

Human Rights Law and disaster risk reduction

*Emanuele Sommario and Silvia Venier**

1. *Introduction*

Disasters are the result of the troubled relationship between human beings on the one side, and either nature or technology on the other. Sometimes unpredictable and sudden, often slow and lingering, various types of disasters may affect the way in which we go about our daily lives. Human beings have always sought new strategies to contain the devastating effects of catastrophes. However, for centuries the general approach to natural and technological disasters has been reactive in nature, rather than pre-emptive.¹ Inhabitants of a certain area, often aware of the risks they were facing, would wait in anticipation of a disastrous event and then activate emergency response procedures once the calamity materialized. Yet little or no attention – in terms of human and financial resources – was devoted to studying and implementing preventive measures that would mitigate or remove the negative effects of such phenomena. The retrofitting of buildings to make them more resilient to earthquakes; the construction of containing walls or tree planting on riverbanks to reduce the potential for floods; the development and regu-

* Emanuele Sommario is Assistant Professor of International Law at the Scuola Superiore Sant'Anna of Pisa and Silvia Venier is PhD Candidate in International Law at the same institution. Although the present article is the result of their joint research effort, Emanuele Sommario was the drafter of paragraphs 1 and 2, and Silvia Venier of paragraphs 3 and 4. The authors wish to thank Riccardo Luporini for his comments on an earlier draft of this contribution. All errors remain the authors' own. The online materials referenced were last accessed 20 November 2017.

¹EL Quarantelli, 'Disaster Planning, Emergency Management, and Civil Protection: The Historical Development and Current Characteristics of Organized Efforts to Prevent and to Respond to Disasters' University of Delaware Disaster Research Center (1998) 4-6.



lar testing of early warning systems and plans for evacuation; the establishment and training of search and rescue teams, are all examples of measures that aim to minimize the adverse effects of hazards. However, policy and decision-makers often overlook the importance of such strategies, despite solid evidence to support their economic effectiveness.²

Despite this traditionally reactive (rather than proactive) approach to disasters, over the last three decades the attention of the international community has slowly started to shift. Growing importance has been conferred on plans and strategies intended to reduce the risks connected to natural or man-made hazards, with increased attention on measures aimed at minimizing their impact.³ These now form part of what is commonly known as Disaster Risk Reduction (DRR), a policy which is ‘aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.’⁴ In other words, DRR encompasses the various actions related to reducing disaster-related risks and their adverse impact through the process of analyzing and managing the causes of hazards, so that they do not turn into disasters. Indeed, it is commonly accepted that there is no such thing as a ‘natural disaster’. Hazards are natural events, of a greater or lesser intensity and occurring more or less frequently. Disasters, on the other hand, are the consequences of human incapacity to deal with such hazards, because we developed and built according to modalities that do not take risks into account. Our capacity to assess these risks, to inform ourselves about the danger they involve and to act accordingly in order to reduce them, determines the extent to which those hazards may become disasters.

² CM Shreve, I Kelman, ‘Does mitigation save? Reviewing cost-benefit analyses of disaster risk reduction’ (2014) 10 *Intl J Disaster Risk Reduction* 213.

³ This shift in attention started with the proclamation by the UN General Assembly of the International Decade for Natural Disaster Reduction, designating the 1990s as a decade in which the international community should pay particular attention to fostering international co-operation in the field of natural disaster reduction. See UNGA Resolution 42/169 (11 December 1987) and UNGA Resolution 44/236 (22 December 1989).

⁴ UNGA, ‘Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction’ (1 December 2016) UN Doc A/71/644, 16.



A significant component in the enhancement of disaster management systems has been the emergence and development of normative frameworks to underpin disaster governance.⁵ Among them, International Human Rights Law (IHRL) has assumed a central role.⁶ In particular - through the practice of treaty monitoring bodies tasked with supervising the observance of individual human rights treaties - it has come to be recognized that a rich array of duties exist that could be ascribed to the area of disaster management.⁷ This comes as little surprise, as disasters pose a major threat not only to the survival of populations and societies as a whole, but also to the dignity and safety of individuals. More often than not, the havoc caused by calamities results in serious infringements of the entire range of human rights, with the right to life, to private and family life and to property featuring amongst those most at risk. As a consequence, human rights bodies have had to grapple with alleged violations caused by State inaction in the phases preceding and following a disastrous event.⁸ The specific interplay between DRR and IHRL, however, is still underexplored.⁹ The International Federation of Red Cross

⁵ R McDermott, P Gibbons, 'Risk and Compliance with Normative Frameworks Relating to Disaster Management. Exploratory Case Studies from Indonesia and Ireland' (2015) 6 *J Intl Humanitarian L Studies* 345, 347.

