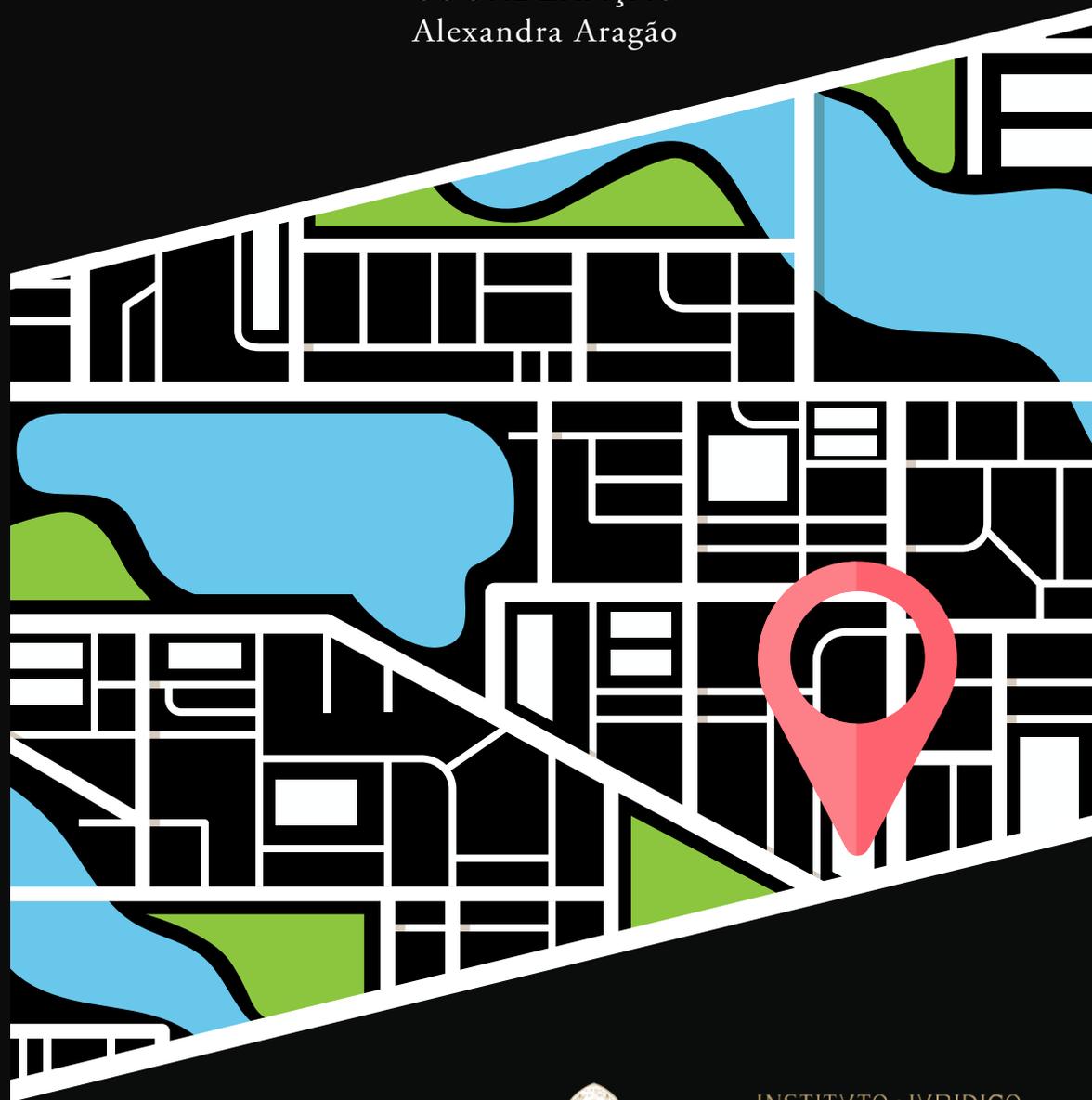


AS INFRAESTRUTURAS DE DADOS ESPACIAIS  
E OUTRAS FERRAMENTAS DE APOIO  
A UMA DECISÃO JUSTA

ATAS DO COLÓQUIO

COORDENAÇÃO  
Alexandra Aragão



INSTITUTO JURÍDICO  
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O presente trabalho foi realizado no âmbito das atividades do Grupo de Investigação “Risco – Transparência – Litigiosidade” do Instituto Jurídico da Faculdade de Direito da Universidade de Coimbra, integradas no Projeto “Desafios sociais, incerteza e direito” (UID/DIR04643/2013).

TÍTULO

As Infraestruturas de Dados Espaciais e outras Ferramentas de Apoio a uma Decisão Justa

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## · NOTA PRÉVIA ·

As atas do COLÓQUIO — As infraestruturas de dados espaciais e outras ferramentas de apoio a uma decisão justa — que decorreu na Faculdade de Direito da Universidade de Coimbra em 20 de Abril de 2018 são a primeira realização pública da Rede Just Side – Justiça e sustentabilidade do território através de sistemas de infraestruturas de dados espaciais. Esta Rede, criada no âmbito do programa CYTED <[http://www.cyted.org/?-q=es/detalle\\_proyecto&un=955](http://www.cyted.org/?-q=es/detalle_proyecto&un=955)>, engloba oito países do espaço Ibero-Americano (Argentina, Brasil, Chile, Costa Rica, Espanha, México, Portugal e Uruguai) e visa promover a justiça territorial e a sustentabilidade das políticas públicas, dando cumprimento aos objetivos de desenvolvimento sustentável das Nações Unidas.

