ISSN Impresso 1809-3280 | ISSN Eletrônico 2177-1758
www. esmarn.tjrn.jus.br/revistas

Revista Direito e Liberdade

THE PROTECTION OF CLIMATE REFUGEES IN THE RISK SOCIETY: A HUMAN RIGHTS-BASED APPROACH

A PROTEÇÃO DOS REFUGIADOS CLIMÁTICOS NA SOCIEDADE DE RISCO: UMA ANÁLISE A PARTIR DOS DIREITOS HUMANOS

Diogo Andreola Serraglio*
Heline Sivini Ferreira**

ABSTRACT: The considerations proposed in this study involve verifying the parameters that define the *climate refugee* term and that aim to protect them legally. The research focused on the spatial mobility of the population faced with immanent natural disasters deriving from human activity, particularly from climate change. Initially, we sought to contextualize the current situation of those forcibly displaced from their place of origin because of global environmental misfortunes. This situation can be better explained through the risk society theory, emphasizing that these people are characterized as the product of an intensive process of economic growth. We also examined the ways in which human intervention in the environment has aggravated global climate change, leading to the emergence of this new category of refugees. After outlining the historical factors which originated the 1951 UN Convention Relating to the Status of Refugees, and concepts developed since then to ensure the right to seek asylum to all, we proceeded to examine the international evolution of the definition of refugeess, in those situations that demanded expansion of the concept to include other categories of people, such as those forced to move because of climate changes.. Finally, our considerations focused on how human displacement caused by climate change has affected contemporary society. Due to the lack of appropriate legislation for this category of people, Law must seek

* Ph.D. Candidate in Law at Pontifical Catholic University of Paraná (PUCPR) and currently Fulbright Visiting Scholar at Elisabeth Haub School of Law at Pace University (USA). M.D. in Law at PUCPR. Specialized in International Environmental Law at the U.N. Institute for Training and Research (Unitar) and in Environmental Law at Paraná Federal University (UFPR). Lawyer. Curitiba – Paraná – Brazil.

** Associate Professor of Graduate and Postgraduate Programs in Law at Pontifical Catholic University of Paraná (PUCPR). Ph.D. in Law at Santa Catarina Federal University (UFSC), having completed her doctoral internship at the Centre for Environmental Law of Macquarie University, in Sydney, Australia. Curitiba – Paraná – Brazil.

alternatives to deal with this reality, by identifying, interpreting and presenting solutions that recognize those compelled to move away from their natural environment.

Keywords: Risk Society. Global warming. Climate refugees. International legal protection. Human rights.

RESUMO: As considerações propostas neste estudo permeiam a verificação dos parâmetros que definem o termo *refugiado ambiental climático* e que visam a sua proteção jurídica. A pesquisa concentrou-se na mobilidade espacial da população, diante da iminência de desastres naturais oriundos da ação humana, particularmente das mudanças climáticas. Buscou-se, inicialmente, contextualizar a situação atual das pessoas obrigadas a se deslocar de seu local de origem em razão de infortúnios ambientais no mundo, melhor respondida por meio da teoria da sociedade de risco, enfatizando que essas pessoas se caracterizam como o produto de um intenso processo de crescimento econômico. Da mesma forma, examinou-se como as intervenções humanas no meio ambiente agravaram as alterações do clima no globo terrestre, propiciando o surgimento dessa nova categoria de refugiados. Após pincelar os fatores históricos que ensejaram o advento da Convenção das Nações Unidas relativa ao Estatuto dos Refugiados, em 1951, assim como os conceitos elaborados a partir de então para assegurar a todos o direito de buscar asilo, averiguou-se como a definição internacional de refugiado vem evoluindo devido a situações que estimulam a necessidade de ampliação desse conceito, para incluir outras categorias de pessoas, como aqueles obrigados a se deslocar em razão das mudanças do clima. Por fim, verificou-se como os deslocamentos humanos provocados pelas mudanças do clima têm afetado a sociedade contemporânea. Face à inexistência de legislação apropriada para esta categoria de pessoas, cabe ao Direito buscar alternativas para enfrentar esta realidade, identificando, interpretando e apresentando soluções que reconheçam àqueles compelidos a se mudar de seu ambiente natural.

Palavras-chave: Sociedade de Risco. Aquecimento global. Refugiados climáticos. Proteção jurídica internacional. Direitos Humanos.

SUMMARY: 1 INTRODUCTION; 2 RISK SOCIETY AND GLOBAL RISKS IN THE 21ST CENTURY; 3 CLIMATE CHANGE DUE TO GLOBAL WARMING; 4 THE INDISPENSABILITY OF CREATING A NEW REFUGEE CATEGORY: CLIMATE REFUGEES; **5 FUNDAMENTAL HUMAN RIGHTS AND THE PROTECTION OF CLIMATE REFUGEES; 6 CONCLUSION; REFERENCES.**

1 INTRODUCTION

Current issues underlying the risk involved in the 'risk society' epithet relate to the global threats from industrial over-production. In many respects, the effects of the industrialization process have become notably unforeseeable, thus evading the remit of the supervisory institutions in modern society. Hitherto predictable situations have come to be characterized by risk, making the environmental consequences of technological development, such as climate change resulting from global warming, a fundamental issue.

This phenomenon results from the unrestrained emission of greenhouse gases into the atmosphere by anthropogenic activities in pursuit of economic development, which, as one of the various by-products, incurs the forcible displacement of various human groups. That is, the acceleration in air pollution causes adverse environmental effects, which in turn provoke forced environmental migration and, as a result, the necessity of regulating the status of the victims of such catastrophes caused either by nature or by other humans.

With this in mind, under the United Nations Convention Relating to the Status of Refugees, ratified in 1951, protection is limited to people whose rights have been violated due to issues of race, religion, nationality, political opinion or membership of a particular social group. Climate refugees lack any effective protection thereunder to guarantee their rights and, as a result, they are protected by International Human Rights and International Environmental Laws.

Bearing in mind that this migration form is neither voluntary nor economically motivated but, rather, mandatory migration for survival reasons arising from conditions increasingly adverse to human habitation, the development of institutions to enable protection for those displaced by environmental disasters is urgently required.

With the intention of responding to this issue, we examine mechanisms in place under contemporary international law that are capable of promoting climate refugee protection. We then assess the feasibility of including this new category of individuals into the legal system through

existing institutions, thereby ensuring fundamental guarantees inherent to human dignity, that is, making the defence of these migrants possible through application of the guiding principles of International Human Rights Law.

2 RISK SOCIETY AND GLOBAL RISKS IN THE 21ST CENTURY

Since the 18th century, the social organization that emerged to perform human activities through capitalist production modes – mobilizing inanimate energy and new materials, and using machinery in manufacturing, along with the ensuing capital accumulation and economic centralization – facilitated the replacement of the agricultural society with an industrialized world by modernizing living conditions (BECK; GIDDENS; LASH, 1997). That is, this transformation also symbolized a change in social patterns and in the organization of forms of political control that had existed until that time, in addition to constituting a transition to a technology based world (BECK, 2010).

Although this historical moment, which Beck describes as the first modernity, succeeded in achieving its premises, in establishing an industrialized society accompanied by technical, scientific and economic progress, it nevertheless failed to monitor its ability to foresee the consequences of this global industrialization, especially with regard to the emergence of an environmental crisis (RAIOL, 2010). Giddens (1991) describes this as a double-edged phenomenon: the development of modern social institutions and worldwide dissemination thereof created greater opportunities for human beings to enjoy a more secure and rewarding existence than in any pre-modern system, but modernity also has a dark side, which has clearly come to light in this century.

