



SPECIAL ISSUE ARTICLE

Environmentally Induced Displacement: When (Ecological) Vulnerability Turns into Resilience (and Asylum)

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ABSTRACT

This article aims to reflect on ‘ecological vulnerability’ – which makes evident the relationship, flows and interactions between the human being/body and the environment/non-human world – as applied in the context of environmentally induced migration. In particular, the dual role of the law vis-à-vis environmentally displaced migrants as a generator and exacerbator of their vulnerability as well as potential antidote, valuable for attaining protection, will be highlighted. Namely, on one hand, the analysis will show how a lack of conceptualisation of the notion to understand the spatial and temporal patterns of climate change-related migration, as well as its consequences for societal well-being, contributes to generate and exacerbate the vulnerability of that category of migrants. On the other hand, the critical understanding of vulnerability, as developed in some recent legal reasoning of international and national jurisdictions, will be proposed as a key element for ensuring the resilience of both environmental migrants and the law itself, for both virtuously expanding traditional asylum norms and flexibilising access to international protection for those migrants.

Keywords: ecological vulnerability; asylum; environmentally induced displacement

1 Introduction

Recent literature (Turner, 2006; Fineman, 2008; Fineman and Gear, 2013; Goodin, 1985; Kittay, 1999; Beckett, 2006), in the realms of philosophy, legal theory and ethics, particularly feminist legal theory (Mackenzie, Rogers and Dodds, 2014; Fineman, 2015; Gear, 2010), approaches vulnerability as a means to revolutionise the architecture of law, which is constructed around the ideal of a rational subject excised from both embodiment and socio-cultural context (Gear, 2011). The ‘vulnerable subject’ is advanced instead as a more realistic alternative (Fineman, 2008), stressing vulnerability and the ontological experience of all human beings as part of the personal, economic, social, and cultural circumstances in which individuals find themselves at different points in their lives, and as a fundamental feature of humanity (Turner, 2006).

Such a shared ‘ontological insecurity’, characterised as a constant exposure to potential harm (whether intentional or accidental), may arise from: (i) ‘our corporeality, our neediness, our dependence on others, and our affective and social natures’ (inherent vulnerability) (Mackenzie, Rogers and Dodds, 2014); (ii) situational and context-specific conditions including personal, social, economic and environmental conditions, so being a product of genetic, social and environmental factors actually present or latent (situational vulnerability) (Mackenzie, Rogers, and Dodds, 2014; Fineman, 2008; Peroni and Timmer, 2013; Neal, 2012); (iii) the exacerbation or compounding of existing types of vulnerability, including ‘morally dysfunctional interpersonal and social relationships characterised by disrespect, prejudice or abuse, or by socio-political situations characterised by oppression, domination, repression, injustice, persecution or political

violence' (pathogenic vulnerability) (Mackenzie, Rogers and Dodds, 2014); or (iv) contingencies that follow a choice (discretionary vulnerability) (Lotz, 2016). Such different and complex kinds of vulnerability may be superposed and experienced simultaneously (compounded vulnerability) (Luna, 2009). As applied to the context migration, migrant vulnerability (Bronfenbrenner, 1979) – or 'migratory vulnerability' (Baumgärtel, 2020; Baumgärtel and Ganty, in this issue) – is normally associated with multiple factors. Some relate to individuals and their family circumstances. In other cases, vulnerability is associated with community factors, including availability of quality educational opportunities, health care and social services; equal access to resources; livelihood and income-generating opportunities; the natural environment and social norms and behaviours. Finally, structural factors of migrant vulnerability are the political, economic, social, and environmental conditions and institutions at national, regional and international levels.¹ The law also plays a key role (Moreno-Lax and Vavoula, in this issue).

Most recently, however, building on Fineman's conceptualisation, a theory of 'ecological vulnerability' has also been elaborated (Harris, 2014) to make evident the relationship and interactions between the human being/body and the environment/non-human world. Through the concept of 'ecological vulnerability' it is recognised that humans are vulnerable not only because they age, become ill and die, 'but because their survival depends on complex macro- and micro-ecologies – all of which are, in turn, vulnerable to harm'. As Harris (2014) underlines, adopting the language of 'ecological vulnerability' implies the necessity – well-explained by Bennet – of having to 'admit that humans have crawled or secreted themselves into every corner of the environment; admit that the environment is actually inside human bodies and minds, and then proceed politically, technologically, scientifically, in everyday life, with careful forbearance' (Bennet, 2010). According to Harris, 'ecological vulnerability' recognises that human lives are part of complex ecosystems that operate on various levels of scale, from the local to the global. She acknowledges that 'in the age of the Anthropocene, when human activity is rapidly causing large-scale, not fully predictable, and potentially irreversible changes to our inner and outer environments', the fully 'responsive State' (Fineman, 2008) should recognise that soil degradation, water scarcity, warming oceans, and depleted fishing stocks structure our options and create opportunities just as market and family relations do. In the age of the Anthropocene, it can no longer be argued that these environmental processes and events are outside the circle of justice. 'Human behaviour' and 'the natural world' are now locked in an ever-tightening feedback loop. Climate change represents the most dramatic example of this indivisibility of humans and 'the environment' (Pachauri *et al.*, 2014; Grant, Kotze and Morrow, 2013) being evident in the close interrelationship between greenhouse gas emissions, large-scale ecosystem and trans-human system disruptions, and human life and health. Thus, the applicability of the 'ecological vulnerability' notion to environmentally induced migration can serve to reframe the reach of law, including the scope of *non-refoulement*, that is, to assess the situation in the country of destination in the event of forcible expulsion of 'climate refugees'. Accordingly, what this article proposes is that the *non-refoulement* principle – the main protection of those in need of international protection – should be *re-interpreted* in the sense that the risk of exposure to inhuman treatment to be assessed in the country of destination should encompass not only the individual situation (regarding threats of persecution or ill treatment) but also *the overall conditions in the country*, considering especially the level of an adequate standard of living in line with basic human rights. This – the recognition *in law* (Moreno-Lax and Vavoula, in this issue) of 'ecological vulnerability' as a relevant factor in the *non-refoulement* assessment – could generate a (virtuous) expansion of traditional asylum norms and the flexibilization of access to international protection for that particular category of migrants (European Commission, 2022) in line with the evolving standards of international law.

¹This is the model of migrants vulnerability developed by the International Organisation for Migrations (IOM). Available at: https://www.iom.int/sites/g/files/tmzbd1486/files/our_work/DMM/MPA/1-part1-thedomv.pdf.

