Discourse on the Institutional Regime of Remedying Loss and Damage Incurred by Climate Refugee Countries: From the Perspective of Natural Rights

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I. Introduction

As an emerging academic concept, the "climate refugee country" is derived from the concept of "eco-refugee country" proposed by Cara Nine, a professor of political philosophy in the UK.[1] Climate refugee countries refer to those countries that have suffered loss and damage caused by climate change and are no longer fit for human habitation.[2] In general, the uncontrolled greenhouse gas emissions of human society directly lead to serious threats to human life, health, property, and environment. Although climate change is a global phenomenon affecting all regions and mankind as a whole, its impacts on different countries and regions are different.[3] Because of the unbalanced distribution of natural environmental conditions and economic and social conditions, it brings inevitable adverse consequences to the survival and sustainable development of countries or regions with more fragile climates, which can necessitate the forced migration of all inhabitants. As some scholars said, considering a certain pre-existing commitment to sea-level rise due to the long thermal lags of the ocean system, several million people living in coastal areas and small islands will inevitably be displaced by the middle of the century.[4]

In fact, climate refugee countries can be understood as the most extreme consequence of the loss and damage caused by climate change. The core concept of the climate refugee countries is that of "territorial disappearance", including "active disappearance" and "passive disappearance".

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1 Cara Nine "Ecological Refugees, State Borders, and Lockean Proviso" (2010) 27 Journal of Applied Philosophy 359.

2 In recent years, warming earth has resulted in rising seas and increasing extreme weather events that force many people to be climate refugees. A "famous" climate refuge country may be Kiribas in Pacific area, but Kiribas is not the only case, it's a worldwide phenomenon, 40 per cent of the world's population lives within 60 miles of the coast, 145 million live in less than three feet above sea level. People in some places do have other higher grounds to relocate to, but those on Kiribas have no place to run. CBS News "Climate Refugees" 21 August 2017 <www.cbsnews.com/video/climate-refugees-nations-under-threat/>. Actually, some climate-related resettlement projects are under way in Vietnam, Mozambique, on the Alaskan coast, the Chinese territory of Inner Mongolia and in the South Pacific. Eco-Business "Countries must plan for climate refugees - report" <www.eco-business.com/ebcircle/>.

3 Randall S Abate and Elizabeth Ann Kronk Climate Change and Indigenous Peoples (Edward Elgar Publishing Ltd, 2013). Randall S Abate and Elizabeth Ann Kronk *Climate Change and Indigenous Peoples* (Edward Elgar Publishing Ltd, 2013).

4 Sujatha Byravan and Sudhir Chella Rajan "Providing new homes for climate change exiles" (2006) 6 Climate Policy 247-252.

The former refers to the sinking of a country's territory to the seabed due to rising sea levels, and the tangible territory is no longer exists; the latter is caused by survival pressures such as land salinization and lack of freshwater resources. Territorial disappearance is not purely a natural phenomenon, it has also triggered a series of international law issues, including, but not limited to, whether a climate refugee state that no longer occupies physical territory can retain its national status as a state, or whether it becomes a "special international legal entity". Are climate refugee countries and their nationals entitled to seek relief for their loss and damage? What damages can be obtained if so? What rights are available to climate refugee countries and their nationals on which relief is claimed, and to what extent do these rights challenge the powerful legal rights granted to States by contemporary international law, including the territorial rights or the permanent sovereignty over natural resources?[5]

However, the disorder of the international community occasionally resembles that of the jungle. And it makes the "positive international law" more incomplete than "positive domestic law".[6] This imperfection of international law is reflected in many aspects from legislation to law enforcement. Generally speaking, the positive international law embodies a serious characteristic of hysteresis at the level of law-making. As the norms of international law embody the common will of States, they must negotiate for a long time in order to reach an agreement. However, such negotiations are prone to deadlock due to the lack of leadership authority. Furthermore, international law itself cannot provide effective sanctions for such non-compliance, which is the reason why some norms of international law are known as soft law.[7] Obviously, this limitation is particularly evident in terms of loss and damage caused by climate change, which also include the loss and damage of climate refugee countries.

In order to break the deadlock in positive international law, international legislators began to establish a global climate negotiation system that could be used to remedy the loss and damage caused by climate change. However, its ambition was limited by many factors, such as the structural shortcomings of the international community (no country can enjoy privileges above others), the reality of conflicts of interest among diverse countries and the complexity and the novelty of the issues regarding climate refugee states. Many climate negotiations on United Nations Framework Convention on Climate Change (UNFCCC) have avoided the topic altogether, or only taken a

5 Territorial rights and permanent sovereignty over natural resources are two rights clearly recognized by current positive international law. These two rights are generally understood as sovereign rights, which must be respected and not interfered by other countries. Under general international law, the exercise of these two rights is limited by the no-harm principle, namely the responsibility not to cause damage to the environment of other states or to areas beyond national jurisdiction. Philippe Sands *Principles of International Environmental Law* (Cambridge University Press, 2003) 235-246. However, on the issues regarding loss and damage caused by climate change, it is difficult to prove the causality, which limits the application of the no-harm principle. In this sense, sovereign rights have become unlimited rights that climate refugee countries must show their respects to. Benoit Mayer "The Relevance of the No-Harm Principle to Climate Change Law and Politics" (2016) 19 Asia-Pacific Journal of Environmental Law 79–104.

6 Positive international law, also called international positive law, are the laws that made by the international legislators rather than natural law.

7 For further information about international soft law. Jaye Ellis "Shades of Grey: Soft Law and the Validity of Public International Law" (2011) 25 Leiden Journal of International Law 313; Francesco Francioni "International 'soft law': a contemporary assessment" in Vaughan Lowe(ed) *Fifty Years of the International Court of Justice* (Cambridge University Press, 1996) 167-178.

limited involvement in this subject.[8] Therefore, climate refugee countries, no matter whether collectives nor as individual nationals, are able to enjoy the right of positive international law relief against other sovereign states under the existing rules of international law. In such circumstances, many theorists in international relations and law have begun to discuss the question of whether natural rights can be the legal basis for climate refugee countries and their nationals to enjoy the right to claim remedy for loss and damage caused by climate change.

Part I of this paper explores the concept of natural rights and its status in international policy and law. Then Part II focuses on how to find a scientific and reasonable legal basis for establishing responsibility rules from the perspective of legal philosophy. Based on two kinds of natural rights, international legislators have three kinds of remedy programs to choose. However, the best institutional choice in theory is not necessarily in line with international political reality. Under the objective international background, this paper then discusses in detail three remedy programs mentioned in Part II and another program based on global distributive justice which highlights responsibilities of states rather than natural rights. Part III applies cost-benefit analysis and determines the De-territorial Countries Remedy Program to be a relatively rightful choice among the four options. This paper also gives attention to international political prospects of the De-territorial Countries Remedy Program in Part IV and its challenges to developing countries, especially for China.

A. The Concept of Natural Rights and Its Status in International Law

The concept of natural rights here refers to a kind of "subjective human rights", which does not derive from the concept of natural rights in the objective sense of natural law norms, obligations, orders, and responsibilities discussed by the Stoics in ancient Greece.[9] The exact time of the origin of this subjective concept of natural rights has already become the focus of theoretical research for nearly half a century. According to Tierney's latest research, the origin of the modern subjective concept of natural rights is related to the commentary activities of church law that was popular in the 12th and 13th centuries.[10] This viewpoint was subsequently supplemented by Auckley's interpretation that the development of the modern concept of natural rights has been gradual and evolutionary, which started from Church Law of the 12th and 13th centuries, first to the medieval academic jurisprudence, then to the philosophical thought of natural rights in 17th century, and evolved continually into the 18th century.[11]

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8 As early as during the 1991 climate negotiations on United Nations Framework Convention on Climate Change (UNFCCC), Vanuatu, on behalf of the Alliance of Small Island States (AOSIS), advocated the establishment of an international insurance fund to compensate the most vulnerable small island countries and the least developed countries for the losses and damage caused by sea level rise. However, as the parties to the Convention did not reach agreement on the proposal, the AOSIS made it clear when signing the UNFCCC that they reserved the right to claim damages for loss and damage caused by climate change. Later, many climate negotiations on UNFCCC have avoided the topic altogether, or only taken a limited involvement in this subject. Cheng Yu "Brief Study on the Loss and Damage Caused by Climate Change and Their Regulations of International Law" (2016) 24 Pacific Journal 12; Elisa Calliari "Loss and Damage: A Critical Discourse Analysis of Parties' Positions in Climate Change Negotiations" (2016) 21 Journal of Risk Research 725–747.