It cannot be ignored that the unbridled exploitation of natural resources for scientific and technological expansion has led to environmental deterioration. Considering that the modernization process that emerged during the Industrial Revolution had no concern with the environment, it could not have foreseen that the advancement of these production forces would cause large-scale environmental degradation (GIDDENS, 1991).

In this way, concomitantly with wealth creation, generation in the modernization process of new risks was unforeseen. During this time, which aimed to administer and share risks generated over the course of this burgeoning modernity, in addition to its preoccupation with wealth distribution, the risk society emerged (RAIOL, 2010). In other words,

> [...] just as in the nineteenth century modernization dissolved the sclerotic, indigenous, agrarian society and, in purging it, removed the structural image of the industrial society, modernization today dissolves the contours of industrial society and, in the continuing modernity, another social configuration emerges. [...] modernization on the track of industrial society is replaced by modernization of the premises of industrial society, which was not provided for in any theoretical manuals or books on policy prescriptions of the 19th century (BECK, 2010, p. 12-13).

It is contended that this period, also known as advanced modernity, was eventually confronted with the very principles that had hitherto governed its unique social and political system, with its own success knocking it off-balance. This new societal model arose from the success of capitalism as the current system of production, and not, strictly speaking, from any specific crisis. That is, the modernization process itself deconstructed the formulations postulated for industrial society (BECK; GIDDENS; LASH, 1997).

The transition into the risk society came about involuntarily, and silently, since confidence in institutions developed during the industrialization process dominated the thinking of the time. Advanced modernity derives from an uninterrupted industrialization process incapable of absorbing threats of its own that shake the very foundations of the first stage of modernity. The institutions of the industrial society are thus reflected as both producers and justifiers of the very risks they are incapable of coping with (BECK; GIDDENS; LASH, 1997). For these reasons, mankind came to a notable point in the course of its history, in which the effects of modernity became increasingly challenging and globalized (GIDDENS, 1991).

In this context, it can be seen that the risks capable of being anticipated and controlled by industrial society, and therefore considered as *concrete*, themselves end up being controlled by unpredictability upon the outbreak of a risk society lacking adequate control systems. In other words, "normality seems comprised of constellations of indeterminates" (DE GIORGI, 1994, p. 45-54).

While the first modernity was capable of foreseeing damage, advanced modernity ends up cohabiting a realm of uncertainty: risks in the industrial society that could be calculated have become incalculable and unforeseeable in the risk society (BECK, 1998). Giddens (1991) emphasizes that the modern age is no more dangerous than previous ages – it is no more risky – but the balance between the risks and hazards created by us are so threatening, or so much more than outside dangers: "some of them are catastrophic, such as global ecological risks, nuclear proliferation or an economic collapse at a global level".

By creating risks never experienced before in human history, rapid technological and scientific advances have led to the emergence of a dark side of industrialization (BECK; GIDDENS; LASH, 1997). Man has come to coexist continually with threats of impending catastrophes, albeit without succeeding in reducing the likelihood of their occurrence. In this sense, Luhmann (2006, p. 88) states that:

> [...] the uncertainties produced now mean that risk has become inevitable in human life, in which everyone confronts it in an unknown and incalculable form. The term "risk" becomes synonymous of "nobody knows". We no longer choose to take risks, we have them thrust upon us. We are living on the ledge – in a random risk society, from which nobody can escape. Our society has become riddled with random risks.

This attests to the emergence of the risk society through environmental threats. With the risks generated, in terms of environmental degradation, having been overlooked during the modernization process, the issue has accelerated over the last century, with an increase in holes

found in the ozone layer, intensifying climate changes and an accelerating desertification process, inter alia (GOLDBLATT, 1996).

The effects of environmental industrialization involve the production of a systematic series of changes between mankind and the ecosystem. Corroborating this, Beck (2010) notes that forests have also been cleared for centuries – initially through their conversion into pastures, and then through reckless timber exploitation. But contemporary deforestation occurs globally – and, in fact, as an implied consequence of industrialization – with entirely different social and political consequences. For example, countries with extensive vegetation cover (such as Norway and Sweden) are also especially affected, themselves with many polluting industries, but still required to pay for the polluting emissions of other highly industrialized countries, with the extinction of forests, plants and animals.

According to Luhmann (2006), it is apparent that the industrialization process described above resulted in an increased incidence of uncontrolled environmental threats. The inability of existing Western institutions to exercise control over technological and scientific development has categorically led to the proliferation of various risks across the globe, with environmental risks standing out, often remaining incomprehensible and still without adequate solutions. In other words,

> [i]t is quite evident from what we have been saying that technology has ecological consequences; […] To ignore this would mean relying on a social construct for technology that promises complete closure, with the exception of openings for inputs and for outputs. The difficulty of bringing about these conditions for even a brief period and for only small volumes, i.e. experimentally, indicates that any transformation into consumer technologies engenders a multitude of additional problems - precisely as a consequence of the attempt to establish, and in the long term to reproduce, a difference between controlled and uncontrolled causality (LUHMANN, 2006, p. 95).

The impact of environmental risks produced by mankind in the risk society to the detriment of its own development has become increasin-

gly grave. The issue of climate change due to global warming is an example of a risk with still incalculable consequences, evidenced as

> [...] one of the major concerns of today's world, and we are all aware that measures are needed to reverse it. However, until very recently, orthodox science would tell us that the Earth was in a period of global cooling. Much of the evidence that served to support the cooling Earth hypothesis – heat waves, followed by cold spells, unusual atmospheric conditions – now serve as an argument to defend the global warming thesis. Does this have human origins? It is likely, but we're not sure and we'll only have absolute certainty when it is too late (GIDDENS, 2000).

Therefore, issues currently underlying risks – which give society the risk epithet - relate to global threats due to industrial overproduction. The effects of the industrialization process have become unpredictable in many respects, evading the grasp of supervisory institutions in the risk society. Hitherto predictable situations have thus become characterized by risk, making a critical issue of the environmental consequences of technological development such as climate change due to global warming.

3 CLIMATE CHANGE DUE TO GLOBAL WARMING

As discussed, in many cases, industrialization produced unforeseen consequences that evaded the jurisdiction of existing institutions in industrial society. As such, predictable situations became cloaked in complexity, presenting themselves as risk situations. This brought on the condition of uncertainty concerning the effects of technological intervention in the environment, such as climate change due to global warming, which still requires solutions[1].

1. According to the United Nations Framework Convention on Climate Change (UNFCCC), signed in 1992, "climate change" means a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.

Note that the global natural disaster average has risen from 260 in 1990 to 337 in 2003, and the number of people affected by these disasters has grown exponentially. It is true that Earth has gone through huge climate variations throughout its geological history; however, there is increasingly strong evidence that the most recent changes are not natural variations, but related to an increase in the Earth's temperature (JURAS, 2008).

The increase in the average temperature of the planet is one of the most debated environmental issues of this century. This phenomenon has accelerated due to rampant greenhouse gas (GHG) emissions into the atmosphere through anthropogenic activities in pursuit of economic growth. Although the quality of life of the global population has indeed improved over the years, the speed with which society consumes raw materials extracted from the environment is immensely faster than the time required for re-composition into nature, resulting in the planet's inability to absorb all man made pollution (BRADBROOK; OTTINGER, 2003). Leal-Arcas (2013) highlights that the warming of the earth's surface is seen as a threat not only to humanity, but also to environmental sustainability. It is therefore a global issue with a significant impact on social, economic and environmental systems.