2 Law as generator and exacerbator of environmental migrants' vulnerability and the resilience of human rights

Since the expression 'climate/or environmental refugees' was first used in 1985 by El-Hinnawi and subsequently recurred in literature and political/institutional documents (e.g. European Parliament, 2011), it has served to bring to the fore the existence of three cumulative elements that characterise the plight of this category of persons: (i) the departure from the usual location; (ii) the existence of a climatic breach (due to natural or human causes, slow onset or not) that impacts and threatens human life and (iii) serious perturbances to living conditions. Despite the literal tenor of the expression (climate/or environmental *refugees*), however, the international refugee law framework, enshrined in the 1951 Convention Relative to the Status of Refugees² and its 1967 Protocol,³ does not represent the normative source of their protection. In fact, the element of persecution that characterises the current definition of a 'refugee', based on 'race, religion, nationality, membership of a particular social group or political opinion' (Goodwin-Gill and McAdam, 2007), is absent in the case of climate or environmentally induced migrations. Although adverse environmental and climate impacts could characterise any related harm as sufficiently severe (Foster, 2009); environmental and climate change consequences are indiscriminate, and thus not tied to individuals' backgrounds or beliefs (McAdam, 2011). There is nonetheless scope for some exceptions, where exposure to climate impacts or environmental degradation in themselves amount to persecution: if government policies target particular groups reliant on agriculture for survival or use starvation or famine as a political tool (Schmeidl, 2001), or contribute to environmental destruction,⁴ or even desertification (Cooper, 1998; Kozoll, 2004). This flows from developments in international human rights law that have informed the meaning of persecution and harm within the international refugee law regime (Foster, 2009; McAdam, 2009) allowing for persecution to take the form of socio-economic deprivation (Foster, 2009).

Moreover, as climate change is a gradual process, it is possible that some individuals will voluntarily leave the affected area *before* it becomes uninhabitable so that the characterisation of any ensuing harm as akin to persecution becomes too remote. This relates to a third issue, namely that it is extremely difficult to disentangle the specific cause of displacement from other connected factors, due to the incremental impacts of climate change on the broader political and socio-economic context (McAdam, 2011). A related matter concerns the problematic notion of climate change as violating human rights *per se*. Furthermore, while Article 1(A)(2) of the 1951 Convention requires the refugee to be 'unable or owing to such fear . . . unwilling to avail himself from the protection of that country', the country of origin may still be *willing* to protect its displaced inhabitants; the problem lying instead in its (in)capacity to do so.

But the limits of the notion of 'environmental/climate refugees' do not end in its inability to include environmental and climate refugees within the frame of international refugee law. Such a notion is not a shared one at either the international or the European level. In fact, a definition according to which climate-induced migration occurs every time a person cannot stay in their home due to a habitual climatic event is too vague and broad to come within the remit of international refugee law (Myers and Kent, 1995). An agreement instead exists about the crossing of an international border and the vulnerability of such migrants, which bears strict similarities with the vulnerabilities of those who are unable to access safe, affordable and regular migration pathways (UN High Commissioner for Human Rights, 2018). The need for a coercive element to

²Opened for signature 28 July 1951, 189 UNTS 137 (entered into force 22 April 1954) ('Refugee Convention').

³The 1967 Protocol relating to the Status of Refugees, opened for signature 31 January 1966, 606 UNTS 267 (entered into force 4 October 1967), removed the temporal limitation of Art. 1A(2) ('[a]s a result of events occurring before 1 January 1951') and, for new contracting parties, removed the option of entering a geographical reservation ('events occurring in Europe').

⁴See e.g. *Social and Economic Rights Action Center v Nigeria*, Communication No 155/96 (2001), reproduced in African Commission on Human and Peoples' Rights, Fifteenth Annual Activity Report of the African Commission on Human and Peoples' Rights 2001–2002 (7 May 2002) annex V, 31 [2].

exist to qualify for international protection (Keane, 2004) is not without criticism either. Thus, it can hardly be determined whether a migrant anticipating a rise in sea level or a drought is allowed (under international law) to organise his/her departure and even choose his/her receiving state (Gonin and Lassailly-Jacob, 2002). Anyhow, at least the idea that the coercion that makes people leave, at the basis of climate/environmentally induced migration, shall be linked to an irresistible (sudden or gradual) environmental disaster/event that inexorably impacts the living conditions of those concerned should be retained.⁵ The lack of consensus on how to define climate refugees makes it extremely difficult to develop an international instrument to protect them – whether in the form of an *ad hoc* Convention or an Additional Protocol to the 1951 Refugee Convention (Bierman and Boas, 2007; Hulme, 2008; Traore Chazalnoel and Ionescoor, 2018) or to the UN Framework Convention on Climate Change (McAdam, 2011), or as a reformulation of Article 1(A) of the 1951 Refugee Convention, to encompass within the refugee definition also those at risk to their personal psycho-physical integrity due to the effects of environmental degradation. This puts environmentally displaced persons outside the law's protection (in quite a literal sense), with the consequence that the law's exclusion ends up exacerbating vulnerabilities (Moreno-Lax and Vavoula, in this issue) and manifests itself as ill-suited to address their plight (McAdam, 2011).

Law, nonetheless, offers some respite in the specific regional context represented by the Organisation of African Unity (OAU) Convention (1974) and the African Charter on Human and People's Rights (1986), which provide an extended refugee definition, encompassing those displaced due to 'events seriously disturbing public order' (Atapattu, 2010) that could be read as accommodating climate disasters. People may therefore be eligible as refugees when displaced by climate change or an environmental disaster and fall under the protection of these regional instruments.

At the international level, the work of the International Law and Sea Level Rise Committee, which operates within the International Law Association (ILA) and of the International Law Commission's working-group on Sea-level rise (ILA, 2022; Marchegiani, 2022; European Commission, 2016), is promising. The same applies to international human rights law, which offers some possibilities to bounce back from the challenges of climate/environmentally induced migration, giving expression to the different capacities of: (i) coping (Keck and Sakdapolrak, 2013) or maintaining, (ii) adapting and/or (iii) transforming (Methmann and Oels, 2015) the environmental vulnerability-exacerbating effects of climate change. The applicability of international human rights law persists in the context of forced migration, in particular, the positive duties attached to the obligation of *non-refoulement*.⁶ Extreme situations of socioeconomic destitution, particularly in relation to vulnerable individuals, in fact, may amount to inhuman or degrading treatment and hence trigger the application of the principle of

⁵On this, see the International Centre of Comparative Environmental Law of the University of Limoge, Draft Convention on the international status of environmentally displaced persons, 2nd version, May 21. Available at: www.cidce.org.