9 Leo Strauss *Natural Right and History* (PENG Gang tr, 1st ed, Zuo An Culture Publishing House 2005) 226.

10 Brian Tierney "'The Idea of Natural Rights-Origins and Persistence" (2004) 2 Northwestern Journal of International Human Rights 3–4.

11 Francis Oakley *Natural Law, Laws of Nature, Natural Rights: Continuity and Discontinuity in the History of Ideas* (Wang Tao tr, The Commercial Press, 1st ed 2015) 95-118.

Since then, "the concept or discourse of natural rights has finally got rid of the subordinate status of the objective norms of natural law and become a modern sense of "moral contract".[12] Almost at the same time, the concept of natural rights began to be replaced by modern sense of human rights,[13] and it also began to move from the "theoretical altar" to "institutional practice", which developed vigorously in the French Revolution and the American War of Independence, and was finally reaffirmed by the Declaration of Independence and the Declaration of the Rights of Man and of the Citizen.[14] As some scholars have summarized, the development of the concept of natural rights since the 12th century has undergone a long and complex evolution process, "from natural law to natural rights and then to human rights."[15] Nevertheless, with the legislation of natural rights, they gradually turned into positive legal rights (namely positive rights), continuously losing its initial value, which directly resulted in the rejection of natural rights by modern social science and gave rise to the criticism of the concept of natural rights by the Positive School of Law and the Historical School of Law. These asserted that laws and rights originate from the state, and sovereign states will not be bound by any law in the 19th and 20th century.[16] However, this practice of excluding the concept of natural rights has obvious defects, which easily leads to "absolutism" and "nihilism". On the one hand, rejecting natural rights amounts to arguing that all rights are positive rights, which means that "what is a right" all depends on the will of legislators; on the other hand, without natural rights, the conflict between different rights demands may not be solved.[17] In this context, a large number of legal theorists, represented by Leo Strauss, began to emphasize the need to recall and revive the concept of natural rights, and focus on the relationship between natural rights and positive rights.

After discussing the necessity of reiterating and reviving the concept of natural rights, we must turn to its connotations. For a long time, there has been no general consensus on the concept of natural rights, but according to the generally accepted theory in academia, natural rights can be understood as the "inherent rights" and "birthrights" that people should enjoy by human nature, which are based on the moral authority of natural law.[18] Obviously, the nature of human beings is to preserve and continue their life. This teleological preservation has been recognized as a basic principle by natural law. Some scholars even extend this concept from the preservation of

12 At 118.

13 In the 17th and 18th centuries, some classical political philosophy scholars began to use the concept of modern human rights to replace the concept of natural rights, such as Grotius, Spinoza, Locke and Rousseau. Through the combing of these scholars abovementioned, modern "human rights theory" was established, which we call "natural human rights".

14 Chen Linlin "From Natural Law to Natural Rights: Western Human Rights in Historical Perspectives" (2003) 33 Journal of Zhejiang University (Humanities and Social Sciences) 82.

15 Zhou Lian "The Western Right Theory in Vision of Post Metaphysics" (2012) Social Sciences in China 47.

16 Strauss, above n 9, at 83.

17 Strauss, above n 9, at 2–6.

18 For example, Hobbes defined the natural right as "the free ability to preserve one's life by all possible means". Thomas Hobbes *Leviathan, The Matter, Form and Power of a Common Wealth Ecclesiasticall and Civil* (LI Sifu and LI Tingbi trs, 1st ed, The Commercial Press, 2012) 98. Locke further extended the scope of natural rights to property rights (including life, freedom and property). John Locke *The Second Treatise of Government* (YE Qifang and QU Junong trs, 1st ed, The Commercial Press 1964) 6. Kant understood the natural rights as "rights granted by nature", believing that they are the rights enjoyed by everyone according to nature, independent of all laws and regulations in experience, and that freedom is the only natural right, while property rights are classified as the right to obtain. Immanuel Kant *The Philosophy of Law: an Exposition of the Fundamental Principles of Jurisprudence as the Science of Right* (SHEN Shuping tr, 1st ed, The Commercial Press, Shanghai 1991) 49.

individual life to the preservation of human collective life.[19] Therefore, many scholars begin to understand natural rights as the rights that people should enjoy in order to preserve their life, which is an obligation of natural law, namely the essential means of ability or freedom to realize the purpose of human life preservation.[20]

There has been change regarding the rights and abilities that human beings need to depend on to preserve their lives, but its basic connotation has relatively definite characteristics. In other words, although it may be difficult to outline the whole picture of natural rights, we can at least list several indispensable elements of natural rights. According to Locke's classical analysis framework, people in primitive societies should enjoy at least the following four rights: first, people should have the right to occupy essential resources on the earth to maintain their survival, which is property rights; second, people should have the right of self-determination to freely decide on matters related to their own development without compulsion, which is right of individual freedom; third, people should enjoy the right to life which shall not be infringed by others; and finally, if there is any infringement of natural rights, people should enjoy the right to implement the corresponding penal regulations of natural law. However, as is known to all, human society cannot remain in the primitive social state of disorder in which everyone enjoys the right to enforce rules of natural law. By "transfer of rights" and "social contract", a modern political society can be built. In addition, due to the hostility of *the Positivist Law School* and *the Historical Law School* to the uncertainty of natural rights, many natural rights begin to be confirmed by legal norms adopted by legislators in political society, and become positive rights in laws and regulations, namely legal rights, or statutory rights.[21] Thus, a self-evident legal axiom is developed which is only after natural rights has become positive rights can the protection of these rights be guaranteed by law.

However, due to the limitations of human cognitive ability and the complexity of certain natural rights, the transformation from natural rights to positive rights is an incomplete transformation. For those natural rights that have not been transformed for the time being, they are not no longer legally valid, and their legal validity is not necessarily lower than the legal rights confirmed by positive law. This is because natural rights are "pre-institutional rights" existing before any laws and societies. They are of indelible and eternal moral authority, and only some of them have been transformed into positive rights (namely legal rights, statutory rights) through "social contract" and "Rule of Recognition".[22]

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19 John Locke *Essays on the Law of Nature* (SU Guangen and YANG Shun trs, 1st ed, East China Normal University Press 2014) 118.

20 In fact, both Hobbes and Locke argued for a definite distinction between natural law and natural rights. Hobbes believe that natural law is a "rational discipline or universal law that keep people from doing damage to their own lives or depriving of means preserving his life", while the natural rights means "everyone has the way according to their willingness to use their power save their own nature of life (that is, save our freedom) ". However, Locke said, "rights are based on the fact that we are free to use something, and a law is to enforce or prohibit the use of something." Therefore, natural law is the moral rule made by the Creator for the whole human being, while natural rights define the moral relationship among people, and provide more specific instructions for the individual's action space in accordance with natural law. The action space brought by the explicit nature rights promise the feasibility of human fulfilling the obligation of natural law. Hobbes, above n 18, at 96; Locke, above n 18, at 118.

21 From the perspective of domestic law, the legislators from parliament establish a whole set of civil rights spectrum on behalf of the peoples' will. From the perspective of international law, states establish a realistic modern human rights system through the peoples' common will.

22 Huang Tao "Out of Passion: German Idealism's Critique of Early Modern Natural Right Theories" (2017) 49 Academic Monthly 91.

Besides the aforementioned characteristics of eternal morality, natural rights have several other characteristics. First, natural rights are objective basic rights human beings should enjoy, not merely hypothetical rights used to justify the natural state of a political social establishment. They are based upon natural law that is more profound than positive law. In other words, natural rights are not "fatherless children",[23] their legitimacy is deeply rooted in human nature, morality, rationality and others.[24] Secondly, natural rights are not entirely independent and separable rights enjoyed by atomic individuals, but universal rights based on interpersonal interaction, aiming to adjust the relationship between individuals and each other.[25] Thirdly, as preservation of life sometimes depends on the collective freedom of action or ability, the subject of natural rights is not limited to individuals, it may also be applicable to people as a collective, or even the humanity as a whole, depending on the situation. Fourthly, from the perspective of the application effect, natural rights are basic and general moral rights, which are of universal application. Even the minor interests of minorities are inviolable basic rights that cannot be deprived of.[26] Obviously, these characteristics of natural rights determine that they shall be in a core status in modern international law.