The Intergovernmental Panel on Climate Change (IPCC, 2007) stresses that the years between 1995 and 2006 were the warmest years since measuring temperatures on the planet's surface began, in 1850. "July 1998 was perhaps the hottest month in the world's history and all of 1998 was perhaps the hottest year. Heat waves caused devastation in many areas of the northern hemisphere" (GIDDENS, 2000, p. 30).

Accordingly, the existence of climate change due to global warming, an effect that evaded the control of a risk society faced with industrialization, is now tangible. From the outset, the amplitude and speed of this progression has been attested to: "[…] previously, the global climate changed human beings. Now, human beings seem to be changing the global climate. […] but if current predictions prove correct, the climatic changes over the coming century will be larger than any since the dawn of human civilization" (UNITED NATIONS, 1994).

Indeed, the Fourth Report of the IPCC, published in 2007, emphatically argues that "warming of the climate system is unequivocal" (IPCC, 2007, p. 12). And Giddens (2000, p. 40) adds: "[...] there is a 90% probability that the warming observed is the result of human activities, through the introduction of greenhouse gases into the atmosphere – deriving from the consumption of fossil fuels in industrial production and in travel, and from new forms of agriculture and land use".

No less significant, the first of four studies, together comprising the Fifth Report of the IPCC, entitled *Climate Change 2013: the Physical Science Basis*, was released in September 2013, attesting that "[...] human activities have changed and continue to change the Earth's surface and atmospheric composition. Some of these changes have a direct or indirect impact on the energy balance of the Earth, and are thus drivers of climate change" (IPCC, 2013, p. 18).

It is contended that man's interference with the environment brought about the increase in average global temperature between 1951 and 2010, with greenhouse gas emissions being the main driver behind the earth's surface temperature increasing between 0.5 ºC and 1.3 ºC in this period. Moreover, the annual average of terrestrial warming recorded in the 20th century has led to a reversal in the long term cooling trend in the northern hemisphere over the last 5000 years. That is, with regard to annual average temperatures in this hemisphere, 1983-2012 were most likely the 30 hottest years of the last 1400 years (IPCC, 2013, p. 18). Similarly,

> [i]t is certain that Global Mean Surface Temperature (GMST) has increased since the late 19th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade of the 2000's has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89 ºC over the period 1901-2012 (IPCC, 2013, p. 5).

For the average global temperature not to exceed 2 ºC above indices recorded at the beginning of the industrialization process, the atmospheric carbon dioxide concentration must not exceed 550 parts per million in volume (ppmv) (JURAS, 2008). And while the 2007 Fourth

Report of the Intergovernmental Panel on Climate Change showed a carbon dioxide increase, from 280 ppmv to 379 ppmv, since the beginning of European modernization until 2005, the study, *Climate Change 2013: the Physical Science Basis*, highlights

> […] as estimated with very high accuracy from the observed increase of atmospheric CO_2 concentration from 278 ppm in 1750 to 390.5 ppm in 2011. The amount of CO_2 in the atmosphere grew by 4.0 PgCyr in the first decade of the 21st century. The distribution of observed atmospheric CO_2 increases with latitude clearly shows that the increases are driven by anthropogenic emissions that occur primarily in the industrialized countries north of equator (IPCC, 2013, p. 5).

For this reason, the overload imposed by steadily increasing air pollution is to be considered as the cause of adverse environmental effects, and firmly placing a new issue on the agenda for the international community - the need to regulate the situation of victims of natural events caused by climate changes due to global warming, as will be analysed below.

4 THE INDISPENSABILITY OF CREATING A NEW REFUGEE CATEGORY: CLIMATE REFUGEES

A brief analysis of the International Refugee Law is required: the institutional framework was initially developed throughout the 1950's and 1960's by the 1950 Statute of the United Nations High Commission for Refugees (UNHCR) and its 1951 Convention Relating to the Status of Refugees, as well as its 1967 Protocol Relating to the Status of Refugees.

After the defeat of the Axis powers – German, Italy, and Japan – in September 1945, which put an end to the Second World War, Europe was devastated and without conditions to meet the needs for the survival of its population. In reality, the war on the European continent had a global reach and highlighted the need for an organization capable of addressing issues related to the thousands of people that remained homeless, without country or even nationality.

It should be noted that the bodies set up to protect these people, besides being non-binding, had only temporary mandates and were often extinct before they could fulfil all the prerogatives conferred on them. For these reasons, "[…] it was necessary to create an agency or organization to keep abreast and take responsibility for guiding both individual refugees and the countries which granted their asylum" (SILVA, 2011). In response, the Statute of the United Nations High Commissioner for Refugees (UNHCR) was approved in 1950.

A year later, the international community signed the Convention Relating to the Status of Refugees in Geneva, in order to ensure the welfare and protection of refugees, who came to be defined as any person who,

> [...] as a result of events occurring before 1 January 1951 and owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (UNITED…, 1951).

The Convention is the backdrop to the 1967 Protocol Relating to the Status of Refugees, a revision that enabled the 'refugee' concept to be applied to any current or future refugee globally, and not only by virtue of events prior to January 1, 1951 on the European continent, as originally. Therefore, both geographical and temporal limitations were removed.

Although the 1951 UN Convention Relating to the Status of Refugees listed grounds for granting refugee status – namely, race, religion, nationality, membership of a social group, and political opinion – it did not exhaust every possible situation that may warrant definition as a refugee. Since then, technical and scientific advances are known to have led to increased combat with deadly weapons and deteriorating socio-economic conditions, with increased poverty and unemployment and, above all, the intensified destruction of nature, leading to the displacement of thousands of people in search of new opportunities (RAIOL, 2010).

In other words, while the conventional refugee concept, the product of an already lengthy historical process, has enabled legal protection for thousands of persecuted people, it has not met the need to authorize the inclusion of those who need shelter when faced with environmental climate disasters, as seen in the last decades (RAIOL, 2010).

Thus, despite the extension providing the original definition of 'refugee', not even the 1967 Protocol managed to overcome the conceptual problems inherent in a model that no longer meets the new demands that have emerged in the contemporary world (RAIOL, 2010).

With this in mind, it remains unfeasible to frame those forced to move due to disasters caused by climate change within the conventional refugee concept. For one thing, environmental devastation cannot be described as 'persecution' and much less fall within one of the legal grounds defining 'refugee' status (LEHMAN, 2009). In synopsis, the term 'persecution' is confined to grounds listed by law, which, for their part, must also revolve around a well-founded fear. In view of this, "[…] climate change, degradation and natural disasters [...] are new grounds which may also lead thousands of people to abandon their place of residence or even the country in which they live" (RAIOL, 2010, p. 140).

The urgency of extending the concept so as to encompass those who lack legal protection becomes manifestly apparent. In other words, "[…] you cannot have the illusion that the refugee concept, remaining unchanged, will continue to fully effectively meet the current requirements arising out of the international situation" (RAIOL, 2010, p. 102).

Although the expression "environmental refugees"[2] was introduced into the international community for the first time in 1970, by Lester

2. In the absence of consensus, a multitude of terms – such as *climate/environmental refugees, environmentally displaced persons, environmental/climate migrants, climate-change-induced migrants, ecomigrants* and so on – are being used interchangeably to refer to these populations affected. Without a precise definition, adequate assistance and recognition of the needs of this vulnerable population segment will not be forthcoming. Further, a lack of a definition also impedes the implementation of existing rights that would otherwise provide a certain degree of protection. As such, without ignoring the merit of the terms mentioned above, the fact is that although *environmental refugee* is an imperfect legal term since the element of persecution is missing from the *environmental refugee* definition (as degradation of the terrestrial ecosystem motivating human displacement can not be classified as persecution), *environmental*

Brown, a member of the Worldwatch Institute, this concept only began to be employed after 1985, with the publication of *Environmental Refugees*, prepared by Essam El-Hinnawi through the United Nations Environment Programme (UNEP) (RENAUD *et al.*, 2007).