⁶*X v. Belgium*, Application No 984/61, ECommHR (1961) para. 8; *X v. Austria and Yugoslavia*, Application No 2143/64, ECommHR (1964) para. 6; *X v. the Netherlands*, Application No 1983/63, ECommHR (1965) para. 12; *X v. Federal Republic of Germany*, Application No 3040/67, ECommHR (1967) at 3; *X v. Federal Republic of Germany*, Application No 3110/67, ECommHR (1968) para. 11; *X v. Federal Republic of Germany*, Application No 4162/69, ECommHR (1969) para. 6; *X v. Federal Republic of Germany*, Application No 4314/69, ECommHR (1970) paras 1–2; *Kemal Altun v. Federal Republic of Germany*, Application No 10308/83, ECommHR (1983) paras 219–220; *M.C. v. France*, Application No 10078/82, ECommHR (1984) para. 111; *Kirkwood v. United Kingdom*, Application No 10479/83, ECommHR (1984) para. 183; *Soering v. United Kingdom*, Application No 14038/88, ECtHR (1989); *The Haitian Centre for Human Rights v. United States*, Inter-Am Comm HR, No 10675 (1997) paras 167–171; The Institution of Asylum and its Recognition as a Human Right in the Inter-American System of Protection (interpretation and scope of articles 5, 22.7 and 22.8 in relation to article 1(1) of the American Convention on Human Rights), Advisory Opinion OC-25/18, Inter-Am Ct HR (Ser A) No 25 2018, para. 181. The *travaux préparatoires* of the European and American Conventions show that the issue of ill-treatment of a non-national after removal to another state was not debated among the drafters. 'Preparatory Work on Article 3 of the European Convention of Human Rights', Council of Europe, European Commission on Human Rights, DH (56) 5 (1956), and OAS, General Assembly, Conferencia Especializada Interamericana sobre Derechos Humanos, paras 41, 100, 246–250.

non-refoulement under human rights law.⁷ A *non-refoulement* effect has been applied also to non-absolute rights,⁸ where there was a risk of a ‘flagrant violation’⁹ of attendant guarantees. A risk of ‘irreparable harm’ in the receiving state,¹⁰ a ‘reasonable risk of [a] violation of their fundamental rights’,¹¹ or a risk for the individual of suffering ‘serious forms of discrimination’ or gender-based violence have been considered sufficient to halt deportations.¹² Against this background, it is worth exploring whether human rights law has the potential of offering additional protection (through the concept of ‘ecological vulnerability’) in order to extend the protective application of the principle of *non-refoulement* to displaced persons who have crossed an international border due to environmental degradation or climate change. Adding to the reflections in this Special Issue, the next section thus turns to examine the potential of ‘ecological vulnerability’, when recognised *in* and *through* law (Moreno-Lax and Vavoula, in this issue) to expand the *non-refoulement* obligation to cover and offer protection to environmental migrants.

3 The potential of vulnerability to expand the *non-refoulement* obligation to environmental migrants

Non-refoulement operates on the basis of the ‘returnability test’, thus on the ‘permissibility, feasibility (factual possibility) and reasonableness of return’ (Kälin, 2010) in the light of the individual situation of the applicant in the event of expulsion. Therefore, state authorities should provide an adequate and *individualised* assessment of the risk of a threat to the applicant’s right to life or his/her right to not be subjected to inhuman or degrading treatment in the country of envisaged return. In such an assessment, vulnerability theories have played a role in the reasoning of human rights courts and UN monitoring bodies, expanding the protection by, for instance, lowering the threshold of risk (Ippolito, 2020). On this basis, what this section will determine, when non-returnability is analysed in relation to climate induced displacement, is whether, through the protection *par ricochet* of the right to life, the application of vulnerability, and especially of the ‘ecological vulnerability’ theory on the dependence of mankind on the

⁷See especially *M.S.S. v. Belgium and Greece*, Application No 30696/09, ECHR (2011), paras 367–368; *Warda Osman Jasin v. Denmark*, HRC, 114th Sess, UN Doc CCPR/C/114/D/2360/2014 (2015), paras 1, 8.9–8.10.

⁸*Golder v. United Kingdom*, Application No 4451/70, ECHR (1975) 34–36; *Young, James and Webster v. United Kingdom*, Application No 7601/76, ECHR (1981), paras 51–52.

⁹That is the case of situations in which non-derogable rights have their essence completely denied or nullified in the receiving country so that the threshold of ‘flagrant violation’ takes into account a level of severity comparable to that resulting from violations of the prohibition of cruel and degrading treatment, which is within states’ powers to verify. The reasoning is not that some rights cannot trigger an obligation of non-refoulement but instead that the harm arising from their potential breach would hardly, if ever, reach the required level of severity. That was the case of the guarantees of the rights to fair trial or to liberty and security: *Othman (Abu Qatada) v. United Kingdom*, Application No 8139/09, ECHR (2012), paras 198–205, 233, 281–287; *Al Nashiri v. Romania*, Application No 33234/12, ECHR (2018), paras 596, 689–692; *Nars & Ghali v. Italy*, Application No 44883/09, ECHR (2016), paras 244, 299–303; *El-Masri v. Former Yugoslav Republic of Macedonia*, Application No 39630/09, ECHR (2012), paras 239–241; the right to private and family life: *Al Nashiri v. Romania*, Application No 33234/12, ECHR (2018), paras 698–699; *El-Masri v. Former Yugoslav Republic of Macedonia*, Application No 39630/09, ECHR (2012), paras 249–250 and the freedom of thought, conscience, and religion: *Z and T v. United Kingdom*, Application No 27034/05, ECHR (2006), paras 7–8.

¹⁰UN Human Rights Committee, General Comment No 31, 80th Sess, UN Doc CCPR/C/21/Rev.1/Add.13 (2004) 1, para. 12; UN Committee on the rights of the child, General Comment No 6, 39th Sess, UN Doc CRC/GC/2005/6 (2005) 1, para. 27; *Z.H. and A.H. v. Denmark*, 82nd Sess, UN Doc CRC/C/82/D/32/2017 (2019) 1, paras 8.7–8.8, where, although the Committee found the claims inadmissible due to lack of substantiation, it did not reject the possibility that a risk of irreparable harm could arise in relation to the right to health, to an adequate standard of living and to education.

¹¹Advisory Opinion OC-21/14, ‘Rights and Guarantees of Children in the Context of Migration and/or in Need of International Protection’, OC-21/14, Inter-American Court of Human Rights (IACtHR), 19 August 2014, para. 231.

¹²UN Committee on the elimination of any discrimination against women (CEDAW), General recommendation No 32 on the gender-related dimensions of refugee status, asylum, nationality, and statelessness of women, CEDAW, UN Doc. CEDAW/C/GC/32 (2014) 1, para. 23.

environment and various ecosystems as recalled in the previous section, should entail an expansion of the positive obligations attached to the principle of *non-refoulement* vis-a-vis environmentally displaced migrants.