Os oradores no colóquio representam diferentes visões sobre o tema da justiça territorial. Estiveram representados órgãos públicos decisores, universidades e empresas privadas, com diferentes perspetivas, nacionais e internacionais (Espanha, Noruega, Brasil) sobre o futuro da convergência interdisciplinar entre o Direito e as Tecnologias de Informação Geográfica para a realização da justiça territorial.

Coimbra, 20 de Abril de 2018.

## TERRITORIAL JUSTICE AND ENVIRONMENTAL DISPLACEMENT

### ***QUO VADIS?***

ISABEL M. BORGES <sup>1</sup>

The United Nations High Commissioner for Refugees (UNHCR) latest “Global Trends” report notes that at the end of last year the number of people forcibly displaced by persecution, conflict, generalised violence and human rights violations (refugees, internally displaced persons, asylum seekers and stateless individuals) stood at approximately 65.6 million: 22.5 million refugees; 40.3 million internally displaced persons and 2.8 million asylum seekers.<sup>2</sup> To complete the picture with more shocking facts, the world is witnessing one of the highest level of humanitarian needs since World War II and experiencing a human catastrophe “on a titanic scale” with 125 million humans in dire need for assistance and 218 million people affected by disasters each year for the past two decades.<sup>3</sup> Climate

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<sup>1</sup> Cand./Lic. Jur. (Coimbra), LL.M. (Kent), Ph.D. (Oslo). Research Director, TGG; Adjunct Associate Professor, Department of Law and Governance, BI Norwegian Business School; Lecturer/Guest Researcher Department of Public and International Law, University of Oslo, Faculty of Law.

<sup>2</sup> UNHCR, *Global Trends: Forced Displacement in 2016*, 2 (2017).

<sup>3</sup> Herve VERHOOSSEL, *Choose Humanity: Make the Impossible Choice Possible!*, INTER PRESS SERV. (Apr. 27, 2016), <<http://www.ipsnews.net/2016/04/choose-humanity-make-theimpossible-choice-possible/>>.

change and natural hazard related disasters are understood to play a crucial part in some of these events.

The effects of environmental change have been described as the “defining human development issue of our generation”<sup>4</sup> and probably “the biggest humanitarian and economic challenge that the developing world will face in the coming decades.”<sup>5</sup> It is now widely recognized that large-scale cross-border environmental degeneracy impacts on human beings and their surroundings and that this environmental degradation is largely due to anthropogenic greenhouse gas emissions that are primarily credited to developed countries. Its noticeable effects are found in extreme droughts and heat waves, floods and hurricanes, the sea level rise and submersing low-lying coastal areas, and other recurrently extreme weather conditions. Although the effects of environmental change may affect us indiscriminately, they will be felt more acutely in some parts of the world than others.<sup>6</sup>

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<sup>4</sup> UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP). “Human Development Report 2007/2008 Fighting Climate Change: Human Solidarity in a Divided World”, (2007) 1.

<sup>5</sup> S. RAJAN, *Climate Migrants in South Asia: Estimates and Solutions*, Chennai: Greenpeace India Society, 2008, 1.

<sup>6</sup> There are some geographical areas where the effects of environmental change are most acute and it is here that the movement of people is/will be particularly felt. the Arctic, as predictions of global warming are high on ecosystems and human communities; Africa, because of their low level of adaptation capacity and high risk of predicted environmental impacts and small islands, because of their high exposure of population and infrastructure stemming from environmental factors particularly, in the Asian and African mega deltas, where populations are mostly at risk from sea level rise, flooding and storms. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), *Synthesis Report* (2007) <[http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/mains6-2.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/mains6-2.html)> (Last accessed on May 06, 2016) emphasizing what systems and regions that are most at risk from the impacts of climate change; U.N. HUMAN RIGHTS COUNCIL (UNHRC), *Resolution 7/23 Human rights and climate change*, Preamble (28 March 2008) <[http://ap.ohchr.org/documents/E/HRC/resolutions/A\\_HRC\\_RES\\_7\\_23.pdf](http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_7_23.pdf)> (Last accessed on June 12, 2012); M. ROBINSON, “Barbara Ward Lecture”, London: Chatham House, 11 December 2006: “All human beings are born free and equal in dignity and rights. However [...] it is poor communities who are suffering most from the effects of climate change, and it is rich countries that are contributing to the problem [...]” available from <<http://pubs.iied.org/pdfs/>

By 1990, the First Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) foresaw that the largest single impact of environmental change could be on forced human displacement. Today, experts estimate that by 2050, the number of environmentally displaced persons will be between 50 and 200 million,<sup>7</sup> either within their own countries or across borders, on a permanent or temporary basis.<sup>8</sup> Although scientific uncertainty surrounds these numbers, in general, there will always be uncertainty surrounding the impacts of environmental issues.<sup>9</sup> The forced displacement of millions of people in the drought-stricken Horn of Africa is yet more clear evidence of the causal link between

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G00101.pdf> (Last accessed on July 07, 2015]; S. McINERNEY-LANKFORD / M. DARROW / L. RAJAMANI, *Human Rights and Climate Change: A Review of the International Legal Dimensions*, Washington — DC: World Bank, 2011, 11.