⁶ R Barber, 'Facilitating Humanitarian Assistance in International Humanitarian and Human Rights Law' (2009) 91 *Intl Rev Red Cross* 371; A Abebe, 'Special Report - Human Rights in the Context of Disasters: The Special Session of the un Human Rights Council on Haiti' (2011) 10 *J Human Rights* 99; W Kälin, 'The Human Rights Dimension of Natural or Human-Made Disasters' (2012) 55 *German YB Intl L* 119, 121.

⁷ Kälin (n 6) 135 ff.

⁸ See, for instance, M Hesselman, 'Regional Human Rights Regimes and Humanitarian Obligations of States in the Event of Disaster' in A Zwitter et al (eds), *Humanitarian Action: Global, Regional and Domestic Legal Responses* (CUP 2014) 202.

⁹ Recent contributions aiming at clarifying how IHRL applies to DRR include: M Hesselman, 'Establishing a Full 'Cycle of Protection' for Disaster Victims: Preparedness, Response and Recovery according to Regional and International Human Rights Supervisory Bodies' (2013) 18 *Tilburg L Rev* 106; D Cubie and M Hesselman, 'Accountability for the Human Rights Implications of Natural Disasters: A Proposal for Systemic International Oversight' (2015) 33 *Netherlands Quarterly of Human Rights*, 9; K Da Costa, P Pospieszna, 'The Relationship between Human Rights and Disaster Risk Reduction Revisited: Bringing the Legal Perspective into the Discussion' (2015) 6 *J Intl Humanitarian L Studies* 64; K Da Costa, 'Preventism, Disaster Risk Reduction and the Consequences for Human Rights' (2015) 26 *Security and Human Rights* 147; D Cubie, 'Promoting Dignity For All: Human Rights Approaches In The Post-2015 Climate Change, Disaster Risk Reduction and Sustainable Development Frameworks' (2014) 8 *Human Rights & Intl L*

and Red Crescent Societies (IFRC) and the United Nations Development Programme (UNDP) have suggested that further study is required on ‘how human rights relevant to DRR are implemented and claimed in practice, in particular, whether they are used as a basis for DRR advocacy, or to claim compensation for preventable disaster losses’.¹⁰ It is thus undeniable that disaster prevention and preparedness are issues that do not exclusively pertain to the technical field of disaster management, but are heavily influenced by the international legal framework set up to protect human rights, which imposes on States a positive obligation to take the necessary and appropriate measures to prevent harm from impending disasters.¹¹

The purpose of this Zoom-in is to highlight the scope of the overlap between existing commitments in the area of DRR and legal obligations prevailing under IHRL. We will initially describe the emergence of DRR as a discrete area of disaster management and bring to the fore some of the commitments that States have undertaken by negotiating and adhering to the DRR framework (para. 2). These commitments will then be compared to the practice and case law of universal and regional human rights treaty monitoring bodies that have addressed alleged violations of human rights connected to natural or human-made disasters (para. 3).¹² The concluding paragraph will briefly review the similarities between the political obligations contained in the most recent DRR instruments and the legal obligations imposed on States by the human rights instruments they have signed and ratified.

Discourse 36; M Sossai, ‘States’ Failure to Take Preventive Action and to Reduce Exposure to Disasters as a Human Rights Issue’, in F Zorzi Giustiniani et al (eds), *Routledge Handbook of Human Rights and Disasters* (Routledge 2018) 119.