As such, the UNEP notably established the first guidelines to define the *environmental refugee* term from among the various definitions existing for this term in contemporary society[3], as "[...] people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously the quality of their life" (RENAUD *et al.*, 2007).

In addition to the 1985 work published by Essam El-Hinnawi, it is worth mentioning that, the use of this expression was recognized by various sectors of the system comprising this international organization, including the speech of Sadako Odata (MYERS, 1995, p. 20), then representative of the UN High Commissioner for Refugees, at the UN Convention on Environment and Development in 1992: "Degradation of the environment may lead to the displacement of environmental refugees, and displacement may cause further degradation of the environment".

Bearing in mind that this study seeks to protect individuals or human groups forced to move because of climate change, the *environmental refugee* concept must be narrowed down, so that a definition of *climate refugees* can be extracted from it.

---

refugee proves itself more persuasive than the others, evoking, in this form, a sense of global responsibility for urgent protection against imminent catastrophes. In this sense, Myers (1995, p. 20) confirms that "[…] a number of alternative terms have been proposed for environmental refugees. These include 'environmentally displaced persons' and 'environmentally impelled migrants'. While these terms may be more precise, they are far less concise".

3. To be highlighted among these is the definition of *environmental refugees* given by Jodi Jacobson in the essay entitled *Environmental Refugees: Yardstick or Habitability* (Worldwatch Institute), in 1988, along with the conceptualization of this term by Myers in *Environmental Exodus: An Emergent Crisis in the Global Arena*, published in 1995. No less important, the *Centre de Recherche Interdisciplinaire en Droit de L'Environemment de L'Amenagement et de L'Urbanisme* (Crideau), under Michel Prieur, featured the environmentally displaced term in the document named *Appel de Limoges*, of 2005. Finally, in 2007, the International Organization for Migration (IOM) developed a working definition of the term *environmental migrants* in order to facilitate adequate policy responses and coping mechanisms.

Truth is, given the range of variants permeating the *environmental refugee* concept, ambiguities cannot be permitted because the expressions are not synonymous (CAMBRÉZY; LASSAILLY-JACOB, 2010, p. 8). It is important to realize their complementary nature, since the objective here is not to draw up a separate legal regime, "but genuine efforts for better accountability, international cooperation, environmental protection standards and good governance" (REFUGEE STUDIES CENTRE, 2008, p. 12).

Environmental climate refugees thus represent a form of environmentally induced migration[4]. The relevance of recognizing this category is clear, since categorization per se makes it possible to link this refugee category with the global climate regime (BIERMANN; BOAS, 2010).

It must be mentioned that the term *climate refugee* (CAMBRÉZY; LASSAILLY-JACOB, 2010) refers to any person or group of persons leaving the place of habitual residence as a result of an event that, even if a natural phenomenon, is triggered and aggravated by reason of human action[5].

With this definition in mind, the implications of terrestrial climate change have only been monitored by the international community in the last 20 years. As a result, it has become clear that the field is riddled with legal loopholes, since the current set of regulations is unable to respond to the demands of those moving due to environmental adversities (IOM, 2009).

Given that International Law does not provide protection to environmental climate refugees, it has been stated that

4. Frank Biermann, Ingrid Boas, Tyler Gianini and Bonnie Docherty are included among the scientists that use the term *environmental climate refugees*, when studying and defending special protection for a specific population category affected by the environment: those who suffer from the consequences of human environmental activity, or climate change, more specifically (SILVA; CUREAU; LEUZINGER, 2011).

5. This means that the cause behind the migration of this category of individuals would concern the occurrence of ecological disturbance resulting strictly from climate change derived from human activity. That is, the nexus between environmental disturbance and human movement must correlate with the climate change caused, principally, by virtue of the consequences of anthropogenic activities, specifically of global warming.

> [...] the majority of migrants leaving Africa for Europe, or leaving Central America for the United States (USA), due to environmental factors, are simply denied the right of asylum by these governments. [...] It is mentioned that the number of refugees, both recognized and unrecognized, is increasing due to environmental issues rather than political or social reasons (BLACK, 2001, p. 11).

On this theme, Myers (1995) points out that the total number of people globally displaced by environmental degradation in 1995 totalled at least 25 million people, while conventional refugees amounted to no more than 27 million individuals in the same year. Myers (1995, p. 20) also points out that environmental refugee situation may

> [...] become one of the foremost human crises of our times. Thus far they have been viewed as a peripheral concern, a kind of aberration from the normal order of things. In the world of the future, they are likely to become a prominent feature of our One Earth landscape. The phenomenon is an outward manifestation of profound change – a manifestation often marked by extreme deprivation, fear and despair.

It appears that tampering with the environment has already had an impact, requiring populations in different parts of the globe to relocate given that no alternative remains, other than leaving their place of origin. With regard to climate change, it is estimated that the number of people relocating, seeking to escape the consequences of climate change, such as rising sea levels, drought and desertification, as well as the higher incidence of catastrophic environmental events, will rise from 200-250 million, possibly to one billion people by mid-century (LEAL-ARCAS, 2013). Moreover, the UN Environment Program (UNEP) states that "[…] a total of 4.5 billion hectares around the world – fully 35% of the Earth's land surface – are in various stages of desertification. These areas are home to more than 850 million people" (JACOBSON, 1998, p. 10).

This highlights the inhabitability of various regions comprising terrestrial ecosystems. In a study conducted in 2009, the International Or-

ganization for Migration (IOM) found that the number of natural disasters related to climate change has more than doubled over the past two decades and, as a result, more than 20 million people were forced to move in 2008 alone (IOM, 2009). Not least, it is estimated that 100-200 million humans will have left their homes to seek shelter elsewhere because of climate change by 2100. Corroborating this, Myers (1995, p. 16) reports that "[…] roughly one person in 225 worldwide is an environmental refugee. If a proportionate number of people in the United Kingdom were to become environmental refugees, they would surpass 250,000; and in the United States, almost 1.2 million". As seen, climate refugees cannot continue to be ignored by virtue of the absence of any institutional means of protection. In reality, appropriate responses to situations facing the risk society must be demanded. In other words, an extension of the conventional refugee concept would enable protection on new grounds that occur regularly in the lives of those forcibly displaced. One cannot thus be

> [...] seduced by a restrictive interpretation of international provisions related to conditions for 'refuge', but first, with an eye towards the norm and reality, seek to identify the emergence of new refugee categories, struggling to insert them into the Convention definition, so as to enable increasingly amplified protection to persons who, being victims of Human Rights violations, are forced to move from their usual place of residence (RAIOL, 2010, p. 102).

In the light of these considerations, and acknowledging the urgency of a new conceptualization of the 'refugee' notion in order to adapt it to current needs, extending the criteria to permit granting this status is urged, while always taking the protection of fundamental Human Rights into account (RAIOL, 2010).

While Human Rights are not to be confused with legal protection concerning forced international displacement, the former provides the legal basis required to achieve the latter. The principles relating to "International Human Rights Law are defined as a set of rules applicable to any migrant, that is to say, a form of *lex generalis*, complementing more specific treaty regimes" (PÉCOURT, 2008, p. 27), such as the International Refugee Law,

for example. We shall now examine the mechanisms in place in contemporary International Human Rights Law capable of promoting climate refugees' protection.