<sup>7</sup> See N. MYERS / J. KENT, *Environmental Exodus: An Emergent Crisis in the Global Arena*, Washington — DC: Climate Institute, 1995, 15–16; N. STERN, *The Economics of Climate Change. The Stern Review*, Cambridge: Cambridge University Press, 2007, 128–130; L. R. BROWN, *Plan B 2.0: Rescuing a Planet under Stress and a Civilization in Trouble*. Earth Policy Institute, New York: W. W. Norton, 2009, 51; ENVIRONMENTAL JUSTICE FOUNDATION, *No Place Like Home. Where Next for Climate Refugees*, London: Environmental Justice Foundation, 2009, 4; O. BROWN, *Climate Change and Forced Migration: Observations, Projections and Implications*. Human Development Report 2007/2008, Geneva: United Nations Development Programme, 2007.

<sup>8</sup> UNITED NATIONS HIGH COMMISSIONER ON REFUGEES (UNHCR), *Forced Migration in the Context of on Long*, 2009; *Term Cooperative Action under the Convention* (AWG-LCA 6) from 1 to 12 June in Bonn (19 May 2009), 1, <<http://unfccc.int/resource/docs/2009/smsn/igo/049.pdf>> (Last accessed on December 20, 2013).

<sup>9</sup> M. GLANTZ, *Creeping Environmental: Are Societies Equipped to Deal with Them? Workshop on Creeping Environmental Phenomena and Societal Responses to Them*, National Center for Atmospheric Research, Boulder — Colorado, 7-8 February 1994, 6. The author notes: “[t]hus, far most CEP [Creepings Environmental Problems] (e.g. global warming, ozone depletion, desertification, tropical deforestation) there has been a backlash, a minority voice, often loud, that plays up what scientists do not know as opposed to emphasizing what they do know. To the public, to policy makers and the media such interactions within the scientific community (verging upon open combat in the electronic media, in professional journals, or in newspapers) tend to weaken the resolve of those whom action is expected. In other words, one can find in the scientific literature viewpoints as well as numbers which can be used to support or attack any particular action.”

environmental change and forced human displacement.<sup>10</sup>With weather-related natural disasters projected to increase both in frequency and intensity in several parts of the world as global average temperatures continue to rise over the next decades,<sup>11</sup> environmental change-related displacement is becoming part of what UN Secretary General Ban Ki Moon has depicted as “the new normal.”<sup>12</sup>

The costs of environmental degradation are disproportionately being borne by the poorest and most marginalized parts of the population, especially in the developing states that often have limited capacity to cope, for example, with climate variability and extremes.<sup>13</sup> In a way, certain countries have not only imposed environmental change but they have also created the environment of vio-

<sup>10</sup> UN SECRETARY GENERAL. *Voices concern over drought in Sahel, Horn of Africa at Event on Building Resilience to Climate Disasters*. Press Release (3 June 2013) <<http://www.un.org/News/Press/docs/2013/sgsm15071.doc.htm>> (Last accessed on August 28, 2014) emphasis added: “Climate change is especially critical for Africa. Droughts and floods killed thousands of Africans last year. Millions more lost homes, livelihoods and hope. The human tragedy is immeasurable. The financial cost runs in the billions of dollars. Predictions are dire. Severe water stress could affect as many as 250 million Africans—not in some distant future, but by the end of this decade. Failed rains are likely to cause extensive crop damage. That means less food for more people. Development setbacks can breed unrest. Countries destabilized by climate change are potential breeding grounds for extremism and international criminal activity. They are a source of mass migration.”

<sup>11</sup> WORLD BANK, *Turn Down the Heat: Climate Extremes, Regional Impacts and the Case for Resilience*, Washington — DC: Potsdam Institute for Climate Impact Research and Climate Analytics, 2013, 7–18, <[http://www-wds.worldbank.org/external/default/wdsContentServer/wdsContentServer?\\_wbdis=63217F20121204](http://www-wds.worldbank.org/external/default/wdsContentServer/wdsContentServer?_wbdis=63217F20121204)> (Last accessed on December 20, 2013).

<sup>12</sup> B. LEWIS / A. DOYLE, *Extreme Weather Is New Normal U.N.’s Ban Tells Climate Talks Reuters*, 4 December 2012, <<http://www.reuters.com/article/2012/12/04/us-climate-talks-idUSBRE8B217F20121204>>, (Last accessed on December 20, 2013).

<sup>13</sup> See S. HALLEGATE, *et al.*, *Shock Waves: Managing the Impact of Climate Change and Poverty*, Washington — DC: World Bank, 2016, 3; L. BRAINARD / A. JONES / N. PURVIS, *Climate Change and Global Poverty: A Billion Lives in the Balance?*, Washington — DC: Brookings Institution Press, 2009, 1–9.

lations of human rights in developing countries.<sup>14</sup> While the causes of displacement may be manifold and complex, there is increasing concern over the extent to which those suffering from forced (or potential) cross-border displacement as a result of environmental change are protected under international law, in particular human rights law. Formally, they are not entitled to admission or to stay in a third state country. This has been identified as an international “legal protection gap”<sup>15</sup> that displaces people and impacts upon their human rights. This creates a situation where people’s predicaments do not receive adequate government intervention.