¹⁰ International Federation of Red Cross and Red Crescent Societies (IFRC) and United Nations Development Programme (UNDP), *Effective law and regulations for disaster risk reduction: a multi-country report* (IFRC and UNDP 2014) 74

¹¹ Even the International Law Commission (ILC) has endorsed the point, by including a specific provision on DRR in its Draft Articles on the Protection of Persons in the Event of Disasters, and spelling out in its commentary that its approach on the issue ‘draws on principles emanating from international human rights law, including the obligations undertaken by States to respect and protect human rights, in particular the right to life’. See ILC, ‘Report of the International Law Commission. Sixty-eight session (2 May – 10 June and 4 July – 12 August 2016)’ UN Doc A/71/10, 43.

¹² While different categories of rights are at risk of infringement during disasters, our focus will be on civil and political ones.



2. *The emergence of DRR and the ensuing State commitments*

Among the first instruments that signalled the will of the international community to integrate disaster prevention into a comprehensive disaster-management strategy was the Yokohama Strategy and Plan of Action for a Safer World (1994), which provided important principles for natural disaster prevention, preparedness and mitigation.¹³ In particular, Principle 2 affirmed that '[d]isaster prevention and preparedness are of primary importance in reducing the need for disaster relief', while Principle 3 provided that '[d]isaster prevention and preparedness should be considered integral aspects of development policy and planning at national, regional, bilateral, multilateral and international levels for reducing disaster relief needs as well as for reducing the vulnerability of populations'.

Another important milestone in the emergence of DRR was the United Nations World Conference on Disaster Reduction held in 2005 in Kobe, Japan, just days following the 2004 Indian Ocean tsunami. Participants in the conference realized that concrete action needed to be taken to go past the trite rhetorical policy statements. States, international organizations, civil society organizations and business actors agreed that a set of defined targets and commitments had to be identified in order to turn DRR into practice. The conference's main output was the adoption of the Hyogo Framework for Action 2005-2015,¹⁴ the first plan to explain, describe and detail the efforts required from all different actors to significantly reduce disaster losses. National and regional reports on its implementation have evidenced that important progress has also been achieved in reducing disaster risk.¹⁵ States have enhanced their capacities

¹³ The document was adopted in the framework of the World Conference on Natural Disaster Reduction, held in Yokohama, Japan in May 1994. See UN World Conference on Natural Disaster Reduction, 'Report of the World Conference on Natural Disaster Reduction (23-27 May 1994)' UN Doc A/CONF.172/9, 5. The text of the Yokohama Strategy is available at <www.unisdr.org/we/inform/publications/8241>. For a more detailed description of the evolution of DRR norms, see Zorzi Giustiniani's contribution in this Zoom-in.

¹⁴ UN World Conference on Disaster Reduction, 'Report of the World Conference on Disaster Reduction (18-22 January 2006)' UN Doc A/CONF.206/6, 6. The text of the Hyogo Framework is available at <www.unisdr.org/we/inform/publications/1037>.

¹⁵ Reports on the improvements introduced in the wake of the Hyogo Framework are available at <www.preventionweb.net/english/hyogo/progress/>.

in disaster risk management, as the Hyogo Framework has been fundamental in raising public and institutional awareness, generating political commitment and prompting actions by a wide range of stakeholders at all levels. However it was also acknowledged that more needed to be done to reduce disaster risk and protect more effectively individuals and their livelihoods, which led to a renegotiation of the relevant commitments.

The result of this effort was the adoption in 2015 of the Sendai Framework for Disaster Risk Reduction, at the Third UN World Conference on DRR in Sendai, Japan.¹⁶ Compared to the previous documents, the main features of the Sendai Framework are: a) a shift in focus from managing disasters to managing risks; b) a wider scope which includes risk of small- to large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or man-made hazards, as well as related environmental, technological and biological hazards and risks; and 3) a more people-centred, all-hazards and multi-sectoral approach to DRR.¹⁷ The Sendai framework will last for 15 years (2015-2030), and has attracted a high level of political interest, partly due to a current converging dynamic between DRR, the sustainable development agenda and climate change issues.¹⁸ In addition, and contrary to the previous instruments, the Sendai Framework for the first time includes an explicit reference to the human rights discourse, as it states that DRR activities should be carried out ‘while promoting and protecting all human rights’.¹⁹

The Sendai Framework outlines four priorities for action to prevent new and reduce existing disaster risks, namely: Understanding disaster

¹⁶ UN Third World Conference on Disaster Risk Reduction, ‘Sendai Framework for Disaster Risk Reduction 2015-2030’ UN Doc A/CONF.224/L.2 (Sendai Framework). The text of the Sendai Framework can be found at <www.unisdr.org/we/inform/publications/43291>.