Theoretical research needs to pay special attention to the relationship between natural rights and legal rights. Based on the theory of interaction between natural international law and positive international law already established by scholars,[27] the relationship between natural rights and positive rights can be summarized as follows: firstly, natural rights are the core concept of natural international law, and the protection of specific natural rights depends on general legal principles

23 Zhang Wenxian, a famous scholar of jurisprudence, once said, "right is the son of law, and natural right is the son of fatherless". "In a more or less civilized society, the only reason that a man can have all rights, and that he can have all sorts of expectations and enjoy all sorts of things which he thinks belong to him, is the law." Zhang Wenxian *Contemporary Western Legal Thoughts* (Liaoning People's Publishing House, 1988) 357.

24 Li Buyun "On the Origin of Human Rights" (2004) 22 Tribune of Political and Science and Law Journal of China University of Political and Science and Law 14.

25 Tan Ankui "Interaction and Institutionalization: The Logic of the Transition from Natural Rights to Human Rights in the Early Modern Times" (2017) 8 Journal of the History of Political Thought 22.

26 John Finnis *Natural Law and Natural Rights* (DONG Jiaojiao etc. trs, 1st ed, China University of Political Science and Law Press 2005) at 160.

27 International law embodies positive international law and natural international law. Paulo Emílio Macedo said that the law of nations is between a kind of mixture which is between natural law and positive law. Paulo Emílio Macedo *Catholic and Reformed Traditions in International Law: A Comparison Between the Suarezian and the Grotian Concept of Ius Gentium* (Springer International Publishing AG 2017) at 13-63. Degan Vladimir-Đuro "Rules of Natural and Positive (International) Law in Multicultural World" (2007) 23 L' Observeur des Nations Unies 95–116. It's also true in Chinese research. The author creating this kind of interactive theory in China is professor Luo Guoqiang, a famous scholar of international law, who holds that international law is the combination of natural international law and positive international law, and the relationship between them is an interactive one. On the one hand, natural international law determines positive international law. Natural international law is transformed into positive international law. The formal factor of positive international law is the agreement of peoples' will, while the substantial factor is the embodiment of natural international law. Natural international law complements the absence of positive international law; positive international law cannot ultimately violate natural international law. On the other hand, positive international law can have a reverse effect on the natural international law. This reaction is manifested in the following aspects: natural international law is mainly realized through international law; The degree of development of positive international law restricts the degree of discovery of natural international law. The rights and wrongs of real international law will affect the realization of natural international law. LUO Guoqiang *On the noumenon of international law* (2nd ed, China Social Sciences Publishing House 2015) at 304–313.

or rules of *jus cogens* of natural international law, while positive rights are the core concept of positive international law which right-holders can directly apply and invoke certain "protection provisions" of positive international law; secondly, positive rights originate from natural rights, in this sense rules of natural rights can be used to evaluate and guide rules of positive rights, and even give remedies for infringements or fill in the blanks in case of any incomplete rules of positive rights. In addition, the rules aiming to protect positive rights cannot seriously violate or erode natural rights; thirdly, the protection of natural rights is mainly realized through enshrining positive rights, and the extent to which positive rights are protected restricts the discovery and realization of natural rights. Simply put, we cannot view natural rights and positive rights separately, especially when the current rules of positive rights are not adequate to meet the requirements of rules of natural law to preserve human life. International legislators should turn their attention to natural rights that can complement or restrict positive rights. The issues of climate refugee countries, as this paper focuses on, is essentially a survival problem and closely related to the proposition of natural rights that are also concerned about survival. Therefore, when current normative system for protecting positive rights under international law cannot provide protection for them, climate refugee countries and their nationals can then in theory invoke the rules for the protection of natural rights to seek relief for their loss and damage.

II. Optional Remedy Programs Based on Natural Rights

It is obvious that climate refugee countries and their nationals suffer from a variety of tangible or intangible loss and damage, including but not limited to the loss of national culture and identities, the loss of nationals' and states' land and property, personal injury, the loss of various ecological resources and so forth. The most significant and urgent need for climate refugee countries is to regain the land supporting their nationals' survival. This land relief could be individual "civil rights relief", which means that other countries have responsibility to accept nationals of climate refugee countries as immigrants[28] or refugees.[29] In addition, the remedy program could also be "collective territorial relief", which means, as communities, climate refugee countries have the right to acquire new territories to maintain their existence as states or other special international legal entities. Nevertheless, in current normative system for protecting positive rights under the framework of positive international law, do climate refugee countries and their nationals have positive rights to require collective territories or retain mandatory acceptance of citizens by large greenhouse gas emitters or the broader international community? The answer is no. Those theoretically accessible

28 Some scholars propose a mechanism by which these exiles would be given immigration benefits by countries through a formula that ties numbers of immigrants to a country's historical greenhouse gas emissions. Byravan, above n 4, at 247.

29 Some scholars argue that the logic of the refugee convention (namely UNHCR) can and should be extended to those fleeing the results of climate change. Matthew Lister "Climate Change Refugees" (2014) 17 Critical Review of International Social and Political Philosophy 618–634.

rules for protecting climate refugee countries and nationals suffer from the difficulty of application due to incomplete legal interpretation and the lack of existing legal practice.[30]

In response to the flaws and shortcomings of these rules of positive rights, theorists began to re-interpret the current theoretical rules of positive rights related to loss and damage of climate refugee countries from the perspective of natural rights, expecting to amend and supplement these existing rules so that they can be better applied to deal with loss and damage of climate refugee countries. In general, remedy programs that are based on natural rights for loss and damage of climate refugee countries could theoretically be divided into two basic approaches, namely the abovementioned individual and collective remedy programs. The first one is a remedy program based on individual natural rights, which means that nationals of climate refugee countries, as the co-owners of the earth, have the right to propose emergency refuge claims against other countries in case of urgent events threatening their survival. The second one is a remedy program based on collective natural rights, which means, as a group, nationals of climate refugee countries would have the right to request that the international community provide them with a new territory in order to maintain their collective right to self-determination or territorial rights in the event of "territorial disappearance".

A. Individual Right of Emergency Refuge Based on the Collective Ownership of the Earth

By citing a case concerning crew members and shipwreck victims who were forced to seek refuge in another country's seaport due to storms, Pauline Kleingeld has pointed out that the Right to Safe Haven was implied in Kant's cosmopolitan legal theory.[31] The Individual Right of Emergency Refuge refers to the right of individuals or collectives (here "collective" is not a concept in the sense of national state, but only a group concept) to have a necessary and essential right prevailing over the rights of other individuals, groups or states in case of particular urgent needs. The long history of the right of emergency refuge can be traced back to the Western Colonial Era. In order to answer whether citizens of one country have the right to settle in another country, discussion on

30 Throughout the existing academic achievements, many scholars discussed the issues of climate refugees under the framework of traditional positive international law (including international refugee law, international immigrant law, international human rights law, international environmental law and etc), and mentioned these laws' limitations in terms of relieving climate loss and damage of climate refugees. Such document literature includes, but is not limited to, Bonnie Docherty and Tyler Giannini "Confronting a rising tide: A Proposal for a Convention on Climate Change Refugees" (2009) 33 Harvard Environmental Law Review 349 at 392; Angela Williams "Turning the Tide, 'Recognizing Climate Change Refugees in International Law" (2008) 30 Law & Policy 502 at 514; Kara K Moberg "Extending Refugee Definitions to Cover Environmentally Displaced Persons Displaces Necessary Protection" (2009) 94 Iowa Law Review 1107 at 1115–1130; Elizabeth Burleson "Climate Change Displacement to Refuge" (2010) 25 J Envtl L & Litig 19 at 23; Hari M Osofsky "Learning from Environmental Justice: A New Model for International Environmental Rights" (2005) 24 Stanf Envion Law J 71 at 75–78; Tiffany T V Duong "When Islands Drown: The Plight of 'Climate Refugees' and Recourse to International Human Rights Law" (2010) 31 U Pa J Int'l L 1239 at1241; Benoit Mayer "Governing International Climate Change-Induced Migration: The Chaos and the Dancing Star" (8th Napsipag International Conference, Dec 2011) <http://ssrn.com/abstract=1955819>; Tanja Dreher and Michelle Voyer "Climate Refugees or Migrants? Contesting Media Frames on Climate Justice in the Pacific" (2014) 9 Environmental Communication 58–76; Emma Lees "Responsibility and Liability for Climate Loss and Damage after Paris" (2016) 17 Climate Policy 59–70.