### **Territorial justice and environmental displacement — *Quo vadis?***

Justice, is an essentially contested term and means many different things to many different people, scholars, and theorists. The idea of equality exerts a powerful hold on the contemporary rationale about justice.<sup>16</sup> However, central to all discussions of justice is: what is the right way to treat people equally? The answer to this question will always comprise two components: what is to be allocated or distributed equally and according to which principle? Territorial justice as conceived in the standard version relates to the principle of equal access to public goods or services however, territorial equity concerning environmental displacement is embedded, in my view, in a wider understanding on not only equitable resource distribution (in terms of costs and benefits) but simulta-

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<sup>14</sup> M. LIMON, “Human Rights and Climate Change: Constructing a Case for Political Action”, *Harvard Environmental Law Review* 33 (2010) 572: 439–576. The author cites the declaration of Marghoob SALEEM, *Butt Counselor, Permanent Mission of Pakistan to the United Nations at Geneva, Panel on Human Rights and Climate Change at the eleventh Session of the Human Rights Council*, 15 June 2009.

<sup>15</sup> UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (2010), “Statement by António Guterres, United Nations High Commissioner for Refugees’ Nansen Conference on Climate Change and displacement in the 21<sup>st</sup> Century” (Oslo, 06 June 2011), available from <<http://www.unhcr.org/4def7ffb9.html>> (accessed 12 June 2012).

<sup>16</sup> A. SEN, *Inequality Re-examined*, Oxford University Press, 1992, 3.

neously, encouraging goals of global human and environmental protection. The following exposition highlights this vision.

### **Territorial injustice and environmental displacement: the loss of income and wealth**

Environmentally induced displacement and the lack of coordinated actions and resettlement plans can impoverish people. The loss of property, community networks, work, means of subsistence, home, in sum, and people's humanity due to environmental degradation determines a loss of human and material resources. Therefore, displacement losses may be a manifestation of territorial injustice. Michael Cernea categorizes these losses in a "model of eight potential risks intrinsic to displacement".<sup>17</sup> Even though Cernea's research work concentrated on development-induced displacement, his model can be generally applied to environmentally induced displacement and the consequences of forced movement.

The model outlines the following risks:

1. *Landlessness* — The loss of land eradicates the basic structures of people's productive and commercial activities as well as their livelihoods. It is the main form of poverty and decapitalization as the loss is both natural and human.
2. *Joblessness* — The loss of work in urban and rural settings is high, especially for those working in industries, services, or agriculture. Creating new jobs in the countries where people flee due to environmental degradation is often dismissed by both home and host state countries. Unemployment is

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<sup>17</sup> Description of the first seven risk factors is drawn from M. CERNEA, "Risks, Safeguards and Reconstruction: A Model for Population Displacement and Resettlement", *Economic and Political Weekly* 35 (2000) 3659–3678. The description of the eight risks, social disintegration, is from IDEM, *Public Policy Responses to Development-Induced Displacement*, Washington — DC: World Bank Reprint Series, 1996, 1515–1523; IDEM, "Understanding and Preventing Impoverishment from Displacement: Reflections on the State of Knowledge. Keynote Address, International Conference on Development Induced Displacement", *Journal of Refugee Studies*, University of Oxford, 8 (1995) 245–264.

often high and endures for long periods after they flee or when the actual physical relocation has been concluded.

3. *Marginalization* — The result of forced movement due to environmental stresses leads to marginalization of the fleeing population due to the loss of earnings and lack of opportunities in the host country, where human capital is ultimately considered obsolete. Economic marginalization often leads to social and psychological marginalization with a decrease in social status, loss of perspective and self-confidence, and a sense of injustice and vulnerability.
4. *Food insecurity* — Falling beyond the poverty line, people become hungry culminating in chronic undernourishment.
5. *Increased morbidity and mortality* — Environmental displacements put people's health at risk. The psychological stress and trauma of relocating are sometimes accompanied by outbreak of diseases (e.g., parasitic and vector-borne diseases). Unsafe water, shortages of food supplies, and sewage conditions put many at risk, especially the most vulnerable (older people, children, and the disabled).
6. *Loss of access to common property* — The loss of access to common property implies loss of income as well as livelihoods (pastures, forests, water courses, quarries, burial sites, and so on). The lack of social belonging and social networks from displacement leads to inequalities and loss of self-respect. In line with Cernea's model of potential risks intrinsic to displacement, this leads also to the following:
7. *Homelessness* — Loss of shelter and loss of place (despite sometimes only being temporary) for many displaced people; however, for some, it puts them in a deteriorating position with worse housing standards, which becomes a chronic condition. It also not only alienates their standard of living but also their own living and cultural environment.
8. *Social disintegration* — The loss of community networks, trade paths, knowledge, and traditions formal and informal management systems. Loss of leaders and leadership, loss of power, and disintegrated communities, that is, the

snowballing effect of destruction of the “social fabric.” In this context it is also worth mentioning two additional risks inherent to displacement, highlighted by Robert Muggah<sup>18</sup> and Theodore Downing<sup>19</sup>:

9. *Loss of community services* — This includes loss of healthcare and educational services, and especially the loss or decrease in opportunities for the development of children’s knowledge, skills, and education.
10. *Violation of human rights* — Environmental displacement may lead to and/or threaten economic, social, civil, and political human rights, such as the right to life, right to adequate food, right to health, right to water, and right to adequate housing.<sup>20</sup> Actions may lead to degrading treatment, arbitrary arrest, temporary or permanent deprivation of a person’s rights, and the loss of the right to be heard. These violations can be carried out by states or non-state actors. In addition, communal violence may occur once people settle elsewhere (internally or across the border).