5 FUNDAMENTAL HUMAN RIGHTS AND THE PROTECTION OF CLIMATE REFUGEES

Given the lack of specific legislation covering climate refugees, the possibility of including this new category of people in the regulatory system that guarantees Human Rights through already existing legal institutions arises. The defence of these migrants could be feasible by bringing them within the guiding principles of International Human Rights Law:

> The existing international legal framework endows every human being with fundamental Human Rights. Environmental and climate change migrants and displaced persons are thereby entitled to enjoy, equally and without discrimination, the same Human Rights and freedoms under international and national laws as every other person (IOM, 2009, p. 13).

It is appropriate to say from the outset that, after completion of the 1951 UN Convention Relating to the Status of Refugees and its 1967 Protocol, two international instruments stood out as facilitating the extension of the refuge concept, namely the 1969 Convention Governing the Specific Aspects of Refugee Problems in Africa, adopted by the Organization of African Unity[6], and the 1984 Cartagena Declaration on Refugees, adopted by the Organization of American States[7].

6. A the Convention of the Organization of African Unity Governing the Specific Aspects of African Refugees of 1969, in §2 of Article 1, extended the possibility of refugee protection by providing that this concept "[...] shall mean every person who, owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country, or who, not having a nationality and being outside the country of his former habitual residence as a result of such events is unable or, owing to such fear, is unwilling to return to it".

7. The third item of the conclusions of the Cartagena Declaration states that "[...] hence the definition or concept of a refugee to be recommended for use in the region is one which, in

Both documents provided a break away from "[…] the chains, both of the 1951 Convention and the 1967 Protocol, that linked classification to a basis of civil and political persecution" (RAIOL, 2010, p. 103), since this definition was already unable to reflect reality in other parts of the globe by the 1960's (RAYFUSE; SCOTT, 2012).

Despite International Human Rights Law does not provide specific legal protection for victims of misfortunes occasioned by global climate change, it is stressed that the protection of these individuals is implicitly incurred through rapprochement with legal system safeguarding fundamental Human Rights (CLARO, 2012).

It should be noted that the United Nations was instituted in the pursuit of maintaining world peace after the Second World War, with this composed of the Security Council and the General Assembly as its principal organs. Historical facts throughout the 20th century have demonstrated that the UN system, through the 1948 Universal Declaration of Human Rights, has facilitated the consecration of Human Rights in contemporary society (CLARO, 2012). Notably, this document was a milestone in relation to debates and policy decisions among States concerning Human Rights, since

> [...] the values that inspired the drafters of the Universal Declaration of Human Rights established a solid point of reference, since it was instituted in the face of the political failure that culminated in extreme nationalism, fascism, as well as two world wars. Through it, the set of guarantees and civil, political, cultural, social and economic rights was enunciated for all members of the human family (BIERMANN; BOAS, 2010, p. 4).

Moreover, one cannot lose sight of the fact that the new issues emerging on the world stage provide the reinforcement and the extension of these guarantees to specific categories of people through intergovernmental

addition to containing the elements of the 1951 Convention and the 1967 Protocol, includes among refugees persons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of Human Rights or other circumstances which have seriously disturbed public order".

bodies. It suffices to conclude that "[…]the protection of displaced people, particularly where migration appears to be forced rather than voluntary, is well established both as a concept and through norms and legal instruments in domestic and international law" (IOM, 2009, 391).

Faced with the lack of proper mechanisms to protect climate refugees, it can be said that protecting this specific group of people is feasible through different legal instruments – usually no-binding ones – conceived in the international arena.

In this respect, the 1948 Universal Declaration of Human Rights proves to be the most significant of these instruments. Besides, it is also worth mentioning the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, both of 1966, as well as a number of other international conventions dedicated to particular social strata, such as the 1991 International Labor Organization Convention 169 on Indigenous and Tribal Peoples; the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families; the 1989 Convention on the Rights of the Child; the 1981 Convention on the Elimination of All Forms of Discrimination against Women; the 1954 Convention relating to the Status of Stateless Persons, together with the 1991 Convention on the Reduction of Statelessness (IOM, 2009).

The historical relevance of the 1948 Universal Declaration of Human Rights may be highlighted not only for its international impact, but also for reflecting the indispensability of including fundamental Human Rights in national constitutions. Under the broader framework of the International Human Rights Law regime, the prerogatives aimed at protecting people displaced by environmental and climatic factors include the right to adequate healthcare, the right to life and dignity, the right to adequate housing, the right to security of tenure, the right to protection from arbitrary eviction, the right to land and rights in land, the right to property and the peaceful enjoyment of possessions, the right to privacy and respect for the home, the right to security of the person, freedom of movement and choice of residence; and the right to housing, land and property restitution or compensation following displacement (LECKIE, 2008).

Thus, International Human Rights Law cannot shirk its primary responsibility, addressed in Article 13, 1 and 2 of the 1948 Universal Declaration of Human Rights, to provide every human being "[...] the right to leave any country, including his own, and to return to his country" (UNITED…, 1948), especially in situations where these individuals or groups become vulnerable, aiming at "[...] the elimination of all forms of discrimination against them, and the strengthening and more effective implementation of existing Human Rights instruments" (UNITED NATIONS, 1993).

Similarly, the Vienna Declaration and Programme of Action, adopted in 1993 by the World Conference on Human Rights, reinforces the universalist concept of human rights protection, highlighting the importance of the international community's commitment to respect them and promote them as a whole. In this sense:

> All Human Rights are universal, indivisible and interdependent and interrelated. The international community must treat Human Rights globally in a fair and equal manner, on the same footing, and with the same emphasis. While the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, it is the duty of States, regardless of their political, economic and cultural systems, to promote and protect all Human Rights and fundamental freedoms (UNITED…, 1993).

It is contended, therefore, that the principles guiding International Human Rights Law apply to climate refugees as the same goal is intended – international protection for humanity – regardless of the institute to be adopted (CLARO, 2012). In other words, the protection provided in general instruments, guided by basic human guarantees, is designated as the primary foundation and the ultimate reason for protecting this category of people, making coverage possible for them in these general instruments (RAMOS, 2011).

Recognition of those forced to move because of weather related climate change, as human beings with Human Rights, cannot be overlooked. That is,

> [...] the protection of refugees and displaced persons should be coordinated by Human Rights mechanisms at a regional and global level, demonstrating the international dimension of the problem, given the state of emergency in which different human groups find themselves, as well as due to economic problems or regional shifts and including those arising from environmental problems (RODRIGUES, 2013, p. 15666).

Hence, the adoption of legislation dealing with Human Rights towards vulnerable groups must be highlighted. Legislation enabling the establishment of a minimum protection level capable of assessing rights breached would impose States accountability for individuals at risk. Moreover, a commitment to fundamental Human Rights arising due to climate change would concern providing additional protection, given that Human Rights Law has already succeeded in providing the necessary legal framework for implementing refugee status itself. Further instruments already exist in International Human Rights Law to guarantee those forcibly displaced the minimum required to survive with dignity in the host country (IOM, 2009).

In accordance with the UN Charter, in addition to other international instruments dealing with protecting fundamental Human Rights, under the 1948 Universal Declaration of Human Rights

> […] states have the duty to cooperate to prevent the violation of Human Rights, including the duty to take effective action in the fight against climate change. Furthermore, states must take adequate measures to respect and protect Human Rights when working to mitigate climate change or adapt to its impacts (IOM, 2009, p. 407).

Not least, the absence of any separate legal instrument to safeguard climate refugees can also be remedied through the elements underlying International Environmental Law (CRIDEAU, 2009, p. 455). Within this, the first principle of the 1972 Stockholm Declaration on the Human Environment expressed the conviction that the existence of an ecologically balanced environment is essential for the enjoyment of human rights, as follows:

> Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic Human Rights the right to life itself (UNITED NATIONS, 1972).