31 Pauline Kleingeld "Kant's Cosmopolitan Law: World Citizenship for a Global Order" (1998) 2 Kantian Review 72–90.

"the Right of Emergency Refuge" or "the Guest Right" were launched by Grotius, Pufendorf and others in western society between the 16th and 17th centuries.[32]

Generally speaking, the right of emergency refuge could be divided into two situational rights. One is the right of emergency refuge in the sense of domestic private law; and the other is the rights of resettlement which residents from one country can claim against another country in the event of an urgent need, which is related to the issues of climate refugee countries discussed in this paper. The essence of these issues is that nationals in climate refugee countries have to face the difficulties of survival and development that force them to relocate. Actually, whether enjoyed as independent sovereign states or as citizens or refugees of other countries, they are in fact require the sharing of living resources of other countries and their nationals, which conforms to the function of the right of emergency refuge. Therefore, the right of emergency refuge is often used to analyze the issues of climate refugee countries. Some scholars have summarized the applicable conditions of this refuge as follows: (1) the State is obliged to provide relief to individuals at risk rather than to collectives; (2) the individuals at risk have to meet certain criteria and they have to claim remedies against a country that is not their home country; (3) the other state's responsibility towards risky individuals is not based on corrective justice, which means all countries, instead of the specific states emitting GHGs, have responsibilities to provide remedy; and (4) another state's responsibility is to potentially and permanently accept some or all qualifying individuals.[33]

As regard to justifying the second kind of the right of emergency refuge in the sense of public international law, namely the right of resettlement, there are two arguments in current academia. The first one is "simple analogy" raised by Wyman, which means, the reason for the existence of the right of emergency refuge in international law which is derived from the collective ownership of the earth lies in its "right similarity" to other rights of emergency in domestic law, which means certain individual rights may prevail over other individual or state's rights in events of urgent needs.[34] The second justification is the Risee-style "circuitous interpretation", which is based on the collective ownership of the earth raised by Grotius and combines the collective ownership of the earth with natural rights.[35] It then derives the right of emergency refuge and the right as a member of the global social community, which then draws two global obligations for states to be members of the global social order.[36] The reasoning thus is similar to Kant's understanding of "the right to resettlement", which means, based on the collective ownership of the earth, individuals enjoy the rights to free access of the world and resettlement due to survival risk.[37]

Hence, it shows that the right of emergency refuge under international law is in line with that under domestic private law, and both of them are based on the collective ownership of the earth. In fact, the dynamic relationships among these three rights could be explored with a more

32 The authors who discuss the similar rights of emergency refuge in relevant works mainly include Grotius, Pffindorf, Kant, Locke and so on. Katrina Miriam Wyman "Sinking Islands, Property in Land and Other Resources" in Daniel H Cole and Elinor Ostrom (eds) *Property in Land and Other Resources* (Lincoln Institute of Land Policy, 2012) 447–448.

33 At 449–450.

34 At 449–450.

35 Hugo Grotius *The Rights of War and Peace* (MA Chenyuan and TAN Rui trs, 1st ed, China University of Political Science and Law Press 2016) 53.

36 Frank Dietrich and Joachim Wundisch "Territory Lost-Climate Change and the Violation of Self-determination Rights" (2015) 2 Moral Philosophy and Politics 83–105.

37 Immanuel Kant *Perpetual Peace* (HE Zhaowu tr, Shanghai People's Publishing House 2005) 24–25.

complete and systematic approach. On the one hand, we argue that the arguments of Grotius and others regarding the right of emergency refuge in the sense of domestic private law could be logically and self-consistently extended to the field of international law. Imagining in the early state of human society (namely the early political society said by Locke), due to human's limited competence to exploit natural resources and the unpredictable and unstable nature of natural resources, exploitation of natural resources is community–based and this kind of joint community development cannot completely exclude other groups from sharing natural resources during drought and famine. Then, with the development of human's ability to utilize natural resources, human society has experienced the evolution from private property (such as livestock), natural co-ownership (such as water, rivers), to the institution that nature is completely privately owned by different communities.[38] Therefore, in order to realize the core interests of human self-preservation and to ensure that humans have the lowest coping capacity in the face of many difficult situation of survival threats, logically, two dimensions should be included in right of emergency refuge: firstly, the right of emergency refuge against the members' property within the community; secondly, the right of emergency refuge against natural resources and property of the members of other communities.

Subsequently, as "pre-institutional natural rights", the right of emergency refuge at the community level has realized the evolution of being domestic legal rights during the transformation from a specific primitive community into a modern state. Regarding the right of emergency refuge against other communities, it has only partially transformed into positive rights in the evolution of international relations (namely the asylum rights of refugees in the international human rights law).

Since the legal effect of natural rights will not diminish or disappear just because they have not wholly been converted into positive rights or have not been converted in a short time, there are also two dimensions of the right of emergency refuge in modern political society: firstly, the right of emergency refuge in domestic private law between individual citizens (namely act of rescue) in a country often confers on the government the obligation to protect, which provides necessary conditions for individual survival, in the form of the state's relief obligation to its nationals stipulated in domestic law; secondly, the individual emergency right of refuge against other communities in primitive society will turn into a collective right of emergency refuge against other countries. The individuals could claim remedies against other countries when they are unable to survive by themselves and this right, in the framework of positive international law, takes the form of a remedy obligation that a country has towards other countries' citizens.

On the other hand, we could also interpret the close relationship between the right of emergency refuge and the collective ownership of the earth through the method of right-decomposition used in empirical analysis of law. In general, the collective ownership of the earth is non-universal "egalitarian ownership". It does not mean that each individual enjoys the average individualized ownership of specific resources or space on the earth, but everyone enjoys the symmetric claim against corresponding resources or space on the earth.[39] Logically, in the initial state, there are at least two elements contained in the collective ownership of the earth in order to realize the self-preservation of human beings: (1) privilege, which means everyone could freely possess and utilize resources on the earth and others have no right to demand his non-possession and non-utilization; (2) right

38 Maurice Godelier "Territory and property in primitive society" (1978) 17 Social Science Information 399 at 417–418.

39 Mathias Risee "The Right to Relocation: Disappearing Islands Nations and Common Ownership of the Earth" (2009) 23 Ethics and International Affairs 283–294.

or claim in strict sense, which means each one enjoys the right to occupy the minimum resources for survival and others bear the duty of non-interference.[40] Privileges correspond to negative obligations that all other collective owners should not require others not to possess or use specific earth resources; rights or claims in a strict sense may correspond to negative obligations that other collective owners have the obligation not to interfere in other's possession or use of resources to maintain basic survival, or they may also be positive obligations, which means other collective owners with abundant natural resources have the obligation to provide corresponding resources when anyone cannot meet the basic survival needs. In other words, rejecting others' survival needs under urgent circumstances could be regarded as "negative interference" of basic rights in a strict sense. In this way, the right of emergency refuge can be understood as the element of positive obligation contained in the second dimension of the collective ownership of the earth.

The following conclusions could be drawn when the logic of the right of emergency refuge is applied to the issues of climate refugee countries: as the collective owner of the earth, nationals from climate refugee countries should enjoy rights in a strict sense against all other citizens of the earth, which leads to two natural responsibilities born by states to support the survival and development of nationals of climate refugee countries, including: (1) negative responsibilities, non-interference in the right of all owners of the earth to possess and use resources in order to maintain their basic survival; and (2) positive responsibilities, to provide resources to collective owners of the earth when there is an urgent need for their survival. This is what Risse said about the two global guaranteed responsibilities of modern states.[41]

Consequently, we can summarize the above methods of demonstration as follows: during the transition from the primitive society to modern one, not only did the institutions of private property rights (including the private property rights under domestic law and territorial sovereignty and permanent sovereignty over natural resources under international law) appear, but also the pre-institutional natural rights restricting property rights was retained. Accordingly, these private property rights being recognized in a country and globally are not absolutely unconstrained. they are always restricted by the right of emergency refuge. In other words, natural law duties (namely provide some of properties to other person who is in urgent need) imposed on the legitimacy of property rights (namely urgent needs constitute an exception to limiting and excluding other's property rights) was temporarily sealed during primitive society's transition into modern political one. That is to say, human beings must take "reserving respect for the original common collective ownership" as the precondition of agreeing to constructing a political society (namely the rules of contractual property).[42] This is also true for international relations: the property rights of natural resources enjoyed by one country are not absolutely unrestrained rights with respect to another country. Instead, the property rights enjoyed by one country are always subject to a precondition, that is, respect for the right of emergency refuge of other countries' nationals. It can be said that when the tragedy of climate refugee countries occurs, the preconditions implicit in human property rules will be activated, and natural resources on the earth will be restored to the "original state of common ownership".[43] Nationals of climate refugee countries can claim their original collective

40 Kleingeld, above n 31, at 72–90.

41 Risee, above n 39, at 283–284.

42 Grotius, above n 35, at 54.

43 Wang Tiexiong *The Foundation of Natural Law in American Property Law* (Liaoning People's Publishing House 2006) 126.

ownership of the Earth's natural resources and use the resources already occupied by other countries to achieve their self-preservation.