¹⁷ On the language and spirit of the Sendai Framework, as well as on its shift in focus compared to the Yokohama and Hyogo documents, see the special issue of the *International Journal of Disaster Risk Science* (vol 6, issue 2, 2015).

¹⁸ See AI Greve, ‘Sustainable Development, Climate Change Adaptation and Disaster Management’, in JI Uitto, R Shaw (eds), *Sustainable Development and Disaster Risk Reduction* (Springer 2016).

¹⁹ Sendai Framework (n 16) para 19(c). Significantly, the language of the Sendai Framework was welcomed by HR experts calling for a strong human rights based approach to disasters. See <www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15733>.



risk (Priority 1); Strengthening disaster risk governance to manage disaster risk (Priority 2); Investing in disaster risk reduction for resilience (Priority 3); Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction (Priority 4). All of the four Priorities set out a list of actions that should be implemented at national and local level, and another one that should be realized at an international level. For the purposes of the present contribution – which adopts a human rights perspective - the actions of primary concern are those that should be implemented by States within their own borders, through their own national laws and institutions.

In this respect, Priority 1 invites States to base their disaster risk management policies ‘on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment’.²⁰ Priority 2 highlights the importance of disaster risk governance for an effective management of disaster risk, and invites States to foster coordination within and across sectors to strengthen disaster management activities throughout the whole disaster cycle, by favouring the involvement of all relevant stakeholders.²¹ Priority 3 pushes for more public and private investment in disaster risk prevention and reduction, ‘to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets’.²² Lastly, Priority 4 takes note of the increased exposure to hazards, and invites States to take stock of the lessons learned from past disasters, to ‘further strengthen disaster preparedness for response, take action in anticipation of events, integrate disaster risk reduction in response preparedness and ensure that capacities are in place for effective response and recovery at all levels’.²³

All of the above Priorities are then further detailed within the text, and States and other relevant stakeholders are called upon to take into consideration the key activities identified for each Priority and to implement them, with a view to strengthening their disaster management capacities. As we shall see in the next paragraph, some of these activities

²⁰ Sendai Framework (n 16) para 23.

²¹ *ibid* para 26.

²² *ibid* para 29.

²³ *ibid* para 32.

can also be traced back to specific obligations connected to the protection of fundamental human rights. However, we will also point to State duties which are not explicitly linked to one of the four Priorities but can instead be related to the agreement's Guiding Principles, i.e. the main tenets that should be followed in the implementation of the Sendai Framework as a whole.²⁴

3. *The practice of human rights bodies in matters of disaster preparedness and mitigation*

In a recently adopted resolution on human rights and climate change, the UN Human Rights Council has affirmed the need for the continuing implementation of the Sendai Framework 'and its references to human rights'²⁵ and has encouraged the UN human rights monitoring bodies 'to provide technical assistance to States, upon their request, to help to better promote and protect human rights when taking action to address the adverse impact of climate change'²⁶, including measures taken to reduce the risk of disasters.²⁷ Although IHRL does not clearly spell out a right to disaster risk reduction,²⁸ an analysis of the practice of UN human rights treaty monitoring bodies and of the case law of the European Court of Human Rights (ECtHR) reveals that a set of obligations under IHRL

²⁴ *ibid* para 19.

²⁵ UN Human Rights Council Res 35/20 'Human Rights and Climate Change' (19 June 2017) UN Doc A/HRC/35/L.32 preamble.

²⁶ *ibid* para 5.

²⁷ The integration of Climate Change Adaptation (CCA) and DRR have only recently begun to be discussed. See G Forino, J von Meding, G Brewer, 'A Conceptual Governance Framework for Climate Change Adaptation and Disaster Risk Reduction Integration' (2015) 6 *Intl J Disaster Risk Science* 372.

