugiés environnementaux: Critique d'une approche individualiste et universaliste des déplacements causés par des changements environnementaux. *Revue Internationale de Droit et Politique du Développement Durable de McGill*; 2011; 7(1): 33-58.
17. Mcadam J. Complementary protection and beyond: how states deal with human rights protection. *New Issues in Refugee Research* 118: 2005. Acessível em: [www.unhcr.org/afr/42fb1f045.pdf](http://www.unhcr.org/afr/42fb1f045.pdf)
18. Morrissey J. Rethinking the 'Debate on Environmental Refugees': from 'Maximalists and Minimalists' to 'Proponents and Critics. *Journal of Political Ecology* 2012; 19 : 36–49.
19. Oliveira MJGS. Refugiados Ambientais: uma nova categoria de pessoas na ordem jurídica internacional. *Revista de Direito e Cidadania* 2010; 7:123-32.
20. Pessini L. As origens da bioética: do credo bioético de Potter ao imperativo bioético de Fritz Jahr. *Revista Bioethikos* 2013; 21(1): 9-19.
21. Potter VR. *Global Bioethics: building on the Leopold Legacy*. Lansing: Michigan State University Press. 1988.
22. Relações Exteriores, Ministério das. Refugiados e CONARE. Ministério das Relações Exteriores, 2017.
23. Raiol IPC. *Ultrapassando fronteiras: a proteção jurídica dos refugiados ambientais*. Porto Alegre: Núria Fabris. 2010.
24. Ramos EP. *Refugiados ambientais : em busca de reconhecimento pelo direito internacional*. São Paulo: SP. 2011. Acessível em: [http://www.teses.usp.br/teses/disponiveis/2/2135/tde-10082012-162021/publico/TESE\\_versao\\_integral\\_ERIKA\\_PIRES\\_RAMOS.pdf](http://www.teses.usp.br/teses/disponiveis/2/2135/tde-10082012-162021/publico/TESE_versao_integral_ERIKA_PIRES_RAMOS.pdf)
25. Renaud F, Bogardi J, Dun O, Warner K. *Environmental Degradation and Migration*. Berlin-Institut. 2008. Acessível em: [https://www.berlin-institut.org/fileadmin/user\\_upload/handbuch\\_texte/pdf\\_Renaud\\_Environmental.pdf](https://www.berlin-institut.org/fileadmin/user_upload/handbuch_texte/pdf_Renaud_Environmental.pdf)
26. Sganzerla A, Pessini L. As mudanças climáticas e seus impactos no reino da vida: perspectivas para um futuro não apocalíptico. *Revista Iberoamericana de Bioética* 2016; 2: 01-13.
27. UNHCR (UN Refugee Agency). *A Situação dos Refugiados no Mundo: Cinquenta anos de ação humanitária*. Portugal: A Triunfadora Artes Gráficas. 2002.
28. UNHCR (UN Refugee Agency). *Environmental migration governance*. *UNSW Law Journal* 1: 2009. Acessível em: <https://ssrn.com/abstract=1412002>.
29. UNRIC (United Nations Regional Information Center). *Relatório para redução de riscos de catástrofes*. 2011. Acessível em: <http://www.unric.org/pt/actualidade/32072-relatorio-da-onu-afirma-que-90-por-cento-dos-desastres-tem-causas-meteorologicas>.

30. UNHCR (UN Refugee Agency). Mid-year trends 2016. Acessível em: [www.unhcr.org/statistics/unhcrstats/58aa8f247/mid-year-trends-june-2016.html](http://www.unhcr.org/statistics/unhcrstats/58aa8f247/mid-year-trends-june-2016.html)
31. Warner K, Martin S, Nassef Y, et al. Integrating Human Mobility Issues Within National Adaptation Plans. UNU-EHS Publication Series, no. 9: 1–52. 2014. Acessível em: <https://www.nanseninitiative.org/portfolio-item/intergrating-human-mobility-issues/>.
32. Yamamoto L, Serraglio AD, Cavedon-Capdeville FS. Human mobility in the context of climate change and disasters: a South American approach. *International Journal of Climate Change Strategies and Management* 2017; 10(1): 65-85.

Recebido: 06/03/2019. Aprovado: 20/08/2019.