In making this proclamation, the intended relationship between preservation of the environment and the implementation of Human Rights can be observed, aiming at maintaining the right to life by means of satisfactory living conditions in a sustainable environment. This, in turn, is closely related to standards underlying the legitimacy of fundamental human guarantees (RODRIGUES, 2013, p. 15662).

The right to a healthy environment is raised to the status of Human Right, the corollary to the right of existence with dignity, the guarantee of which depends on the full implementation of Human Rights. Then the continuity of life is one of the cornerstones of environmental protection. In other words, "[…] human life belongs to a category of values of purely qualitative and indivisible dimensions, serving as a foundation for other values" (BOITEUX, 2009, p. 41).

From this perspective, other documents drawn up by the scientific community also began to prioritize the conservation of the environment as a precondition for enjoyment of the basic Human Rights. In its Resolution 45/94[8], the United Nations General Assembly recalled resolutions establi-

8. The Resolution n. 45/94 from the United Nations General Assembly, from December 1990, recalls that, "[…] in accordance with the provisions of the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, everyone has the right to an adequate standard of living for his or her own health and well-being and that of his or her family and to the continuous improvement of living conditions", and recognizes "[…] the need to promote universal respect for, and observance of, Human Rights and fundamental freedoms in all their aspects".

shed in Stockholm in 1972, stressing that all individuals have the right to live in an environment suitable for their health and well-being.

The Rio Declaration on Environment and Development, signed during the 1992 United Nations Conference on Environment and Development, held in Rio de Janeiro, "recognizing the integral and interdependent nature of the Earth, our home" (UNITED NATIONS, 1992), asserts that environmental conservation through sustainable development is essential for enjoying certain Human Rights. Principle one expresses it: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (UNITED NATIONS, 1992).

Therefore, the incorporation of the human dimension in environmental issues and concerns for future generations are highlighted as essential aspects to International Environmental Law, given the irreversible or irreparable character that climate change can have in nature, as already explained (RAMOS, 2011).

Hence the relevance of actions to protect, prevent and adapt to the effects of these global changes, which threaten not only the current generation (the effective victims), but also future generations (potential victims): "[…] far beyond the issue of human displacement lies the necessity of understanding its causes and recognizing the necessity of preventing them and combatting them. International Environmental Law enables clear visualization of all these aspects" (RAMOS, 2011, p. 122).

For these reasons, International Environmental Law, complementing the guiding principles of International Human Rights Law, is seen as a precondition for maintaining human life, since environmental balance is essential in developing basic Human Rights that otherwise would not exist in a degraded environment that could not promote a healthy quality of life (BOITEUX, 2009, p. 40-41). It is important to understand that:

> Environmental law does have the merit of providing an additional and broader basis for responding to climate change damage and the potential migratory effects. But it requires upholding a duty to act collaboratively to ensure that an international system is sufficiently strong to protect Human Rights. To this extent,

> it complements Human Rights law, which acts principally at national level (IOM, 2009, p. 410).

It must be acknowledged that an adaptation of International Human Rights Law and International Environmental Law would effectively accommodate the needs of those forced to migrate when faced with climate change. However, it constitutes a significant challenge for today's society (IOM, 2009).

Even though the international community has proclaimed the universality of fundamental Human Rights and the indispensability of a healthy environment through various multilateral agreements during the second half of the 21st Century, some of those rights listed are clearly far from optimal effectiveness. As Human Rights are constantly breached not only by individuals, but especially by States, they fail to comply with the duty to look after their citizens.

With the question posed, no regulatory response to date has ensured adequate protection for individuals forcibly expelled from their places of origin because of climate change. In this sense, several international bodies and standards aiming at the protection of climate refugees have been drafted in recent years. Although not legally binding, these guidelines and instruments provide a *soft law*[9] approach to dealing with the issue of displaced persons due to climate change.

The United Nations Human Rights Council has adopted three resolutions on Human Rights and climate change since 2007: Human Rights Council Resolutions 7/23[10] and 10/4[11], intending to mobilise international

9. The international text is devoid of legal character in relation to the signatories, with compliance being voluntary.

10. According to Human Rights Council Resolution n. 7/23, from March 2008, "[…] climate change poses an immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of Human Rights", recognizing "[…] that the world's poor are especially vulnerable to the effects of climate change, in particular those concentrated in high-risk areas, and also tend to have more limited adaptation capacities".

11. The Human Rights Council Resolution n. 10/4, from March 2009, notes that "[…] climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of Human Rights including, *inter alia*, the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, the right

Human Rights mechanisms as an additional and complementary means of mobilizing international action on climate change; and Human Rights and Climate Change Resolution 18/22[12], recognizing the link between Human Rights and climate change, and also climate change induced displacement (CLARO, 2012). Two more resolutions on Human Rights and the environment must also be mentioned: Human Rights Council Resolutions 16/11[13] and 19/10[14] (RABAB; WADUD; COELHO, 2014).

Moreover, it is important to note that

> [...] the Council's first and primary goal was to introduce Human Rights concepts and principles into the United Nations Framework Convention on Climate Change (UNFCCC) process so as to highlight the human dimension of global warming, and to use Human Rights principles, such as equality, non-discrimination, access to information, access to decision-making and access to justice, to qualitatively improve climate policy (MCADAM; LIMON, 2015, p. 8).

In response to the resolutions mentioned, March 2016 saw the publication of the *Report of the Special Rapporteur on the issue of Human Rights obligations relating to the enjoyment of a safe, clean and healthy and*

to self-determination and Human Rights obligations related to access to safe drinking water and sanitation, and recalling that in no case may a people be deprived of its own means of subsistence".

12. The Human Rights and Climate Change Resolution n. 18/22, from October 2011, affirms "[…] that Human Rights obligations, standards and principles have the potential to inform and strengthen international and national policymaking in the area of climate change, promoting policy coherence, legitimacy and sustainable outcomes".

13. According to Human Rights Council Resolution n. 16/11, from March 2011, "[…] sustainable development and the protection of the environment can contribute to human well-being and the enjoyment of Human Rights", noting that "[…] environmental damage can have negative implications, both direct and indirect, for the effective enjoyment of Human Rights".

14. The Human Rights Council Resolution n. 19/10, from March 2012, decided to "[…] appoint, for a period of three years, an independent expert on the issue of Human Rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment", in order to "[…] identify, promote and exchange views on best practices relating to the use of Human Rights obligations and commitments to inform, support and strengthen environmental policymaking, especially in the area of environmental protection, and, in that regard, to prepare a compendium of best practices".

sustainable environment, which not only describes possible methods of implementing Human Rights obligations in order to enjoy a healthy environment, but also indicates a growing level of consensus about how Human Rights standards apply to environmental issues: "there is an agreement that environmental degradation can and does interfere with the enjoyment of a wide range of Human Rights" (HUMAN RIGHTS COUNCIL, 2016, p. 2).

In order to protect against this interference, Human Rights bodies have stated that governments have procedural obligations, including making environmental information publicly available, facilitating public participation in environmental decision-making and providing access to legal remedies. Furthermore, they are expected to adopt institutional frameworks in order to protect against environmental damage that may encroach on the enjoyment of Human Rights, and heightened obligations to protect those who are most vulnerable to this damage (HUMAN RIGHTS COUNCIL, 2016).

Finally, led by organisms such as the United Nations Human Rights Council, the international community has regularly acknowledged and expressed its concern about the negative Human Rights implications of climate change, and has consistently drawn particular attention to the Human Rights consequences of climate change-related displacement (MCADAM; LIMON, 2015).