All the mentioned human and material resources are lost when people are forced to move due to environmental depleting conditions. Although some of these “social goods” might have been owned or not by the displaced (such as property), and jobs might have or have not been owned also by them, the collective effect of loss of assets (and even sometimes the prospect of loss of one’s country, such as in case of disappearance of many island states) may launch them into impoverishment. These “social goods” are lost

<sup>18</sup> R. MUGGAH, “Through the Developmentalist’s Looking Glass: Conflict-Induced Displacement and Involuntary Resettlement in Colombia”, *Journal of Refugee Studies* 13 (2000) 133–164.

<sup>19</sup> T. DOWNING. *Avoiding new poverty: mining-induced displacement and resettlement*, London: International Institute for the Environment, 2002, 7.

<sup>20</sup> See U.N. *Human Rights Council Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy, and sustainable environment*, John KNOX U.N. Doc. A/HRC/22/43 (24 December 2012); and U.N. *Human Rights Council Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights*, U.N. Doc. A/HRC/10/61 (15 January 2009).

due to environmental degradation conditions mostly caused by the developed world and in many cases with the complicity of the developing world.<sup>21</sup> These conditions, in turn, create life-threatening circumstances for the populace and inequalities that compel them to migrate. Domestic laws and international legal standards are ill-equipped to grant them protection. The outcome of environmental displacement can, therefore, create territorial injustices. The condition of environmental injustice due to displacement is directly linked to the global stratified structure of economic and political power of the developed world that is able to change or force environmental burdens on fragile states.<sup>22</sup> This is due to the lack of adequate legal structures, environmental policies, and sanctions, together with the acceptance and connivance of weak states in the depletion of their resources by developed states for economic gains. As a result, developed states use the environment at their own expense, creating a vicious circle of dependency, impoverishment, and displacement of people from the developing world. The unbalance between the core and the periphery has been

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<sup>21</sup> This can be particularly true in cases where governments do not put into place any mitigation or adaptive strategies in a particular area prone to environmental changing patterns or are unable to manage a situation of disaster. A relevant example is the desertification of the African Sahel region where it is claimed that states in that area “could have enacted policies and programs to cut population growth, to improve techniques, or to heighten food production.” See A. WILLIAMS, “Turning the Tide: Recognizing Climate Change Refugees in International Law”, *Law and Policy* 30 (2008) 508:502–529. Another documented example is Cyclone Nargis in 2008, considered one of the worst catastrophes in the history of Myanmar where the government was not only incapable of offering assistance to the victims but also refused to receive aid from humanitarian institutions. See R. COHEN, “The Burma Cyclone and the Responsibility to Protect”, *Global Responsibility to Protect* 1 (2009) 256:253–257.

<sup>22</sup> See F. ADEOLA, “Cross-National Environmental Injustice and Human Rights. A Review of Evidence in the Developing World”, *American Behavioral Scientist* 43 (2000) 686–706; V. BORNSCHIER / C. CHASE-DUNN, *Transnational Corporations and Underdevelopment*, New York: Praeger, 1985, 6; and C. CHASE-DUNN / T. HALL, *Rise and Demise: Comparing World-Systems*, Boulder — CO: Westview Press, 1997, 41; C. CHASE-DUNN, *Global Formations*, Oxford: Blackwell, 1989, 201; S. BUNKER, *Underdeveloping the Amazon. Extraction, Unequal Change, and the Failure of the modern State*, Urbana: University of Illinois, 1985; I. WALLERSTEIN, *The Capitalist World Economy*, Cambridge: Cambridge University Press, 1979, 22.

the rule rather than the exception.<sup>23</sup>

### **Territorial injustice and environmental displacement: the lack of legal protection**

From the above, one can infer that environmental displacement creates inequalities and is an injustice issue. If so, do states have not only individually but also especially collectively an obligation to grant legal protection to those who are environmentally displaced, in particular those who could (potentially) cross the border?

In its 1985 report for the United Nations Environment Program entitled *Environmental Refugees*, El-Hinnawi identified a new group of persons known as “environmental refugees,” that is, “those 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 affected the quality of their life”.<sup>24</sup> The current legal definition of “refugee” in the 1951 Geneva Convention or Convention Relating to the Status of Refugees (CRSR) on the status of refugees excludes those who flee from man-made or naturally driven environmental disasters.<sup>25</sup> The Convention

<sup>23</sup> C. CHASE-DUNN / T. HALL, *Rise and Demise: Comparing World-Systems*, 41. According to the authors, this dependency and relationship between the core and periphery are a result of colonialism, power conquest, economic plunder, and competition of capitalist economies, which puts developing economies in a fragile situation of acceptance, subordination, and exploitation (in the case under analysis exploitation of the environment leading to displacement).