²⁸ The few exceptions include the African Union Convention on the Protection and Assistance of Internally Displaced Persons (adopted 23 October 2009, entered into force 6 December 2011, Kampala Convention) which under art 4(2) requires States to devise early warning systems and establish disaster risk reduction strategies; and the Convention on the Rights of Persons with Disability (adopted 13 December 2006, entered into force 3 May 2008) 2515 UNTS 3, the text of which will be commented on below.



have been already identified that correspond to some of the action priorities or general guidelines put forward by the Sendai Framework.²⁹ The first part of this paragraph examines the attention devoted by UN monitoring bodies in particular to the need to mitigate existing vulnerabilities, while the second part discusses positive obligations as identified by the ECtHR case law.

3.1. *The practice of UN human rights monitoring bodies*

IHRL puts particular emphasis on the requirement for DRR frameworks to take into account the needs and views of the most vulnerable groups in society, which are usually the most impacted when disasters strike. The Convention on the Rights of Persons with Disabilities is a unique treaty in this respect, since it explicitly establishes the obligation to ‘take [...] all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters’.³⁰ It is therefore not surprising that the Committee on the Right of Persons with Disability (CRPD) has discussed DRR obligations in its Concluding Observations, making an explicit link to the Sendai Framework in those most recently adopted.³¹ These refer to the duty for State Parties to take into account the specific needs of persons with disabilities in their DRR plans,³² including by collecting disaggregated data to inform

²⁹ While this paragraph offers a general overview of States’ legal responsibilities pertaining to DRR as derived from human rights treaties, the exact references to the corresponding requirements under the Sendai Framework are included in the corresponding footnotes.

³⁰ Convention on the Rights of Persons with Disability (n 28) art 11.

³¹ See for instance UN CRPD ‘Concluding Observations on the initial report of Latvia’ (10 October 2017) UN Doc CRPD/C/LVA/CO/1 para 19; ‘Concluding Observations on the initial report of the United Kingdom of Great Britain and Northern Ireland’ (3 October 2017) UN Doc CRPD/C/GBR/CO/1 para 29; ‘Concluding Observations on the initial report of Montenegro’ (27 September 2017) UN Doc CRPD/C/MNE/CO/1 para 23; and ‘Concluding Observations on the initial report of Moldova’ (18 May 2017) UN Doc CRPD/C/MDA/CO/1 para 23.

³² UN CRPD ‘Concluding Observations on the initial report of Qatar’ (2 October 2015) UN Doc CRPD/C/QAT/CO/1 para 22; ‘Concluding Observations on the initial report of Kenya’ (30 September 2015) UN Doc CRPD/C/KEN/CO/1 para 22. According to the Sendai Framework’s Guiding Principles, a ‘gender, age, *disability* and cultural perspective should be integrated in all policies and practices’ para 19(d) (emphasis added).

such plans³³ and by taking into account the views of disabled persons.³⁴ Other requirements include the obligation to establish uniform emergency control centres across the State which shall include modern protocols for deaf persons,³⁵ and to train emergency services personnel on the rights of persons with disabilities.³⁶

Another interesting recent development is represented by the work of the Committee on the Elimination of Discrimination against Women (CEDAW). After having affirmed that States parties ‘should adopt strategies and take measures addressed to the particular needs of women in times of emergency’,³⁷ the CEDAW is currently discussing a General Recommendation specifically dedicated to the gender-related dimension of DRR.³⁸ This document makes reference to the Sendai Framework and notes that States ‘should ensure that all policies, legislation, plans, programmes, budgets and other activities related to disaster risk reduction and climate change are gender responsive and grounded in human-rights based principles’,³⁹ namely equality and non-discrimination, participation and empowerment, accountability and access to justice. More specific guidance has been provided by the CEDAW in recently adopted Concluding Observations, where State parties were recommended to include a gender perspective in national policies and action plans on cli-

³³ UN CRPD ‘Concluding Observations on the initial report of Cook Islands’ (15 May 2015) UN Doc CRPD/C/COK/CO/1 para 22. Note that one of the Sendai Framework’s Guiding Principle states that ‘[d]isaster risk reduction requires a multi-hazard approach and inclusive risk-informed decision-making based on the open exchange and dissemination of disaggregated data, including by sex, age *and disability*’ para 19(g) (emphasis added). See also the recommendation, under Priority 1, to ‘[s]ystematically evaluate, record, share and publicly account for disaster losses [...] in the context of event-specific hazard-exposure and *vulnerability* information’ para 24(d) (emphasis added).