The so-called *Nansen Principles* are also worth mentioning. Drawn up in 2011 by a state-led process outside the UN – formulated by the Nansen Initiative and led by the government of Norway – they provide the first guidelines for work related to the victims of climate change resulting from global warming. These principles seek to build consensus among interested states, in consultation with other stakeholders, on how to address the legal, operational, institutional and knowledge lacunas in cross-border disaster-displacement, including those connected to climate change, not through drafting new legal instruments or policies, but through developing a non-binding *protection agenda* setting out examples of existing practices and areas for future action (RABAB; WADUD; COELHO, 2014).

The overall goal of the Nansen Initiative is to develop a *protection agenda* able to draft standards for dealing with those displaced across borders in the natural disaster context, promoting international cooperation and solidarity and developing operational responses to ensure preparedness in dealing with these refugees (NANSEN INITIATIVE, 2013).

In this context, "[…] the Nansen Initiative process has highlighted that protecting the rights of cross-border disaster-displaced persons requires broadening the scope of discussions and policy developments beyond the humanitarian response phase" (MCADAM; LIMON, 2015, p.22). To achieve this, the Nansen Principles recommended guiding responses to some of the urgent and complex challenges raised by displacement in the context of climate change and other environmental hazards, as follows:

> 1. Responses to climate and environmentally-related displacement need to be informed by adequate knowledge and guided by the fundamental principles of humanity, human dignity, Human Rights and international cooperation; 2. States have a primary duty to protect their populations and give particular attention to the special needs of the people most vulnerable to and most affected by climate change and other environmental hazards [...]; 3. The leadership and engagement of local governments and communities, civil society, and the private sector, are needed to address effectively the challenges posed by climate change, including those linked to human mobility; 4. When national capacity is limited, regional frameworks and international cooperation should support action at national level and contribute to building national capacity [...]; 5. Prevention and resilience need to be further strengthened at all levels, particularly through adequate resources [...]; 6. Building local and national capacity to prepare for and respond to disasters is fundamental [...]; 7. The existing norms of international law should be fully utilized, and normative gaps addressed; 8. The Guiding Principles on Internal Displacement provide a sound legal framework to address protection concerns arising from climate and other environmentally related internal displacement [...]; 9. A more coherent and consistent approach at the international level is needed to meet the protection needs of people displaced externally owing to sudden-onset disasters. States, working in conjunction with UNHCR and other relevant stakeholders,

> could develop a guiding framework or instrument in this regards; 10. National and international policies and responses, including planned relocation, need to be implemented on the basis of non-discriminations, consent, empowerment, participation and partnerships with those directly affected, with due sensitivity to age, gender and diversity aspects [...] (NANSEN…, 2011).

Although the *Nansen Principles* have not been officially adopted as a legally binding instrument in law, as such reflecting only the results obtained from the Nansen Conference: Climate Change and Displacement in the 21st Century held in Norway in 2011, they made it possible to define a political framework that addresses worldwide climate changes, identifying key stakeholders and relevant areas of activity. They constitute an important step in the process of including this category of individuals in the contemporary international agenda (KÄLIN, 2012).

For all these reasons, it is clear that there is a significant gap in the International Human Rights Law architecture for protecting people displaced across international borders in the context of climate change. It relates in particular to questions of admission, legal status during their stay, and also conditions for returning home.

While certain principles and standards define the rights of climate refugees, a legally binding Human Rights instrument has yet to evolve the rights and protection of this vulnerable population. The approach commonly taken to the issue of climate refugees stems principally from a scientific and developmental perspective, with the Human Rights perspective only recently brought into the debate.

Finally, given that the apparatus established by the risk society does not provide legal support for climatic refugees due to lack of express legislative protection, and despite this vicissitude factually existing, protection still has not been assimilated into the legal sphere. In these circumstances, this regulatory deficiency could be resolved by widening the circumstances that compel migration, that is, by including environmental causes in the list of grounds that warrant granting refuge: with respect to guaranteeing the effectiveness of Human Rights for victims of these catastrophes, therefore, there is light at the end of the tunnel.

6 CONCLUSION

Given the considerations underlying the unpredictable consequences of unbridled industrial development process, leading to climate change from global warming, the urgency of extending the definition of 'refugee' to include those lacking legal protection despite forced migration, is obvious.

While the traditional refugee concept has enabled legal protection for thousands persecuted, it has not left an opening enabling the inclusion of those seeking refuge from new situations emerging internationally, such as those highlighted by environmental disasters related to climate change from global warming.

As such, environmentally forced migrants do not have any international protection regime, even if applying International Human Rights Law instruments, albeit indirectly.

Although the 1969 Convention Governing the Specific Aspects of Refugee Problems in Africa and the 1984 Cartagena Declaration were not designed to deal with environmental issues, by extending the 'refuge' concept these both facilitated the implied inclusion of environmental adversities arising from climate change due to global warming as grounds for granting this status.

As further demonstrated, while International Human Rights Law does not provide protection to victims of global climate disasters, it does provide support to these individuals, based on Human Rights standards.

The importance of the 1948 Universal Declaration of Human Rights has been cited, in that its use of Human Rights legislation to defend individuals vulnerable to forcible displacement induced by climate change makes possible the establishment of a minimum protection level for these people.

It should be noted further that the absence of any separate legal instrument to safeguard environmental climate refugees can be remedied through the elements underlying International Environmental Law, such as the 1972 Stockholm Declaration on the Human Environment and the 1992 Rio Declaration on Environment and Development.

Regardless of advances regarding the international protection of Human Rights and the environment, no regulatory response currently ensures adequate protection for individuals forcibly driven out of their places of origin because of climate change due to global warming.

A number of international bodies and standards aiming at protection for environmental climate refugees have been drafted in recent years, such as the United Nations Human Rights Council resolutions and the *Nansen Principles* which, although not legally binding, provide a *soft law* approach to dealing with the issue of *environmental climate refugees*.

Finally, given that the apparatus established by the risk society itself does not provide legal support for environmental climate refugees due to lack of express statutory protection, it has been observed that, while factually existing, this vicissitude has not yet been assimilated into the legal sphere. This regulatory deficiency could thus be rectified by an extension of the circumstances constituting compelled migration, that is, by including environmental causes in the list of grounds for granting refugee status. There is thus some light at the end of the legal tunnel in securing Human Rights for these disaster victims.

REFERENCES

BECK, U. **Sociedade de risco:** rumo a uma outra modernidade. São Paulo: Editora 34, 2010.

_____. **The politics of risk society.** Edited by Jane Franklin. Cambridge: Polity Press, 1998.

BECK, U.; GIDDENS, A.; LASH, S. **Modernização reflexiva:** política, tradição e estética na ordem social moderna. São Paulo: UNESP, 1997.

BIERMANN, F; BOAS, I. Preparing for a warmer world: Towards a Global Governance System to Protect Climate Refugees. **MIT Press Journals: Global Environmental Politics**, v. 10, n. 1, 2010, p. 60-88. Available at: <https://www.mitpressjournals.org/toc/glep/10/1>. Accessed: 2 Jan 2018.

BLACK, R. **Environmental refugees:** myth or reality. New Issues in Refugee Research Working Paper 34. Geneva: United Nations High Commissioner for Refugees, 2001.

BOITEUX, E. (Coord.). **Filosofia e direitos humanos:** estudos em homenagem ao professor Fábio Konder Comparato. Salvador: Podivm, 2009.

BRADBROOK, A.; OTTINGER, R. **Energy law and sustainable development.** Geneva, Switzerland: IUCN, 2003.