So far, we have demonstrated the justification of the right of emergency refuge and its implications, according to which the nationals of climate refugee countries can claim the right of emergency refuge, and the international community correspondingly assumes responsibilities to provide land and other necessary resources for their continued survival. However, it is noteworthy that the remedy program here is not a collective territorial relief, but only an individual remedy program. In other words, although the right of emergency refuge can also be exercised by a community or the state on all nationals' behalf, its right ultimately base on individuals rather than nations or states. Therefore, it is a minimum individual remedy program, meaning nationals of climate refugee countries can only obtain a status as individual international refugees[44] or international immigrants.[45]

B. Collective Rights to Self-determination and Territorial Rights of States

After a long history of development and evolution, based on the universal recognition and acceptance by the international community, the right to self-determination has been established as a basic legal principle in modern international law. Generally, its basic meaning has been summarized as follows: "all nations under foreign colonial rule, foreign occupation and slavery enjoy the right to determine their own destiny, political status and autonomously handle its internal and external affairs, and such rights should be respected by the international community. All countries should assume responsibilities not to obstruct, interfere, destroy, or deprive this right in any way. Otherwise, it constitutes an internationally wrongful act, and the state concerned shall bear international responsibilities. The people and peoples of these countries have the right to independently handle their internal and external affairs, choose their favorite political and social systems and develop their own economy, society and culture, while other countries are obliged to respect and not interfere with these rights".[46] It is thus clear that the existing right to self-determination (namely a legal right) in positive international law is limited to the category of national separation and national independence and unification, which corresponds to other countries' negative responsibilities to respect other nations' determination on self-determined issues such as independence and other basic human rights. In other words, in the current context of international law, other states do not have positive responsibilities towards climate refugee countries' claim of providing new territory to help them maintain their collective rights to self-determination.

For this reason, some theoreticians begun to extend the connotation of the right to self-determination (that is to regard it as a positive respecting duty), and link title to territory with the collective rights to self-determination, so as to justify the collective territorial relief. When climate refugee countries' sovereignty over territory is violated as the "territory disappearance", their status as self-determined entities are subsequently impossible. So, new territory is required so as to

44 Wyman, above n 32, at 449–450.

45 Risee, above n 39, at 283–294.

46 Yang Zewei "On the Natural Self-determination and State Sovereignty" (2002) 19 Law Science Journal of Northwest University of Politics and Law 40.

ensure adequate remedy.[47] In fact, this is already an understanding of the right to self-determination from the perspective of natural rights, which means collective rights to self-determination enjoyed by a particular nation or group includes the right to require other countries to provide necessary conditions to ensure that the right to self-determination can be realized, instead of only the negative duty to respect this right. In other words, when collective rights to self-determination of climate refugee countries have been violated because of "territorial disappearance", other states are naturally responsible for providing them with new territory to help climate refugee countries maintain the status as "autonomous" "independent" legal entities.

In fact, a logical premise of the above view is to regard territorial rights as the basis of collective rights to self-determination. However, this logical premise is not necessarily true. Although the collective rights to self-determination and the titles to territory are two mutually independent positive rights deriving from the exercise of the same natural right (namely natural union right), the basis of the two rights are different intrinsic value-based natural rights. Natural union right, as a natural right, derives from the social attributes of "the natural state". According to John Dunn, "Locke's natural state is not a non-social state, but a non-historical state,"[48] as relationships among people are involved. In other words, natural rights are not individualized rights that are in isolation and have no connection with others, but rather "social rights" based on interpersonal interactions. The "nature" aspect of natural rights only emphasizes that it can exist independently of the recognition of public power, rather than its non-social nature. Taking the collective ownership of the earth in the first remedy program as an example, although it is an individualized right, it is still based on symmetry.[49] The social attributes of natural union rights can also be understood from another angle: to ensure the self-preservation of individuals, human beings must have the right to freely unite with each other and at the same time, enjoy the rights to possess and use natural resources based on collective ownership of the earth. "Conditions for human seem to be worse than that of livestock, because few other animals are so vulnerable as human beings." To achieve the miracle of individuals' growth, human beings must help each other and improve their competence to cope with threats to survival.[50] However, as an instrumental right based on individual rights of freedom, the role of natural union rights is only to achieve the union among individuals, instead of being the manifestation of the intrinsic value that individuals should enjoy in the natural state.

Combining the Hohfeldian analysis of the collective ownership of the earth mentioned above, Locke's classic theory of natural rights and the purpose of this paper together, it is argued that, in order to achieve self-preservation, individuals in the natural state should at least enjoy three different natural rights of intrinsic value: firstly, the collective ownership of the earth and its derived individual right of emergency refuge; secondly, the right to self-determination (a sort of individual freedom) which individuals enjoy to freely dispose their own development; and thirdly, the individuals in the original state also enjoy a corresponding right to enforce rules of natural law when the first two rights are interfered with or obstructed by others. Therefore, we have to answer the question of how the natural rights of different intrinsic value will change after individuals

47 Cara Nine "A Lockean Theory of Territory" (2008) 60 Political Studies 252–268; Cara Nine "Territory is Not Derived from Property: A Response to Steiner" (2008) 56 Political Studies 957–963; Avery Kolers "Floating Provisos and Sinking Islands" (2012) 29 Journal of Applied Philosophy 333–343; Dietrich, above n 36, at 83–105.

48 John Dunn *The Political Thought of John Locke* (Cambridge University Press 1969) 97.

49 Risee, above n 39, at 283–294.

50 Samuel Baron von Pufendorf *The Rights and Obligations of a Citizen and a Person* (JU Chengwei, 1st ed, The Commercial Press 2010) 80–83.

come from the natural state to the modern political society by exercising their natural union rights. As a matter of fact, the right of emergency refuge is attached to the property rights as natural law duties. While the individual right to self-determination and the right to enforce rules of natural law are transformed respectively into "collective rights to self-determination" of the "common destiny" and the "title to territory" of the "state" through the social contract. Specifically speaking, after individuals enter into modern political society, individuals' right to choose their development are naturally aggregated to the collective level due to the similarity of involved matters. It is up to the collective to decide the matters involved in the overall development in order to achieve "autonomy" and "independence".[51] Furthermore, individuals naturally unite into a "common destiny" to improve their ability of self-preservation and realize the transformation from natural state to political society. And the transfer of the enforcement power of the rules of natural law give birth to the territorial rights of the state.[52] It can be seen that the value basis of collective rights to self-determination lies in the natural aggregation of individual rights to self-determination (a natural right), and that of territorial rights comes from the transfer of the individual right to enforce the rules of natural law (a natural right). Although both of them are generated from the process of exercising the natural union rights, the former right cannot be directly and simply understood as the source and moral value basis of the latter one. The only connection between these two rights may be that the object of rights or the result of the exercise of both rights will objectively point to the natural resource carriers such as land and sea. Therefore, damage to territorial rights does not necessarily lead to damage to collective rights to self-determination. On the contrary, remedy for damage on collective right to self-determination is not necessarily to be achieved by restoring territorial rights.