<sup>24</sup> E. EL-HINNAWI, *Environmental Refugees*, United Nations Environment Programme, 1985, 4.

<sup>25</sup> *Convention Relating to the Status of Refugees*, adopted on July 28, 1951, in force since April 22, 1954, 189 UNTS 137, amended by Protocol Relating to the Status of Refugees, adopted on January 31, 1967, in force since October 4, 1967, 606 UNTS 267. The 1951 Convention Relating to the Status of Refugees and the 1967 Protocol to the convention, a refugee is defined in Article 1 as: “A person who owing to a 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

was largely modeled as a response to postwar needs, emphasizing “persecution” or the belief of persecution by the individual’s own government, as opposed to the needs of the modern age: “an era of increasing international investment in developing countries, a continuing international waste trade and growing industrialization.”<sup>26</sup> As a result, “those forced to migrate across borders because of depleting environmental conditions have little, if any, recourse to protection.”<sup>27</sup> Even though some authors claim that the CRSR was not drafted with environmental migrants in mind,<sup>28</sup> when, in the absence of persecution, but where there are “grave [environmental] circumstances” and the government is unable to grant effective protection, could environmental migrants be characterized as environmental refugees?<sup>29</sup> Could the refugee definition be

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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.”

<sup>26</sup> J. HONG, “Refugees of the 21st Century: Environmental Injustice”, *Cornell Journal of Law & Public Policy* 10 (2001) 323–348.

<sup>27</sup> R. ZETTER, “The role of legal and normative frameworks for the protection of environmentally displaced people”, in F. LACZKO / C. AGHAZARM, ed., *Migration, Environment and Climate Change. Assessing the Evidence*, Geneva: International Organization for Migration, 2009, 387–434.

<sup>28</sup> See authors like G. McCUE, “Environmental Refugees: Applying International Environmental Law to Involuntary Migration”, *Georgetown International Environmental Law Review* 6 (1994) 151–190; D. FALSTROM, “Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment”, *Colorado Journal International Environmental Law & Policy* 13 (2002) 1–28; D. KEANE, “The Environmental Causes and Consequences of Migration: A Search for the Meaning of Environmental Refugees”, *Georgetown International Environmental Law Review* 16 (2004) 209–223; and B. DOCHERTY / T. GIANNINI, “Confronting and Rising Tide: A Proposal for a Convention on Climate Change Refugees”, *Harvard Environmental Law Review* 33 (2009) 349–403.

<sup>29</sup> The United Nations High Commissioner for Refugee (UNHCR), the International Organization for Migration (IOM), and the Refugee Policy Group have been reluctant to use the term “environmental refugee” and have opted to use the term “environmental displaced people” to designate internally and transborder displaced people. Here too the legal regime applicable to internally displaced people should be by analogy the 1951 Geneva Refugee Convention, but so far there is no adopted international treaty at the U.N. level.

adjusted to include them? How much are environmentally displaced people protected by existing human rights guarantees? How best can international human rights law and/or environmental law be adapted to protect environmentally displaced people? Or is the best way to protect and promote the human rights of affected communities to create a new legal instrument to confront the issue of environmental displaced people?

Governments are generally not required to protect or afford special legal status to displaced people entering their territory because of environmental conditions. However, as environmental degradation in the developing world advances causing a new era of mixed and complex international migration, preventing people from access to healthcare, water, food, air, and land, among other basic human rights, an enhanced level of protection may be needed. This legal protection might be further justified bearing in mind the major proponents of environmental injustices, that is, the developed world. “As the interlinked issues of protection and responsibility rise up in the [global environmental agenda] [...] more work on this relationship is vital to ensuring that protection is provided as efficiently and effectively as possible.”<sup>30</sup>

Alleged human rights violations by transnational actors, complicit and corrupt governments, and the overall environmental impact of industrialized nations may corroborate the collective human right obligations toward environmental displacement and the need to grant them specific international legal protection. At a scholarly level, proposals for legal protection of environmentally displaced persons have varied in content and imagination, with authors balancing their normative proposals between hard and soft law approaches. In this context, scholarship-coordinated efforts have abounded, with many proposing the treaty model approach.<sup>31</sup> Environmental scholars in Belgium have developed the most

<sup>30</sup> R. ZETTER, “The role of legal and normative frameworks”, 426.

<sup>31</sup> See, e.g., HODGKINSON, *et al.*, “Towards a Convention for Persons Displaced by Climate Change: Key Issues and Preliminary Responses”, 8 (September 2008), <<http://www.ias.uwa.edu.au/new-critic/eight>> (accessed on May 20, 2012). This Convention was initially presented at the University of Copenhagen during a conference on Climate Change: Global Risks, Challenges and Deci-

complete publication to date, a Draft Convention on the International Status of Environmentally Displaced Persons.<sup>32</sup> Less ambitious, but also relying on existing mechanisms and treaties, some scholars have suggested a sui generis protection that would consist of adding a Protocol to the 1992 United Nations Framework Convention on Climate Change (UNFCCC),<sup>33</sup> or a adding a Protocol to

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sions, March 10–12, 2009. Other convention proposals include: B. DOCHERTY / T. GIANNINI, “Confronting and Rising Tide”; V. MAGNIN. “Les Réfugiés de l’environnement. Hypothèse Juridique à Propos d’une Menace Écologique», Doctoral Dissertation, Paris : Department of Law / Paris; University Paris I Panthéon-Sorbonne, 1999, 532; G. S. McCUE. “Environmental Refugees”. This last author emphasizes that congregating principles of refugee law and environmental law would be the best option for the protection of environmentally displaced persons under an international arrangement. He suggests creating a compensation fund that would enable the resettlement of people displaced by environmental factors.