The decision by the UN Human Rights Committee in the case of *Ioane Teitiota v. New Zealand*¹³ – assessed positively by some (Behlert, 2020; McAdam, 2020; Schuetze, 2020) or more critically by others (Behrmann and Kent, 2020; Cullen 2020; Imbert, 2020; Le Moli, 2020; Rive, 2020; Scott, 2019) – illustrates some of such a protective potential of a vulnerability-inspired reading of *non-refoulement*. The case concerned a family from the Republic of Kiribati, a Pacific Island-nation projected to be completely submerged by water by 2050, who applied in New Zealand for refugee status based on ‘changes to their environment in Kiribati caused by sea-level-rise associated with climate change’ that threatened their lives and wellbeing – having arrived there in 2007 and stayed well after their permits expired in 2010. All the national levels of jurisdiction dismissed the request for refugee status on the grounds that the Kiribati citizens did not ‘objectively face a real risk of being persecuted if returned to Kiribati’ (at 4) and that there was insufficient evidence to show that Mr Teitiota and his family faced a ‘real chance of suffering serious physical harm from violence’, or that he would be unable to find land accommodation to grow food and obtain potable water. Furthermore, there was no evidence that the environmental conditions in Tarawa were ‘so perilous that Teitiota’s life [and that of his family] would be jeopardised’ (*ibid.*). When the case reached the UN Human Rights Committee, arguing that New Zealand had violated Mr Teitiota’s right to life under Article 6 of the International Covenant on Civil and Political Rights (ICCPR), that argument was dismissed.

However, building on the consideration that the protection of the right to life implies positive obligations, including those arising from international environmental law (acknowledged first in the *Portillo Cáceres* case),¹⁴ the Committee interpreted the normative content of the right in an evolutionary way, comprehensive of the positive duty to protect not only against imminent risks to life but also against ‘reasonably foreseeable threats and life-threatening situations that *can* result in loss of life’,¹⁵ even if they do not result in *actual* (and immediate) loss of life.¹⁶ The Committee further recalled that environmental degradation and climate change constitute some of the most pressing and serious threats to the ability of present and future generations to effectively enjoy the right to life.¹⁷ Interpreting the right to life as the right to enjoy a life with dignity, together with the acknowledgment of the existence of a close correlation between the obligations placed on states under international environmental law and the protection of the right to life enshrined in Article 6 ICCPR,¹⁸ brought the Human Rights Committee to recognise that, without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a

¹³UN Human Rights Committee, *Ioane Teitiota v. New Zealand*, CCPR/C/127/D/2728/2016, 23 September 2020.

¹⁴UN Human Rights Committee, *Portillo Cáceres et al. v. Paraguay*, CCPR/C/126/D/2751/2016, 20 September 2019.

¹⁵UN Human Rights Committee, *Ioane Teitiota v. New Zealand* (n 13), paras. 9.4, 9.11. Committee member Vasilka Sancin’s (dissenting) Individual Opinion even eventually requested to evidence that such a threat does not exist. See also Citroni, 2020, at 3, critically highlighting how the burden of proof entirely beared on the applicant.

¹⁶*Ibid.*, para. 9.4 and already in *Portillo Cáceres et al. v. Paraguay* (n 14), para. 7.3.

¹⁷UN Human Rights Committee, *Ioane Teitiota v. New Zealand*, para. 9.5. See also UN Human Rights Committee, General Comment No 36 (CCPR/C/GC/36), para. 62; UN Human Rights Committee, *Portillo Cáceres et al. v. Paraguay* (n 14), para. 7.4; Inter-American Court of Human Rights, Advisory Opinion OC-23/17 of 15 November 2017 on the environment and human rights, series A, No. 23, para. 47; *Kawas Fernández v. Honduras*, judgment of 3 April 2009, series C, No. 196, para. 148. See also African Commission on Human and People’s Rights, General Comment No 3 on the African Charter on Human and Peoples’ Rights: The Right to Life (article 4), para. 3 (states’ responsibilities to protect life ‘extend to preventive steps to preserve and protect the natural environment, and humanitarian responses to natural disasters, famines, outbreaks of infectious diseases, or other emergencies’).

¹⁸UN Human Rights Committee, General Comment No 36, Article 6 Right to Life adopted on 30 October 2018, UN Doc CCPR/C/GC/36 of 3 September 2019, paras 26, 62.

violation of their rights under Articles 6 and/or 7 of the Covenant, thereby triggering their *non-refoulement* obligations. Furthermore, given the risk of an entire country becoming submerged under water and its potentially extreme consequences, the conditions of life in such a country may become incompatible with the right to a life with dignity before the risk materialises.¹⁹ However, the risk of serious harm to life must be personal and cannot result simply from the general conditions of the receiving country, except in extreme cases. Therefore, Mr. Teitiota, not complaining of a strictly *personal* risk and with the Committee not taking into account a ‘cumulative assessment’ of all the relevant factors (McAdam, 2020) to assess the risk holistically, would have needed to provide proof of the uninhabitability of Kiribati to avoid expulsion.

The application of the ‘ecological vulnerability’ theory could have helped in refocusing the assessment in the light of the specific vulnerabilities of the applicant in relation also to the overall conditions in the country, in particular considering the level of an adequate standard of living, whose components include access to adequate food, clothing, housing and the continuous improvement of living conditions, as well as the right not to be deprived of livelihood means – all elements that are extremely affected by both environmental degradation and climate change. In particular, the theory of ‘ecological vulnerability’ could have been used to demonstrate that intermediate degrees of exposure to climate-induced harms may trigger *non-refoulement* protection. The theory would have served to jointly consider *extreme* conditions, making life unliveable, alongside the unbearable effects of environmental degradation, *before* the risk is realised (at 9.11) but being nonetheless imminent (at 9.12).²⁰

Namely, ‘ecological vulnerability’ may lower the evidence threshold necessary to prove the risk, giving rise to a ‘wider and more tailored net than the generic *non-refoulement* obligations’ (Pobjoy, 2017), as well as a broader and more flexible definition of harm (Sommaro, 2021). ‘Ecological vulnerability’ draws from an intersectional evaluation of all the relevant risk factors as they interact together. If generalised, an ecological vulnerability-inspired evaluation would transform the assessment of, for instance, age-related vulnerabilities in a revolutionary way. In this regard, the Committee on the Rights of the Child (CRC Committee) has developed the notion of ‘other irreparable harm’ as ‘also includ[ing] harm to the survival, development, or health (physical or mental) of the child’,²¹ which in the Committee’s jurisprudence requires the right to survival and development as implemented through the combined enforcement of the rights to health, adequate nutrition, an adequate standard of living, and a healthy and safe environment.²² This, interpreted in light of the best interests of the child, is gaining momentum and becoming an effective strategy in the fight against climate change (Ippolito, 2020, 2022, 2023; Liguori, 2022).

A similar approach might also turn to be applicable before the Human Rights Committee in future cases. Article 24(1) ICCPR entitles every child to special measures designed to protect its life

¹⁹UN Human Rights Committee, *Ioane Teitiota v. New Zealand* (n 13), para. 9.11.