For reasons above, some theoreticians attempted to reinterpret the relationships between the collective right to self-determination and territorial rights. For example, departing from the approach of Cara Nine, Jorgen Odalen adopts the concept of self-determination in the relatively weak sense that is defined by Buchanan who argued that self-determination is a gradual spectral concept, and the enjoyment of complete titles to territory may be only a special case for realizing self-determination.[53] What may be achieved in the real world is the self-determination to some extent. Based on the re-understanding of the relationship between the two rights, Odalen proposed a relatively collective self-determination remedy program for climate refugee countries,[54] namely the De-territorial Countries Remedy Program. In this program, nationals of climate refugee countries can live in host countries as collective cultural communities or nations. The international community shall also recognize the new collective as an independent international legal entity holding certain degree of autonomy (do have its own language habits and cultural traditions). And this entity shall continue to exercise its sovereignty over the underwater land and corresponding marine areas after the original territory disappeared. Therefore, there are two basic preconditions for the establishment of Odalen's scheme. Firstly, this program recognizes collective rights to self-determination and territorial rights as two relatively independent rights. Thus, the remedy of collective right to

51 Nine, above n 1, at 359–375.

52 Bas Van der Vossen "Locke on Territorial Rights" (2015) 63 Political Studies 713–728.

53 Jorgen Odalen "Underwater Self-determination: Sea-level Rise and De-territorialized Small Islands States" (2014) 17 Ethics, Policy & Environment 225–237.

54 In this sense, different from the absolute relief scheme for the damage of collective self-determination in the absolute sense that other international communities provide a new territory for the climate refugee countries, the "national program for demoralization" is a relatively meaningful scheme for the restoration of collective self-determination.

self-determination does not necessarily mean compensation by transferring territorial, and climate refugee countries can maintain collective self-determination without enjoying territorial rights and continue to act as independent international political and legal entities. Secondly, this program recognizes the property dimension of territorial rights. Although climate refugee countries have lost their ability to establish a just order in their original territory, they still can have independent control over the original territory and its natural resources. Therefore, to some extent, the relief of territorial rights promotes the realization of the collective rights to self-determination, and in a general sense, the restoration of collective self-determination in absolute sense can be achieved by providing a new territory for the injured nationals whose rights to collective self-determination is impaired by the disappearance of their territory. However, we cannot conclude that the remedy of collective self-determination can only be achieved through remedying territorial rights. Logically, there are two remedy programs when collective rights to self-determination are damaged: firstly, the program of restoring collective self-determination in absolute sense; secondly, the program of restoring collective self-determination in relative sense.

Theoretically, if international legislators adopt this kind of program and expand the concept of collective rights to self-determination, it will inevitably lead to a collective remedy program for loss and damage incurred by climate refugee countries. That is to acknowledge the legitimate existence of an injured state as a national collective, and the specific method of compensation may be to provide and transfer a new territory for the injured state, or it may be an institutional arrangement of embedded limited sovereignty between host countries and nationals of climate refugee countries. However, a problem may arise that if the international legislators do not adopt the remedy program of individual right of emergency refuge which is based on the collective ownership of the earth, the concrete restoration plan of the collective right to self-determination could not be constructed in light of the principle of global climate distributive justice (which is applied in the aforementioned individualized remedy program), instead the principle of global climate corrective justice should come into play. In other words, the collective remedy program is based on the concept of global corrective justice, which emphasizes that the loss of rights held by climate refugee countries should be linked with specific countries generating GHGs according to some specific principles and standards attributing responsibilities.[55]

III. A Comparison of Optional Remedy Programs: Integration of Idealism and Realism

In addition to the aforementioned optional remedy programs centering on natural rights, some theoreticians emphasize a duty-oriented option, advocating the redistribution of natural resources of all countries within the framework of global distributive justice. In this remedy program, international legislators need to consider how to assign excessive natural resources of rich countries to climate refugee countries in order to ensure refugees may survive. In order to analyze issues regarding climate refugee countries, Bell tried to introduce Rawls and Bates's ideas of liberal international justice (namely the Global Society of People and the Cosmopolitan Approach). After

55 Quite a few scholars have elaborated on how to establish a regime to identify which countries should take the responsibility for relieving loss and damage caused to climate refugee countries from the perspective of correction justice and the scope of their respective obligations, but they are not the focus of this paper. Margaret Moore "Natural Resources, Territorial Right, and Global Distributive Justice" (2012) 40 Political Theory 84–107; Kolers, above n 47, at 332–343; Dietrich, above n 36, at 83–105.

a comparative analysis with the Rawls's theory, Bell believes that Bates's principles of global resources redistribution (RRP, applicable to natural resources) and principles of global differences (GDP, applicable to the income and wealth generated from the utilization of natural resources) based on Rawls's principles of social equity and justice distribution is more helpful to solve the problems of natural resources concerning climate refugees.[56] To correct Bates's inadequate treatment of natural resources as only of instrumental value, Bell holds that the rights of climate refugees to obtain equally distributed natural resources and wealth should be ensured, and they can exist as people enjoying the collective rights to self-determination (that is specific persons living in a specific place).[57] Skillinton further advocated that a more scientific and rational agreement on the redistribution of global natural resources and cooperation should be established to ensure climate refugees' rights of emergency refuge and the collective rights to self-determination, facilitating their resettlement.[58] Therefore, both Bell and Skillinton attempted to combine the two moral value bases mentioned in the individual and collective remedy programs, namely the individual right of emergency refuge and collective right to self-determination. Finally, it is worth mentioning that although Margaret Moore didn't directly refer to climate refugee countries, her views on the dichotomy of control over natural resources and the right to obtain national income generated from natural resources together with her views on the restriction of the individual right to life on the exercise of collective right to self-determination can also be indirectly applied to solve the issues regarding climate refugee countries.[59]

In summary, all the programs above advocate adjusting the unfair and unequal distribution of natural resources on a global scale in accordance with the principle of global distributive justice, aiming at transferring an excess of natural resources to individual or collective climate refugees through the global redistribution system. The implementation of this remedy program does not require the individual right of emergency refuge and the collective right to self-determination. Actually, it is an analysis that weakens the focus on rights and only emphasizes state responsibility under the framework of global distributive justice. However, the efforts of its proponents to weaken analysis of rights are not convincing. When they make the case for global natural resources redistribution, they still rely on natural rights to discuss the responsibilities of states with rich natural resources towards climate refugee countries. Moreover, its proponents take the individual right of emergency refuge and the collective right to self-determination proposed by the aforementioned individualized and collectivized remedy programs as its moral justifications without any demonstration. For example, Bell's collective ownership of the earth, collective right to self-determination, and Skillinton's right of emergency refuge, collective right to self-determination, and Moore's right to life and collective right to self-determination. Thus, we can regard the global redistribution scheme of natural resources under the framework of global distributive justice as a compromise between the individual and collective remedy programs. Whether this simple integration can effectively solve the inherent dilemma of the two remedy programs remains to be tested.

Therefore, it can be demonstrated that there are currently four remedy programs for climate refugee countries in the theoretical field (See Table 1, following below). In theory, these four

56 Derek R Bell "Environmental Refugees: What Rights? Which Duties?" (2004) 10 Res Publica 135–152.

57 At 135–152.

58 Tracey Skillinton "Reconfiguring the Contours of Statehood and the Rights of Peoples of Disappearing States in the Age of Global Climate Change" (2016) 5 Social Sciences 46 at 54–55.

59 Moore, above n 55, at 86–107.

options are feasible, but whether they could become practical remedy programs for climate refugee countries should be evaluated by cost-benefit assessment. In order to simplify analysis, this paper selects "political feasibility" and "normative acceptability" as evaluative criteria. An assessment of "political feasibility" means that under the current international political framework, examining whether and to what extent a remedy program can be adopted and accepted by all rational countries. It can be understood as a cost consideration. Generally, the least objected-to program is the most feasible one in politics. "Normative acceptability" means the extent to which a remedy program can achieve the damage relief goal. It can be understood as a benefit consideration, which means the program that can best compensate the loss and damage incurred by the climate refugee countries should be considered as the best choice.

Firstly, regarding the remedy program of the individual right of emergency refuge, it is a minimum individualized remedy, namely international climate immigration or a refugee mechanism. As this program does not require any transfer of territory, states can accept only part of the climate refugees/immigrants based on the concept of global distributive justice, which can avoid an influx of large-scale collective refugees/migrants and be met with a relatively low level of resistance from rational states. However, in the current international refugee law and immigration law, each state has the power to determine their own qualifications for refugees, which may pose significant challenges to this individual remedy program. The program is also merely a minimum level of relief, that is to say the host country may only grant partial citizenship (namely refugee status) to climate victims, and even if it grants full citizenship (as immigrants), this program cannot adequately remedy various losses suffered by climate victims (such as the loss of political identity, language habits, cultural tradition, acknowledgement of political community, and psychological loss).