<sup>32</sup> M. PRIEUR, *et al.* “Projet de Convention Relative au Statut International des Déplacés Environnementaux. University of Limoges (CRIDEAU-CRDP-OMIJCIDCE)”, *Revue Européenne de Droit de l’Environnement* 4 (2008) 391–406. This draft treaty model approach relies on three strands: protection, assistance, and responsibility by including principles of environmental assistance, proximity, proportionality effectiveness, and nondiscrimination. It further creates a legal apparatus to grant a status to environmentally displaced persons to be managed by each state through a national commission and develop cooperation efforts with various international and regional organizations. It further creates a legal apparatus to grant a status to environmentally displaced persons to be managed by each state through a national commission and develop cooperation efforts with various international and regional organizations. It creates a custom-made institution, the World Agency for Environmentally Displaced Persons for treaty-related interpretation matters, to deal with appeals against national commission decisions, aided by a secretariat and an administrative and scientific council. In line with other proposals, it also proposes that a World Fund for the Environmentally Displaced be set up. Importantly, the treaty outlines the fundamental rights that are common to both temporarily or permanently displaced persons and highlights the importance of the principle of common but differentiated responsibilities “with the aim of prevention and reparation,” which should be covered by a specific protocol.

<sup>33</sup> F. BIEMAN / I. BOAS, *Protecting Climate Refugees: The Case for a Global Protocol Environment*, November–December 2008, <<http://www.environmentmagazine.org/Archives/Back%20Issues/November-December%202008/Biermann-Boas-full.html>> (Accessed on May 20, 2012). This proposal gravitates around five principles (principle of relocation and resettlement, principle of resettlement rather than temporary protection, principle of collective rights granted to

the European Convention Human Rights (ECHR), concerning the right to a healthy and safe environment as a means of “enhancing the human rights protection mechanisms vis-à-vis the challenges of climate change and environmental degradation processes.”<sup>34</sup> Additional proposals have consisted of extended legal protection, or of adding an amendment or additional Protocol to the CRSR.<sup>35</sup> Professor Jane McAdam has favored a better implementation of the Guiding Principles of Internal Displacement that could usefully inform a framework relating to cross-border environmental-related movement.<sup>36</sup> Some authors also favor strengthening “soft law” as an interim measure before there is a global consensus on a binding document for the protection of environmental displacement.<sup>37</sup> The

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local people, principle of international assistance within states, and principle of sharing the burden of hosting refugees internationally). A specific funding mechanism (Climate Protection and Refugee Resettlement Fund) has also been put forward, which links protection with state responsibility for climate change.

<sup>34</sup> COUNCIL OF EUROPE (CoE) / COUNCIL OF EUROPE PARLIAMENTARY ASSEMBLY / COMMITTEE ON MIGRATION / REFUGEES AND POPULATIONS, “Environmentally Induced Migration and Displacement: A 21<sup>st</sup> Century Challenge”, CoE Doc 11785 (23 December 2008) paras. 6.3 and 121.

<sup>35</sup> S. M. CHRISTIANSEN, *Environmental Refugees, A Legal Perspective*, Wolf Legal Publishers, 2010; RENAUD, *et al.* (2008), *Control, Adapt or Flee, How to Face Environmental Migration? Interdisciplinary Security Connection*, United Nations University Institute for Environment and Human Security, 5 (2007); M. COINSBEE / A. SIMMS, *Environmental Refugees: The Case for Recognition*, London: New Economics Foundation, 2003; J. COOPER, “Environmental Refugees: Meeting the Requirements of the Refugee Definition”, *New York University Environmental Law Journal* 6 (1998) 480–488.

<sup>36</sup> J. McADAM, *Climate Change and International Law: Complementary Protection Standards*, United Nations High Commissioner for Refugees Legal and Protection Policy Series, 2011, <<http://www.unhcr.org/4dff16e99.html>> (Last accessed on May 20, 2012). See also J. McADAM, *Climate Change, Forced Migration, and International Law*, Oxford: Oxford University Press, 2012, 256. The author also suggests that any suitable response to the issue of environmental displacement should be guided by overarching normative principles of humanity, human dignity, human rights, and international cooperation.