²⁰The Committee observed in paras 9.9 and 9.19 the finding of the domestic authorities that it was not impossible to grow crops, as well as that there was no evidence that the author would lack access to potable water in the Republic of Kiribati while the author has not provided sufficient information indicating that the supply of fresh water is inaccessible, insufficient or unsafe so as to produce a reasonably foreseeable threat of a health risk that would impair his right to enjoy a life with dignity or cause his unnatural or premature death. It equally observed that the author refers to sporadic incidents of violence between land claimants that have led to an unspecified number of casualties, and he has not demonstrated clear arbitrariness or error in the domestic authorities’ assessment as to whether he faced a real, personal and reasonably foreseeable risk of a threat to his right to life as a result of violent acts resulting from overcrowding or private land disputes in Kiribati.

²¹UN Committee on the Rights of the Child, General Comment No. 6 (2005): Treatment of unaccompanied and separated children outside their country of origin. UN Doc. CRC/GC/2005 e/6.

²²UN Committee on the Rights of the Child (CRC), General comment No. 7 (2005): Implementing Child Rights in Early Childhood, 20 September 2006, CRC/C/GC/7/Rev.1, para. 10.

in addition to the general measures required under Article 6 ICCPR for the protection of the lives of all individuals. Accordingly, when taking special measures of protection, states should be guided by the best interests of the child and the need to ensure the survival and development of all children and their well-being. This should apply also with specific regard to those positive obligations of a 'special character', which deal 'with the conditions of the causes of the violation' of Article 2 and 6 ICCPR.²³

The Human Rights Committee has partially embraced this understanding in its most recent case law, specifically in a case concerning aboriginal Australians with ancestral ties to the land and territorial sea in Torres Islands,²⁴ on consideration that their way of life and culture were being seriously threatened by the *prospect of becoming displaced* (together with the disappearance of certain species in the sea that are basic foodstuff the complainants depend on). In this case, the vulnerability of the applicants as indigenous people played a role in the configuration of their status as 'victims' under the Covenant, which was contested by the defendant state because it related to a form of *future* harm which had yet to materialise in any existing or foreseeable violation of, or threat to, their rights due to climate impacts. Using a precautionary approach to the interpretation of the notion of 'imminence' of the harm concerned (Anderson, Foster, Lambert and McAdam, 2019), the Committee did not reason in the sense that the risk must materialise within a short time (using a temporal frame). Instead, it considered those risks that *directly* (in a causal sense) threaten the persons involved,²⁵ linking the 'alleged serious adverse impacts that have already occurred and are ongoing' with the foreseeable consequent impairment of rights under the Covenant.

Thus, vulnerability played a role in the determination of the responsibility of Australia, as the destination country, for failing to adopt *timely* and adequate *adaptation* measures to protect the collective ability of people to maintain their traditional way of life, to transmit to their children and future generations their culture and traditions, and make use of ancestral land and sea resources. This amounted to a violation of the positive obligation to protect the right to enjoy their minority culture²⁶ and should be considered in the individual assessment of the applicant risk situation, as complemented by the overall conditions in the country, considering the level of (for example) an adequate standard of living.

In light of the statement contained in para 9.12 of the *Teitiota* decision, according to which 'the assistance of the international community, to take affirmative measures to protect and, where necessary, relocate its population', this reasoning might also pave the way to a possible application of the positive obligation of *non-refoulement*, binding the returning/expelling state to a form of subsidiary responsibility to protect third-country nationals (Schefer and Cottier, 2015) in those cases where the countries of return are not able to protect them (Maneggia, 2022). This would considerably extend the *non-refoulement* protection available to environmentally displaced migrants.

²³Discussion of the GC No. 36 (Cont'd), HRC, 3323rd meeting, 118th Session (n 45) Special Rapporteur Mr Yuval Shany, 1.23.41 min.

²⁴UN Human Rights Committee, *Billy et al v. Australia*, Communication No. 3624/2019, 22 September 2022.

²⁵The protection of Art. 2 ECHR also regards risks that may only materialise in the longer term according to the Dutch Supreme Court, *The State of The Netherlands (Ministry of Economic Affairs and Climate Policy) and Stichting Urgenda*, para 5.2.2; *Öneryıldız v. Turkey*, Application No 48939/99, ECHR (2004) affirming that where an environmental problem creates risks to life and where the state has known of those risks over a period of years, yet has failed to take action to address them, resulting in eventual loss of life and other serious human rights impacts, the responsibility of the State is engaged. As to Art. 2 ECHR, in particular, it was held that '... the Turkish authorities at several levels knew or ought to have known that there was a real and immediate risk to a number of persons living near the Ümraniye municipal rubbish tip. They consequently had a positive obligation under Art. 2 of the Convention to take such preventive operational measures as were necessary and sufficient to protect those individuals ...' (para. 101).

²⁶UN Human Rights Committee, *Billy et al* (n 24), para 8.14.

4 Vulnerability as a tool for an expansive reading of complementary protection regimes under EU law able to encompass environmentally-induced migration

Another way in which ‘ecological vulnerability’ might expand human rights protection is via favouring an extensive interpretation of complementary protection regimes, such as humanitarian forms of national protection and the ‘subsidiary protection’ offered by the Qualification Directive in the European Union to persons who do not qualify as refugees but are ‘otherwise’ in need of ‘international protection’.²⁷ According to Article 2(e) of the Directive, in fact, a person who is eligible for subsidiary protection is:

‘any third country national or stateless person who does not qualify as a refugee, but in respect of whom there are substantial grounds for believing that the person concerned, if returned to his or her country of origin or, in the case of a stateless person, to his or her country of former habitual residence, would face a real risk of being subjected to serious harm, would face a real risk of suffering the serious harm defined in Article 15, Article 17(1) and (2) not being applicable to that person, and that person being unable or, in view of that risk, unwilling to avail himself or herself of the protection of that country’.

Article 15 further defines ‘serious harm’ as:

- (a) the death penalty or execution, or
- (b) torture or inhuman or degrading treatment or punishment of an applicant in his or her country of origin, or
- (c) serious and individual threat to the life or person of a civilian by reason of indiscriminate violence or in case of internal or international armed conflict.

This list of different types of ‘serious harm’ does not explicitly include harm caused by global environmental problems. However, serious environmental problems may have similar effects to inhuman treatment as those set out in Article 15(b) of the Directive.

According to the case law of the European Court of Justice (CJEU), to qualify for subsidiary protection it is necessary to show that a threat of ‘serious harm’ is ‘individual’, either by reasons of ‘specific risk’ factors to do with a person’s particular characteristics or circumstances or by the ‘general risk’ factors arising out of an exceptional situation of a very high level of violence in the country of origin.²⁸ The Court appears to be following a ‘sliding scale’ approach (see further, Moreno-Lax and Garlick, 2015), balancing individual threat and indiscriminate violence as two extremes of the same continuum, applying a notion of ‘general risk’ similar to the one developed in the case law of the ECtHR relating to Article 3 ECHR.²⁹ However, it seems to only apply this reasoning to situations related to Article 15(c) of the Qualification Directive, despite the fact that Article 15(b) of the Directive is based upon the jurisprudence of the ECtHR on Article 3 ECHR. In this connection, the Court has noted, in the case *M’Bodj*,³⁰ precisely that Article 15(b):

‘must be interpreted as meaning that serious harm . . . does not cover a situation in which inhuman or degrading treatment . . . to which an applicant suffering from a serious illness may be subjected if returned to his country of origin, is the result of the fact that appropriate

²⁷Directive 2011/95/EU of the European Parliament and of the Council of 13 December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted (recast), [2011] OJ L 337/9.