Secondly, in terms of the remedy program of the collective right to self-determination, it advocates the re-delimitation of national borders and the transfer of territories to ensure nationals of climate refugee countries to relocate as collectives in new territories. The resulting costs (of transferring territories and natural resources) and its possible adverse impacts on host countries (such as the risk of "refugee governance") will readily lead to staunch resistance from rational countries. After all, it is current international reality that no land is without an 'owner', and state sovereignty reigns supreme. No state is willing to voluntarily transfer its own territory no matter how high the price is. However, this collective remedy program has high "normative acceptability". While relieving individual victims, it can at the same time compensate climate refugee countries for the damage to the collective right to self-determination and maintain the survival of their nationals as ethnic collectivity.

Therefore, each remedy program has its own advantages and disadvantages. In light of this, can the De-territorial National Remedy Program and the global redistributive justice program, which aim to integrate the individual and collective remedy programs, make up for the limitations of those remedy programs? As regard to the global redistributive justice program, its intention is to introduce the principle of fairness and justice in the field of global natural resource redistribution and to promote the equalization of wealth. However, every country in the international community tends to pursue the supremacy of national sovereignty, and the powers of each country are equal in principle. Therefore, this remedy program cannot break through the problems of political feasibility that an individualized remedy program will face; in terms of normative acceptability, the global distributive justice program focuses upon transferring excessive (natural) resources of other countries. However, it is difficult to define what is "excessive", and as a result, countries may

argue that their own (natural) resources are scarce in order to shirk some of their responsibilities. Ultimately, resources for relieving climate refugees will be too scarce to achieve the goal, and the acceptability of norms is relatively low.

As far as the De-territorial National Remedy Program is concerned, it adopts a flexible response plan: on the one hand, it has the advantage of higher political feasibility than the individual remedy program, recognizing multiple relief schemes. Even the collective remedy program is not a collective scheme based on the transfer of real territory. That is to say, the collective can exist as an independent political legal entity within the territory of a new country and retains the right to self-government, but it does not have absolute territorial rights to the new territories in which it resides, weakening direct conflicts with the territorial rights of the host country. On the other hand, the De-territorial National Remedy Program also takes into account the remedy of the collective rights to self-determination of climate refugee countries, which advocates measures of "alternative compensation" to help climate refugee countries to maintain their autonomous natural resources (such as effective control of the "abandoned" territory, institutional resources provided for the establishment and maintenance of the government in exile, the economic resources needed to exploit the natural resources in the original "disappeared" territory, and institutional resources for effective allocation of natural resource rents and so on),[60] improving normative acceptability of the remedy program.

Table 1: A Comparison of Four Optional Remedy Programs

Remedy Programs	**Political feasibility**	**Normative acceptability**
The Remedy Program of Individual Right of Emergency Refuge	High	Low
The Remedy Program of Collective Right to Self-determination	Low	High
Global Distributive Justice Remedy Program	Low	Low
De-territorial Countries Remedy Program	High	High

IV. International Political Prospects of the De-Territorial Countries Remedy Program and Its Challenges to Developing Countries

In comparison with other remedy programs, the relatively collective self-determination remedy program (namely the De-territorial National Remedy Program advocated by Jorgen Odalen) is a more normatively accepted and politically feasible choice for climate refugee countries and the best institutional choice for international legislators. However, as the UNFCCC has become the main platform for addressing climate-related issues, including loss and damage caused by climate change, it is therefore necessary to explore the compatibility of the De-territorial National Remedy Program with the UNFCCC framework and its international political prospects under

60 Maxine Burkett "The Nation Ex-situ: on Climate Change, De-territorialized Nationhood and the Post-climate Era" (2011) 2 Climate Law 345–374.

the UNFCCC framework. In terms of compatibility, the De-territorial National Remedy Program is compatible with the fundamental legal principles established by the UNFCCC, because the UNFCCC preamble clearly provides that "no harm done to another country's environment", which allows for future international negotiations under the UNFCCC for climate change loss and damage.[61] However, it is worth noting that this theoretical compatibility has not been completely implemented in international climate legal practice as yet.

Taking a look at the outcomes on the concern of loss and damage caused by climate change in the texts of climate agreements that have emerged from climate negotiations since the Bali Action Plan in 2007,[62] the "return" of responsibility is still far off. In the year of 2013, the 19th Conference of the Parties to the UNFCCC directly contributed to the birth of The Warsaw International Mechanism (namely WIM). Since the establishment of the WIM, the Executive Committee of the WIM has held a lot of meetings, workshops and events for loss and damage associated with climate change impacts.[63] However, the Paris Agreement in 2015 only reached Article 8, specifically excluding the responsibility issue from the final text of the agreement, which also indicates that the international community has not yet demonstrated an intention to solve loss and damage under the UNFCCC framework.

Actually, after the year of 2015, Conferences of the Parties (COP) to UNFCCC tried to put the loss and damage caused by climate change into the Global Risk Reduction Framework while avoiding talking about responsibility issues, which has now become the leading path for remedying loss and damage caused by climate change under the UNFCCC.[64] In this way, future loss and damage and related issues of climate refugees are likely to be dealt with in the international legal protection mechanism of natural disasters (namely international natural disaster response law). Although the Sendai Framework for Disaster Risk Reduction 2015–2030 formulated by the Third UN World Conference on Disaster Risk Reduction in 2015, after the Hyogo Framework for Action, shifted the focus of the international natural disaster response law from 'immediate relief in case of disaster or threat' to 'post-disaster recovery, restoration and reconstruction'.[65] However, it is only a guidance document with no mandatory legal binding force, which means that it falls far short of imposing international legal duties on climate wrongdoers or the whole international community. In other words, the current international natural disaster response law is rooted in soft law and lacks legal binding force. Specifically, in the current international natural disaster response law, there are only a series of soft law documents providing guidance and norms for humanitarian assistance during natural disasters. These conventions and agreements do not cover any specific duty of states to the victims of natural disasters, and not to mention the refugees' rights to obtain remedies. Therefore, trying to solve the issues regarding climate refugee countries under the UNFCCC or the international natural disaster response framework will face considerable institutional resistance and predictably lower implementation benefits.

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61 Yu, above n 8, at 12–22.

62 UNFCCC *Bali Action Plan* FCCC/CP/2007/6/Add.1, Decision 1/CP.13 (2007) <https://unfccc.int/sites/default/files/resource/docs/2007/cop13/eng/06a01.pdf>.

63 UNFCCC Workshops & Meetings *Excom (Loss and Damage)* <https://unfccc.int/workshops-and-meetings>.

64 Julia Kreienkamp and Dr Lisa Vanhala "Climate Change Loss and Damage - Policy Brief" <www.ucl.ac.uk/global-governance/news/2017/mar/climate-change-loss-and-damage>.

65 United Nations Office for Disaster Risk Reduction (UNDRR) *Sendai Framework for Disaster Risk Reduction 2015–2030* <www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf>.

The resistance comes from the essential attribute of climate refugee countries, which is in essence an issue of state responsibility and how to determine the responsible states and distribute specific responsibilities among them. Actually, state responsibility in the field of climate change is not only a problem evaded by UNFCCC, but also one that cannot be easily solved under the framework of international natural disaster law, not least because both are international soft law. Even though the UNFCCC has imposed mandatory obligations on developed to reduce GHGs emissions, the cases of the United States withdrawing from the Paris Agreement and UNFCCC starting the bottom-up Nationally Determined Contributions (namely NDCs) after 2015 Paris Agreement indicate that the coercive power of these agreements is extremely limited. As a result, the efforts of the De-territorial Countries Remedy Program to emphasize distributing specific responsibilities among different responsible states will be limited. After all, the nature of UNFCCC negotiations among parties and the humanitarian nature of international natural disaster response law makes both of them unsuited to undertake this task.

Does this mean that the De-territorial Countries Remedy Program will inevitably not be in applicable in the context of future international politics? The answer is no. Compared with the challenges about state responsibility faced by other remedy programs, the De-territorial Countries Remedy Program has two advantages. First, unlike the compensation of territorial transfers in the collective remedy program, this program allows climate refugees to live in the new country as individual migrants or national collectives, which can actually mitigate the rigidity of state responsibility to some extent. Second, the argument of this program that climate refugee countries can retain their property rights to the "disappeared" territories (namely rights to the former territories after they have been submerged by the sea) as independent international legal entities, in effect, can ensure remedy for the damage to their collective right to self-determination. Moreover, this legitimate recognition can meet the qualification for national self-determination and the rights of maritime territories would not harm the legitimate interests of other states and can be an acceptable option.