CAMBRÉZY, L.; LASSAILLY-JACOB, V. Réfugiés climatiques, migrants environnementaux ou déplacés? Du consensus de la catastrophe à la surenchère médiatique – Introduction. **Revue Tiers Monde** – Réfugiés climatiques, migrants environnementaux ou déplacés?, v. 4, n. 204, p.7-18, 2010. Available at: <https://www.cairn.info/revue-tiers-monde-2010-4-page-7.htm>. Accessed: 2 Jan 2018.

CENTRE DE RECHERCHE INTERDISCIPLINAIRE EN DROIT DE L'ENVIRONNEMENT ET L'URBANISME. **Projet de convention relative au statut international des deplaces environnementaux.** Limoges: CRIDEAU, 2009.

CLARO, C. de A. B. **Refugiados ambientais:** mudanças climáticas, migrações internacionais e governança global. 2012. 113 f. Dissertação (Mestrado em Desenvolvimento Sustentável) – Universidade de Brasília, Brasília, 2012. Available at: <http://repositorio.unb.br/handle/10482/11970>. Accessed: 20 Jan. 2018.

DE GIORGI, R. O risco na sociedade contemporânea. **Seqüência Magazine**, Florianópolis, UFSC, v. 15, n. 28, 1994. p. 45-54.

GIDDENS, A. **As consequências da modernidade.** São Paulo: Unesp, 1991.

_____. **O mundo na era da globalização.** São Paulo: Editora Presença, 2000.

GOLDBLATT, D. **Teoria social e ambiente:** Perspectivas Ecológicas. Lisboa: Piaget, 1996.

HUMAN RIGHTS COUNCIL (HRC). **Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.** United Nations General Assembly: Thirty-first session. Agenda item 3: Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, 2016.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC). **Climate Change 2007:** The Physical Science Basis. Geneva, Switzerland: PISMC, 2007. IPCC

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC). **Working Group I Contribution To The IPCC Fifth Assessment Report.** Climate Change 2013: the Physical Science Basis. Sweden: 2013.

INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM). **Migration, environment and climate change:** Assessing the evidence. Switzerland: IOM, 2009.

JACOBSON, J. L. **Environmental Refugees:** a yardstick of habitability. Worldwatch Paper 86. Washington, D.C., 1998.

JURAS, L. A. G. M. **Aquecimento global e mudanças climáticas:** uma introdução. Brasília: Biblioteca Digital da Câmara dos Deputados, 2008.

KÄLIN, W. De los Principios de Nansen a la Iniciativa Nansen. **Revista Migraciones Forzadas**, n. 41, dec. 2012. Available at: <http://www.fmreview.org/es/prevencion/kaelin>. Accessed: 2 Jan. 2018.

LEAL-ARCAS, R. **Climate change and international trade.** Cheltenham, UK: Edward Elgar Publishing Limited, 2013.

LEHMAN, J. **Environmental refugees:** the construction of a crisis. Prepared for the UHU-EHS Summer Academy, 2009.

LUHMANN, N. **Risk:** a sociological theory. Londres: Aldine Transaction, 2006.

MCADAM, J.; LIMON, M. **Human rights, climate change and cross-border displacement:** the role of the international human rights community in contributing to effective and just solutions. Switzerland: Universal Rights Group, 2015.

MYERS, N. **Environmental exodus:** an emergent crisis in the global arena. Washington: Project of the Climate Institute, 1995.

NANSEN INITIATIVE. **2013 The Nansen Initiative**. Available at: <https://www.nanseninitiative.org/>. Accessed: Feb 20, 2018.

_____. **The Nansen Conference:** Climate Change and Displacement in the 21st Century. Oslo, Norway, 2011. Available at: <https://www.unhcr.org/protection/environment/4ea969729/nansen-conference-climate-change-displacement-21st-century-oslo-6-7-june.html>. Accessed: Feb 20, 2018.

PÉCOURT, S. **Protection des déplacés et réfugiés climatiques: migrations forcés, droits de l'homme et changement climatique.** Geneva: Certificat de formation continue en droits de l'homme, 2008.

RABAB, F.; WADUD, A. J.; COELHO, S. **Human Rights, Climate Change, Environmental Degradation and Migration:** A New Paradigm. Bangkok and Washington, D.C.: International Organization for Migration and Migration Policy Institute, 2014.

RAIOL, I. P. C. **Ultrapassando fronteiras:** a proteção jurídica dos refugiados ambientais. Porto Alegre: Núria Fabris, 2010.

RAYFUSE, R.; SCOTT, S. **International Law in the era of climate change.** Great Britain: Edward Elgar Publishing Inc., 2012.

RENAUD, F. *et al.* **Control, adapt or flee:** how to face environmental migration? Alemanha: United Nations University for Environment and Human Security (UNU-EHS), 2007.

RODRIGUES, D. A. M. Refugiados ambientais: necessária tutela do direito internacional? **Revista do Instituto do Direito Brasileiro**, v. 2, n. 13, 2013, p. 15651-15679. Available at: <https://blook.pt/publications/publication/17cac67de14b/>. Accessed: 20 Jan. 2018.

SILVA, C. R. B. A **questão dos refugiados ambientais:** um novo desafio para o direito internacional. 2011, 20p. Available at: <http://www.egov.ufsc.br/portal/sites/default/files/anexos/32518-39529-1-PB.pdf>. Accessed: 15 Sep 2016.

THE UNITED NATIONS (UN). **Universal Declaration of Human Rights.** Proclaimed by the United Nations General Assembly in Paris on 10 December 1948 (General Assembly resolution 217A). Switzerland, 1948. Available at: <https://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf>.

_____. **The United Nations Convention relating to the Status of Refugees.** Switzerland, 1951. Available at: <https://cms.emergency.unhcr.org/documents/11982/55726/Convention+relating+to+the+Status+of+Refugees+%28signed+28+July+1951%2C+entered+into+force+22+April+1954%29+189+UNTS+150+and+Protocol+relating+to+the+Status+of+Refugees+%28signed+31+January+1967%2C+entered+into+force+4+October+1967%29+606+UNTS+267/0bf3248a-cfa8-4a60-864d-65cdfece1d47>. Accessed: 2 Jan. 2018.

_____. **Declaration of the United Nations Conference on the Human Environment.** Stockholm, 1972. Available at: <http://www.un-documents.net/aconf48-14r1.pdf>.

THE UNITED NATIONS (UN). **The Rio Declaration on Environment dnd Development.** Rio de Janeiro, 1992. Available at: <https://unfccc.int/resource/docs/convkp/conveng.pdf>.

_____. **Vienna Declaration and Programme of Action.** Adopted by the World Conference on Human Rights in Vienna, 1993. Available at: <https://www.ohchr.org/en/professionalinterest/pages/vienna.aspx>.

UNEP/WMO. Information Unit on Climate Change. **United Nations Framework Convention on Climate Change.** United Nations: New York, 1994.

Correspondência | *Correspondence:*

Diogo Andreola Serraglio
Rua Imaculada Conceição, 1155, Bloco 5, Térreo, Prado Velho,
CEP 80.215-901. Curitiba, PR, Brasil.
Fone: (41) 3271-1515.
Email: diogo.aserraglio@gmail.com

Recebido: 18/09/2018.
Aprovado: 11/11/2018.

Nota referencial:

SERRAGLIO, Diogo Andreola; FERREIRA, Heline Sivini. The protection of climate refugees in the risk society: a human rights-based approach. **Revista Direito e Liberdade**, Natal, v. 20, n. 3, p. 47-81, set./dez. 2018. Quadrimestral.