²⁸Case C-465/07 (CJEU), *Elgafaji*, 17 February 2009, ECLI:EU:C:2009:94.

²⁹*Sufi and Elmi v. the United Kingdom*, Application Nos. 8319/07 and 11449/07 ECHR (2011) para. 218.

³⁰Case C-542/13 (CJEU) *M’Bodj*, 18 December 2014, ECLI:EU:C:2014:2452.

treatment is not available in that country, unless such an applicant is intentionally deprived of health care' (para. 41).

It seems therefore clear that the relevant 'serious harm' must necessarily derive from the conduct of an actor, rather than simply result from general shortcomings in the health system of the country of origin (para. 35). Applied to climate change-related effects, the logical consequence seems to be that, under Article 15(b) of the Qualification Directive, 'serious harm' cannot stem from a general situation obtaining from climate-change effects. However, the wording of Article 6 of the Qualification Directive does not preclude the application of subsidiary protection to cases of illness where the risks are situational rather than coming from an identifiable actor, as the list provided in this provision is merely indicative. Moreover, the wording and risk assessment criteria used by the Directive in Article 15(b) are borrowed from Strasbourg's jurisprudence on Article 3 ECHR and, as noted, the main significance of Article 15(b) is precisely found in it 'affording a status, rather than simply rendering non-removable, persons in these circumstances' (Costello, 2015). Therefore, a different reading of Article 15(b) could be imagined, inclusive of the risks facing environmentally induced migrants. The recent jurisprudence of the CJEU in *Hamed* seems to go towards this direction.³¹ In *Hamed*, the CJEU insisted on the concept of the violation of human dignity linked to Article 4 of the EU Charter of Fundamental Rights on the prohibition of ill-treatment as requiring a particularly high threshold of seriousness. It, however, acknowledged that such seriousness encompasses cases where state authorities' acts or omissions create a situation of extreme material deprivation that would prevent the claimant from meeting their most basic needs and that would impair their physical or mental health or place them in a state of degradation incompatible with human dignity. This should not exclude cases where the serious humanitarian emergency is also caused or exacerbated by climate change and is connected with the vicious circle of poverty, conflict, violence, and the high level of insecurity in which the civilian population may find itself.

National case law concerning requests for asylum or entry visas in connection with phenomena related to climate change, environmental degradation, or natural or man-made disasters, already offers inspiring prospects. The case of Italy, to which the next section turns, identifies specific solutions, including the possibility of issuing a residence permit for disasters and of recognising special protection for those who, as a result of repatriation, would find themselves in a condition of vulnerability, including as a consequence of environmental or climate change.

5 The protective potential of vulnerability-based reasoning in national humanitarian jurisprudence

The case of Italy is particularly illustrative of a proactive vulnerability-inspired reading of the principle of *non-refoulement* applied to environmentally induced migration,³² demonstrating the protective potential of the concept as and when mediated through law (Moreno-Lax and Vavoula, in this issue). Initially, the possibility of issuing a residence permit for 'serious reasons of a humanitarian nature or arising from constitutional or international obligations of the Italian State'³³ facilitated such a proactive outcome. Such a permit could be released by the *Questore* upon request or, in cases of rejection of the application for international protection, by the Territorial Commissions where the applicant did not qualify for refugee status or subsidiary protection proper, but still was confronted in the state of origin with 'serious reasons' of a humanitarian nature. In the absence of specifications regarding the requirements necessary for the issuance of

³¹Cases C-540/17 and C-541/17 (CJEU), *Bundesrepublik Deutschland v Adel Hamed and Amar Omar*, 13 November 2019, EU:C:2019:964, para 36.

³²https://www.legambiente.it/wp-content/uploads/2021/09/I-migranti-ambientali_dossier_2021.pdf.

³³See Turco-Napolitano Law (L. n. 40/1998).

such permits, the institutions have lent themselves to a broad interpretation regarding those persons who have suffered, or would be at risk of suffering upon removal, an ‘*effective deprivation of human rights*’. The risk assessment is conducted considering the applicant’s personal conditions in light of the prevailing situation in the country of origin. Indeed, the reference to *their individual vulnerability* on account also of slow-onset events has allowed Territorial Commissions³⁴ – and also Courts³⁵ – to extend these permits with respect to serious natural disasters,³⁶ droughts,³⁷ famine³⁸ and floods,³⁹ so enlarging the spectrum of situations of non-returnability in case of undignified and unsafe conditions in the country of return.⁴⁰

In the reasoning of the superior jurisdictions, it has been the situational vulnerability of applicants that has been central to extend the recognition of humanitarian *non-refoulement* in cases where situations that include adverse climatic conditions⁴¹ may expose the applicant, upon removal, to the risk of a standard of living that does not respect core fundamental rights (including situations of drought, famine, or of unsustainable poverty).⁴² That was the case, for instance, in the most recent jurisprudence of the Italian Court of Cassation,⁴³ following the appeal of a man from the Niger Delta against a decision by the Tribunal of Ancona rejecting international protection. The Court recognized the applicability of humanitarian protection (Passarini, 2022; Perrini, 2021) when the situation in the country of origin does not allow for a ‘minimum essential guarantee’ for the individual’s right to life. In particular, the recognition of humanitarian protection on the basis of Article 5(6) of the *Testo Unico* (TU) on immigration⁴⁴ was significantly anchored to an international obligation, with explicit references to the *Teitiota* case. The need for the expelling state to assess the

³⁴The National Commission for the Right of Asylum had then collected the practice that had emerged in administrative and judicial proceedings in Circular No. 3716 of 30 July 2015, specifying that humanitarian protection was to be granted to the applicant in the following cases: 1) exposure to torture or inhuman or degrading treatment in the event of repatriation; 2) serious psycho-physical conditions or serious pathologies that cannot be adequately treated in the country of origin; 3) temporary impossibility of repatriation due to the insecurity of the country or area of origin, not attributable to the provisions of Art. 3) temporary impossibility of repatriation due to the insecurity of the country or area of origin, not ascribable to the provisions of Art. 14, letter c) of the legislative decree no. 251/2007; 4) serious natural disasters or other serious local factors hindering a return in dignity and safety; 5) family situation of the asylum seeker, which must be assessed in accordance with the provisions of Art. 8 ECHR, concerning the right to respect for private and family life.