But the question is, how to determine the states that shall receive climate refugee countries as collectives? In fact, the strategies proposed by the supporters of the collective self-determination remedy program deserve attention of supporters of the De-territorial Countries Remedy Program. Frank Dietrich suggest establishing a central fund comprised of climate wrongdoers' contributions to cover the costs of territorial compensation, as well as reaching resettlement agreements between countries willing to provide territories and collectives of climate refugee countries.[66] Tracey Skilington advocated that the responsible states and specific responsibility shares should be determined by comprehensively considering population density, natural resource reserves and other factors, and emphasized that it should be supplemented by transnational cooperative incentive systems, such as a natural resource redistribution tax or fund system.[67] In the authors' opinion, based on both views, a similar two-stage treatment scheme can be adopted. Firstly, the fund payment duties should be allocated according to some specific principles of distributing different state's responsibilities. The next stage is to establish transnational cooperation agreements between climate refugee countries and host countries voluntarily willing to accept climate refugees that can be supplemented by corresponding transnational incentive mechanisms to encourage cooperation. For example, climate refugee countries, as a collective, can still pay part of the rental income to the

66 Dietrich, above n 36, at 83–105.

67 Skillinton, above n 50, at 54–55.

host country from sovereign funds of natural resources they still hold. But the questions of how to determine responsible states and how to allocate the shares among multiple states still need to be addressed under the UNFCCC framework. In the future, international legislators need to design a scientific and fair indicator system of responsibility distribution though the UNFCCC negotiations. Actually, it may still face the same negotiating bottlenecks as in establishing duties of reducing GHGs, which is caused by the inherent limitations of the equal-rights structure of international community. However, this is extremely high transaction costs that the international community has to pay, which is an unavoidable "natural friction force" inherent in system design.

For developing countries, if loss and damage caused by climate change and the more severe problem of climate refugee countries are not paid sufficient attention, they are bound to be in a weak position in future climate change negotiations. Moreover, developing countries tend to suffer most from loss and damage caused by climate change, and most of the countries that have emerged as being at the highest risk of becoming climate refugee countries are indeed developing countries.[68] In addition, as mentioned above, the core issue of climate refugee countries is state responsibility. The practice of developed countries perpetuating an avoidance on state responsibility will internalize the ultimate responsibility for loss and damage into the developing countries' costs of survival and development, which is contrary to the idea of global justice. Therefore, in order to ensure the sufficient implementation of the international community's idea of justice in the field of loss and damage caused by climate change, developing countries can and should continue to pool their efforts to advance the international legal process related to those loss and damage. However, the current divergent views among developing countries on climate loss and damage,[69] and the further decline of global climate negotiations make it difficult for developing countries to bring together bargaining strength. In the future, developing countries should attach importance to negotiation strategies, try to avoid the issues regarding compensation of territorial transfer which developed countries are most resistant to, and support the remedy program of de-territorial countries. Meanwhile, the responsibility for remedying loss and damage should be converted into financial duties that can further weaken the rigidity of state responsibility. Lastly, developing countries shall consistently advocate the remedy for damage to the right to self-determination.

Theoretically, as a member of developing countries, China shall not deny its possible responsibilities for loss and damage caused by climate change. In other words, China must take the possibility seriously that developed and some developing countries might impose more responsibilities on it, and it should not adopt a strategy of simply refusing to take responsibility, which would not only damage its international image, but also keep it out of the camp of developing countries. Therefore, to ensure that China will not be disadvantaged in dealing with the issues of climate refugee countries under the rules of future international climate laws, the Chinese government should actively promote negotiations on climate loss and damage, and especially emphasize the adverse effects that the issues of climate refugee countries will have on China through scientific research and its possible contribution to assume responsibilities for helping climate refugee countries.

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68 Mathis Okka Lou and Benjamin Schraven "Climate Refugees in Europe? Climate-related Migration Affects Developing Countries in Particular" <https://www.die-gdi.de/en/the-current-column/article/climate-refugees-in-europe-climate-related-migration-affects-developing-countries-in-particular-1/>.

69 Wang Weiguang and Zhen Guoguang (eds) *Green Paper on Climate Change: Addressing Climate Change report* (2015) (China Social Sciences Academic Press 2016) 55-68.

Meanwhile, the Chinese government should, while emphasizing its own responsibilities and capabilities, urge developed countries to take their responsibilities for climate justice, which depends on the possibility of proposing a responsibility distribution program that is most consistent with the international justice (the key issue is how to establish a set of responsibility distribution program integrating climate distributive justice and corrective justice).[70] However, it is worth noting that since a small number of developed countries may also face the risk of becoming a climate refugee country, the distribution of responsibilities may not be limited to the traditional two-point method of developing countries and developed countries. As an active promoter of global climate governance, China should no doubt stand by the principle of Common But Differentiated Responsibility (CBDR) and take it as a basis for new negotiations, actively strengthen the work of South-South cooperation, fulfill her international climate commitments without reservation, vigorously develop a low-carbon economy, and actively promote international negotiations on the subject of loss and damage.[71]

Accordingly, the principle of CBDR also needs to be adjusted. Instead of unilaterally emphasizing the responsibilities of developed countries, it is necessary to redefine countries that are relatively easy to become climate refugee countries and countries that are relatively difficult to become climate refugee countries. Only in these ways can China be a responsible big power. Meanwhile, China should be alert that some developed countries may try to impose an unreasonable share of responsibility on China for loss and damage incurred by climate refugee countries.[72]

V. Conclusion

Climate refugee countries has been the most extreme case of loss and damage caused by climate change. Many residents from low-coast or climate-fragile countries face the "tragic fate" of being forced to leave their hometown. Under the existing rules of international law, these climate refugee countries, no matter as collectives or as individual nationals, are not entitled to obtain positive legal relief from other sovereign states. Natural rights can be a powerful "weapon" for climate refugee countries' nationals when they claim remedies for climate loss and damage. According to theoretical analysis, it can be inferred that there are four optional remedy programs, three programs of which are directly based on natural rights and the last one is focusing on the responsibilities of states highlighting global distributive justice. Considering the "political feasibility" and "normative acceptability" of a remedy program, the relatively collective remedy program, namely the De-territorial National Remedy Program, is a more normatively accepted and politically feasible choice for climate refugee countries and the best institutional choice for international legislators. Furthermore, the De-territorial National Remedy Program is compatible with the fundamental legal principles established by the UNFCCC, since the UNFCCC preamble clearly provides that "no harm done to another country's environment", which also favors future international negotiations under the UNFCCC for climate loss and damage. However, it does not mean that the De-territorial National Remedy Program will go on smoothly, it still needs other countries' positive acceptance.

70 Cao Mingde "The Legal Standpoint and Strategy of China to Participate in International Climate Governance: From the Perspective of Climate Justice" (2016) 1 China Legal Science 29–48.

71 Mingde Cao and others "Remedies for Loss and Damage Caused by Climate Change from the Dimension of Climate Justice" 2016 (14) Chinese Journal of Population Resources and Environment 253.

72 Wyman, above n 32, at 449–450.

Due to the space constraints, this paper gives little attention to specific institutional construction regarding climate refugee countries which needs further study.[73]

73 Due to the space constraints within this paper, it does not elaborate on the allocation of responsibility and specific implementation mechanisms of remedy programs for loss and damage incurred by climate change countries, which are the key issues to determine whether a remedy program can be effectively implemented. Therefore, the focus of future academic research should be on how to determine recipient countries of climate refugee countries from both theoretical and practical perspectives, and how to encourage more countries to accept climate refugee nationals voluntarily, whether as individuals or as collectives, through the design of international political and legal institutions. In addition, as there may be conflicts between exotic and native communities, the research on how to carry out effective community cooperation is also a theoretical concern. Finally, how to amend the existing international legislation to implement the de-territorial countries remedy program should also be the focus of academic research, specifically including two issues: firstly, to confirm that nationals of climate refugee countries maintain and ensure their status as an entity of collective self-determination by electing an "interim government" and to recognize their special status as international legal entities. Secondly, to amend the rules of international law of the sea and recognize the sovereign rights of states over their original maritime areas, such as the possibility of "freezing" the scope of their maritime areas before the territorial extinction.