<sup>37</sup> R. FATIMA / A. WADUD / S. COELHO, *Human Rights, Climate Change, Environmental Degradation and Migration: A New Paradigm*, Bangkok / Washington — DC: International Organization for Migration & Migration Policy Institute, 2014, 8: 1–11. The authors note that given the lack of consensus on a legal and normative framework for environmental displacement, a “soft law” approach

building of a gradual consensus to address the challenges of cross-border displacement in the context of disasters and climate change has been the cornerstone of the so-called Nansen Initiative.<sup>38</sup>

Although all of them are worthy and merit recognition, among other things because they draw attention and offer insightful solutions into enhanced legal protection options surrounding environmental displacement, none of them address the matter all-inclusively from a normative and pragmatic/strategic point of view. This is because the protection of environmentally displaced persons warrants states to take a holistic approach to protection in all phases of displacement—from, during, and after displacement. This is particularly necessary, given that the solutions that could be envisaged for those who are displaced and (potentially) cross an international border due to environmental factors have to be conceptualized and combined with measures to avoid displacement or to adapt to the conditions of a changing environment. A new model of legal protection for environmentally displaced people must be carefully (re)conceptualized.

The plight of the environmentally displaced warrants a human approach to their vulnerability, conveying human rights as an integral part of their protection, recognizing that environmentally displaced persons are plainly entitled to enjoy a wide range of civil, political, economic, and social rights set out in international and regional human rights treaties and customary international law, while at the same time highlighting the corresponding (home and host) states' obligations. In this context, the protection of the human person is not only an *ex post facto* obligation of states but

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should be explored because it allows leveraging expertise and knowledge base of actors such as nongovernmental organizations, does not directly challenge state sovereignty, expands existing institutional arrangements, and accommodates different views. Furthermore, it allows a timely action in situations where governments reach a stalemate and helps expand on existing legal binding and nonbinding agreements.

<sup>38</sup> The Nansen Initiative is an intergovernmental process that was launched in 2012 by Switzerland and Norway to address the challenges of cross-border displacement in the context of disasters and climate change. Its "Protection Agenda" builds upon consultative processes carried out in various regions of the world available from: <<http://www2.nanseninitiative.org>> (accessed April 19, 2015).

must also be increasingly seen as an *ex ante* one. It requires a transformational change in government practices toward working in a proactive rather than a reactive matter. Here labor migration — as a new status of protection—has a legitimate role to play for vulnerable communities in particular, when adapting to environmental change. As the fields of human rights and environment expand and intertwine, so do the legal cumulative effects of these frameworks, which highlight the prevention of, or protection from, cross-border environmental displacement as an important protection dimension of emerging customary nature. Importantly, the human rights framework identifies the “minimum standards of treatment” that should be afforded to those displaced by environmental factors (i.e., identifying the rights violated or at risk and how states need to deal with risk and their obligation to deal with it). It falls short, however, in providing an effective protection mechanism or status when someone crosses a border due to environmental factors. This is because as previously highlighted, the international legal protection regime has been traditionally geared, once displacement occurs, toward the narrow class of those fleeing political persecution under the 1951 Convention Related to the Status of Refugees. This present legal structure, although relevant as a point of comparison, and although it offers protection and status to those who cross the border due to environmental factors in certain circumstances (where environmental impacts may amount to persecution based on qualified grounds), is still largely inadequate. The Refugee Convention was created for a different purpose and, therefore, has limited application to engage host states in particular obligations. Nevertheless, the increased convergence of the law of protection of the human person at regional level has expanded protection beyond the remit of that conventional instrument into codified forms of subsidiary or complementary protection under the European Union legal framework. I propose that the European Union’s regionally orientated protection regime can help states to consolidate an evolving protection paradigm of proactive and reactive measures being erected at the international level for environmental cross-border displacement. In other words, it helps states to (re)conceptualize protection as a holistic and dynamic

enterprise. The objective is to highlight protection—as a way of reflecting the international human rights obligations of states—by way of a process of consolidation of existing proactive (*ex ante*) and reactive (*ex post*) protection measures. *Ex ante* protection encapsulates protection of environmentally displaced persons from displacement, that is, as prevention. It looks at strategies to deal with the predicted effects of environmental change (e.g., circular labor migration through the Seasonal Workers Directive and/or Mobility Partnerships). *Ex post* protection deals with the effects of environmental change and the various modes of legal protection that are available and that can be adapted to protect environmentally displaced persons once they cross an international border (e.g., temporary protection through the Temporary Protection Directive and subsidiary protection through the Qualification Directive). An optimistic stance by engaging in a dynamic and contextual legal interpretative analysis of the existing European Union regional protection framework and related jurisprudence, suggesting it as a potential model, can - in the short term - be a stepping stone to consolidate protection for environmentally displaced persons reinforce existing states' obligations, and even reorient the international protection regime if needs be.<sup>39</sup>

Any model of protection has to be associated with a model of social support. If protection of environmentally displaced people is to become a reality, then there is an increasing need of a global and holistic approach to protection. This means that the letter and spirit of the law must fully reflect the needs of environmentally displaced people and be inclusive. The current state of play of environmental degradation and displacement must ensure a maximization of goods for the entire population, creating a just society for all, that is, a distributive and territorial justice between North and South, rich or poor, decrease inequalities, and most importantly realize and protect people's human rights.

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<sup>39</sup> See I. Mota BORGES. "International Law and Environmental Displacement: Towards a New Human-Rights Based Protection Paradigm", Ph.D. Dissertation, University of Oslo / The Faculty of Law / Norwegian Centre for Human Rights, 2016.

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