³⁵See for instance, Court of Cassation, I Civil Section, Judgement of 23 February 2018, n 4455, 8 and the Tribunal of L’Aquila, Order of 16 February 2018, 4, according to whom vulnerability needed to be interpreted broadly to encompassing also any exposure to famine, natural or environmental disasters and land grabbing, as well as the general environmental and climatic conditions of the country of origin, if these are such as to jeopardise the core of basic human rights of the individual.

³⁶Territorial Commission for the Recognition of International Protection of Rome, Section II, Decision of 21 December 2015.

³⁷Tribunal of Cagliari, Order of 31 March 2019, n 4043.

³⁸Tribunal of Milan, Order of 31 March 2016, n 64207.

³⁹Tribunal of Naples, Order of 5 June 2017, n 7523.

⁴⁰This has not been set back following the ‘Salvini Law’ converted Decree-Law no. 113 of 4 October 2018, followed by Decree-Law no. 53/2019, into Law no. 77/2019), to art. 5 c. 6 D. Lgs. 286/98 and to the amendments made by Law 286/2018 to art. 5 c. 6 D. Lgs. 286/98. Lgs. 286/98 that made disappear humanitarian protection which has been replaced by new forms of residence permit for specific hypotheses, among whose natural disaster; and a temporary form of protection (six months) against expulsion for those foreign nationals already present in Italy in a situation of irregularity, who, as a result of contingent and exceptional calamity, find themselves unable to return to their country of origin in conditions of safety. Only with Decree-Law No. 130/2020, adopted and converted into Law No. 173/2020, humanitarian protection was finally reinserted with some improvements as to the issue of residence permits for natural disasters. It is a two-year permit (and no longer annual) possibly convertible into a residence permit for employment reasons; making it forbidden (art. 1, para. 1) to reject, expel or extradite ‘a person to a State if there are reasonable grounds to believe that he would risk being subjected to torture or inhuman or degrading treatment’ as well any removal ‘if there are reasonable grounds to believe that removal from the national territory would result in violation of the right to respect for one’s private and family life’.

⁴¹Court of Cassation, third civil section, no. 25143/20 of 10 November 2020; Court of Cassation, I Civil Section, Order of 4 February 2020, n 2563.

⁴²Court of Cassation first section, judgement no. 4455/2018 of 23 February 2018; Court of Cassation 10686 of 2012; and Court of Cassation 16362 of 2016; Court of Cassation, I Civil Section, Order of 4 February 2020, n 2563, para. 6.

⁴³Court of Cassation, II Civil Section, Order of 24 February 2021, n 5022.

⁴⁴Legislative Decr. 27 July 1998 n. 286 as modified by d. l. 21 October 2020 n. 130.

individual risk of inhuman or degrading treatment in the country of expulsion alongside the general risk of undignified living conditions due to environmental degradation, climate change or unsustainable development in the area, was acknowledged.⁴⁵ Moreover, the Court reduced the burden of proof on asylum seekers in need of humanitarian protection on account of the effects of climate change, so that the more severe the situation of environmental degradation existing in the country of origin, the lesser the need to prove individual vulnerability; and this, especially, if environmental degradation derives from human action or inaction that excludes entire parts of the population from access to essential natural resources, such as cultivable land and drinkable water. In the case at hand, according to the Court, there was no doubt that the appellant was exposed to a situation of serious environmental degradation insofar as no policies were provided in the country of origin to fight against pollution and mitigate climate change.⁴⁶ To the contrary, it retained that the disastrous climatic situation of the country of origin was determined by the conduct of government authorities regarding industrial shrimp farming, the occupation of the territory with expanses of aquaculture tanks and an active policy of deforestation⁴⁷ that exposed the individual to the risk of seeing his fundamental rights to life and dignified existence annihilated, or in any case reduced below the threshold of their essential and inescapable core.⁴⁸ Following the Court of Cassation, an analogous reasoning has been applied by lower courts when confronted with environmental disasters stemming from intentional human misconduct or the over-exploitation of natural resources that endangers a claimant's life or safety.⁴⁹

Turning the attention to other European jurisdictions, it is possible to notice the same evolutive interpretation of *non-refoulement* and humanitarian protection in other countries as well (Scissa, 2021). For instance, the High Administrative Court of Baden-Württemberg, in 2020, annulled the repatriation decree issued to an Afghan national, partly because of the environmental and climatic conditions obtaining in the country of origin.⁵⁰ Like in the Italian jurisprudence, the situational vulnerability of the applicant was instrumental to a reinterpretation of the notion of inhumane and degrading treatment, considering not only the humanitarian situation in the country of origin, covering both the social and economic conditions there, but also the individual situation of the individual concerned.⁵¹ Accordingly, the principle of *non-refoulement* has been considered applicable even when the terrible humanitarian conditions facing applicants are attributable to poverty or lack of state resources to deal with a natural phenomenon (Schloss, 2021).

A similar reasoning has been deployed by the Court of Appeal of Bordeaux,⁵² which ruled that a temporary residence permit (*carte de séjour temporaire*) for medical treatment should be issued to

⁴⁵Court of Cassation, II Civil Section, Order of 24 February 2021, n 5022.

⁴⁶*Ibid.*, at 5.

⁴⁷According to the Court, instead, the rejection of the asylum application by the lower instances was wrongfully based on the illegitimate failure to assess 'the situation of environmental disaster existing in the Niger Delta', in violation of Art. 5 of Legislative Decree no. 286/1998. Recalling the observations made by the Human Rights Committee in the *Teitiota* case, the Court noted that 'States have an obligation to ensure and guarantee the right to life of persons', also with regard to 'reasonably foreseeable threats' that lead to a substantial deterioration of living conditions, including environmental degradation, climate change and sustainable development.

⁴⁸*Ibid.*, at 6.

⁴⁹Order by the Court of Genoa of 27 July 2022.

⁵⁰VGH Baden-Württemberg, Dec. No A 11 S 2042/20, 17 December 2020.

⁵¹See the German Supreme Court on the interpretation of humanitarian conditions in the country of origin, BVerfG 2. Senat 1. Kammer, 9 February 2021, ECLI:DE:BVerfG:2021:qk20210209.2bvq000821.

⁵²CAA de Bordeaux, decision n. 20BX02193, 20BX02195, 18 December 2020. The case concerned a forty-year-old waiter-cook, who had obtained a temporary residence permit on medical grounds in 2015. In 2019, his renewal was rejected by the Haute-Garonne prefecture, which considered that he could access his treatment in Bangladesh. The administrative court of Toulouse annulled the decision in June 2020. The prefecture decided to appeal. The Bordeaux Court of Appeal annulled, on the 18 December 2020, the obligation to leave French territory addressed to the applicant, on the grounds that he would be confronted in his country of origin – ranked 179th in the world for its air quality – with an aggravation of his respiratory pathology due to atmospheric pollution.

an asylum seeker from Bangladesh because, due to the health and environmental conditions in his country, he would not have access to the essential health treatment he needed. The French Code on the Entry and Stay of Foreigners and the Right of Asylum provides for the possibility of issuing a temporary residence permit to a foreigner, habitually residing in France, who presents a state of health such that, if not treated, he would risk consequences of exceptional seriousness. In this sense, Article L. 313-11 provides that:

‘Sauf si sa présence constitue une menace pour l’ordre public, la carte de séjour temporaire portant la mention “vie privée et familiale” est délivrée de plein droit : . . . 11° A l’étranger résidant habituellement en France, si son état de santé nécessite une prise en charge médicale dont le défaut pourrait avoir pour lui des conséquences d’une exceptionnelle gravité et si, eu égard à l’offre de soins et aux caractéristiques du système de santé dans le pays dont il est originaire, il ne pourrait pas y bénéficier effectivement d’un traitement approprié’.

In the case at hand, the plaintiff suffered from a certified chronic respiratory condition, aggravated by a severe form of allergic asthma and sleep apnoea syndrome, which required the use of an electric ventilation device every night, as well as frequent maintenance and replacement of the mask, filters, and tubes. The Court of Appeal, once more, based on the vulnerability of the applicant and in the light of the general situation in his country of origin, ordered the issuance of the temporary residence permit. The reasoning stressed how in Bangladesh the rate of particulate matter pollutants is one of the highest in the world, so that, the mortality rate from respiratory diseases is 12.92 percent compared to 0.82 percent in France.⁵³ Those grounds served the Court to take account of the ‘very compelling humanitarian grounds’ standard, as articulated by the ECtHR in its case-law on ‘humanitarian *non-refoulement*’ of persons at risk of ill-treatment on health grounds, due to the lack of sufficient resources to deal with their condition in the receiving country.⁵⁴ Anchoring its reasoning in this ECtHR jurisprudence,⁵⁵ the Court formulated a positive obligation on the expelling state for the prevention of the further vulnerabilisation of the applicant. Such a positive obligation, insofar as the *non-refoulement* principle was at stake, implied that an individual assessment of the applicant’s condition in the receiving state had to include how his condition would evolve upon expulsion,⁵⁶ particularly in the light of the distinguishing features that make the lack of health services especially deleterious in the applicant’s regard, especially when combined with environmental degradation and underlying socio-economic vulnerabilities.

This reasoning, in the case at hand, led the applicant to obtain the extension of his residence permit for medical treatment given the severe environmental and health conditions prevailing in the country of origin.⁵⁷ Its extension to similar cases could even lead to new forms of asylum based on the cumulative impacts of climate change on people’s ability to enjoy their socio-economic rights when removal to ‘destitution’ amounts to inhuman or degrading treatment.⁵⁸

⁵³*Ibid.*, at 4.

⁵⁴See i.e. *D. v. United Kingdom*, Application No 30240/96, ECHR (1997); *N. v. United Kingdom*, Application No 26565/05, ECHR (2008); *Yoh-Ekale Mwanje v. Belgium*, Application No 10486/10, ECHR (2011); *S.J. v. Belgium*, Application No 41738/10 ECHR (2016); *Tatar v. Switzerland*, Application No 65692/12, ECHR (2014).

⁵⁵*Chowdury and Others v. Greece*, Application No 21884/15, ECHR (2017).

⁵⁶*Paposhvili v. Belgium*, Application No 41738/10, ECHR (2016), para. 188.

⁵⁷The Council of State has confirmed that the hypothesis is limited to a protection provided for in national law to the sole question of health. See CE, 2ème et 7ème chambres réunies, 30 décembre 2021, *Ministre de l’intérieur c. M. A*, n° 449917.

⁵⁸*R v Secretary of State Department ex parte Adam* [2005] UKHL 66. See also UNHCR, ‘Guidelines on International Protection’, 23 July 2003, para. 29.

6 Concluding remarks: vulnerability to shore up an emerging law for the protection of environmental migrants?

Environmentally induced migration, together with the other drivers of migration, such as economic deprivation, social discrimination, and politically adverse conditions, acts as a push factor on human mobility (*cf.* Grundler, in this issue). However, environmental migrants remain undefined under international law and the lack of any conceptualisation of the notion of vulnerability, let alone an articulation of the theory of ‘ecological vulnerability’, in their regard makes it difficult to develop an international legal instrument to protect them, while at the same time leaving them unprotected under current (refugee) law. The law *itself* exacerbates the vulnerability facing environmental migrants (Moreno-Lax and Vavoula, in this issue). Nonetheless, as the previous sections have shown, human rights law and, in particular, the principle of *non-refoulement* may offer some respite when interpreted through an intersectional, holistic lens that takes account of all the relevant circumstances of each individual case (Moreno-Lax, 2021).

In particular, the vulnerability (whether situational, contextual, or compounded) of environmental migrants could well become an empowering tool, if the notion of ‘ecological vulnerability’ would be legally employed by Courts and decision-makers around the world. The analysis above has shown how that notion may help in reconceptualizing *non-refoulement* obligations, generating a (virtuous) expansion of traditional asylum norms and the flexibilisation of access to international protection for environmentally and climate-induced migrants (European Commission, 2021). Namely, in the same vein that feminist studies have valorised the notion of ‘vulnerability’ to generate a more ‘responsive State’ (Fineman, 2008), discharging positive obligations of redistributive justice, when applied to the expulsion of environmental and climate-induced migrants, an ecological vulnerability-mediated interpretation of the law allows for an expansive (and principled) application of the *non-refoulement* obligation and the generation of additional humanitarian protection. The advent of the Anthropocene era requires a heightened awareness of the relationship between humans and the environments in which they live, which provides the grounds for said vulnerability to be considered pertinent and applicable in legal assessment. Emphasizing the ‘prognosis’ function of the ‘returnability test’, the application of an ‘ecological vulnerability’ lens should imply a refocusing of the assessment of individual situations in the destination country by expelling states to determine the ‘reasonableness of return’ (Kälin, 2010). This should be conducted in the light of both the individual risk situation facing applicants and the general conditions obtaining in the country of origin, which should not amount to a breach of the right to a dignified life, including due to climate change and environmental degradation, interpreting the imminence of the risk not as the necessity that the risk materialises within a short period of time, but rather as comprising those risks that are *directly* threatening the persons involved in a material and causal sense.

Alternatively, or complementarily, the application of the same ‘ecological vulnerability’ theory could not only exclude or nuance the returnability of environmental migrants, but additionally serve to advance the case for their substantive protection. An ecological vulnerability-imbued reinterpretation of the law favours an extensive construal of the complementary protection regimes such as the ‘subsidiary protection’ offered under the EU Qualification Directive and similar national forms of humanitarian protection. Should some of the national practices explored in this article further expand, (ecological) vulnerability may become a helpful device to alleviate harm and produce new forms of asylum from the worst collateral effects of unsustainable development and climate change. In so doing, this expansion would help realising justice by contributing to achieving ‘just resilience’, which is essential for the equitable distribution of climate adaptation benefits (European Commission, 2021).

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