³⁴ UN CRPD ‘Concluding Observations on the initial report of Australia’ (21 October 2013) UN Doc CRPD/C/AUS/CO/1 para 23.

³⁵ UN CRPD ‘Concluding Observations on the initial report of Germany’ (13 May 2015) UN Doc CRPD/C/DEU/CO/1 para 24.

³⁶ UN CRPD ‘Concluding Observations on the initial report of Luxembourg’ (10 October 2017) UN Doc CRPD/C/LUX/CO/1 para 23.

³⁷ UN CEDAW ‘General Recommendation 28 on the Core Obligations of States Parties under Article 2 of the Convention’ (16 December 2010) UN Doc CEDAW/C/GC/28 para 11.

³⁸ UN CEDAW ‘Draft General Recommendation on Gender-Related Dimensions of Disaster Risk Reduction in a Changing Climate’ (11 October 2016) CEDAW/C/GC/37.

³⁹ *ibid* para 19.



mate change and DRR, targeting women not only as those disproportionately affected by disasters but also as active participants in the formulation and implementation of such policies.⁴⁰ The obligation to take concrete steps to address the gender-related dimensions in DRR frameworks was also affirmed in previously adopted Concluding Observations.⁴¹

Even the Committee on the Right of the Child (CRC) has clarified DRR duties in relation to the protection of children. These include the obligation to ensure that children's special vulnerabilities and needs, as well as their views, are taken into account in the development of DRR policies or programmes,⁴² and the obligation to collect disaggregated data identifying the types of risk they would face in various natural disaster

⁴⁰ See for instance UN CEDAW 'Concluding Observations on the combined fifth to eighth periodic reports of Barbados' (24 July 2017) UN Doc CEDAW/C/BRB/CO/5-8 para 47-4; 'Concluding Observations on the combined sixth and seventh periodic reports of Thailand' (21 July 2017) UN Doc CEDAW/C/THA/CO/6-7 paras 46-47; 'Concluding Observations on the combined initial to third periodic reports of the Federated States of Micronesia' (9 March 2017) UN Doc CEDAW/C/FSM/CO/1-3 paras 42-43; and 'Concluding Observations on the combined seventh to eight periodic reports of Honduras' (25 November 2016) UN Doc CEDAW/C/HND/CO/7-8 para 43(a). Under Priority 4, the Sendai Framework recommends that women be empowered 'to publicly lead and promote gender equitable and universally accessible response, recovery, rehabilitation and reconstruction approaches' para 32.

⁴¹ See for instance UN CEDAW 'Concluding Observations on the combined third and fourth periodic report of Tuvalu' (11 March 2015) UN Doc CEDAW/C/TUV/CO/3-4 paras 31-32; 'Concluding Observations on the combined initial to third period reports of the Solomon Islands' (14 November 2014) UN Doc CEDAW/C/SLB/CO/1-3 paras 40-41; and 'Concluding Observations on the combined seventh and eighth periodic reports of Guinea' (14 November 2014) UN Doc CEDAW/C/GIN/CO/7-8 para 53. The Sendai Framework sees women and their participation as 'critical to effectively managing disaster risk and designing, resourcing and implementing gender-sensitive disaster risk reduction policies, plans and programmes', and asks that adequate capacity building measures be taken 'to empower women for preparedness as well as to build their capacity to secure alternate means of livelihood in post-disaster situations' para 36(a)(i).

⁴² See for instance UNCRC 'Concluding Observations on the combined second to fourth periodic reports of Antigua and Barbuda' (30 June 2017) UN Doc CRC/C/ATG/CO/2-4 para 46(b); 'Concluding Observations on the combined second and third periodic reports of Saint Vincent and the Grenadines' (13 March 2017) UN Doc CRC/C/VCT/CO/2-3 para 51(b); 'Concluding Observations on the combined second to fourth periodic report of Samoa' (12 July 2016) UN Doc CRC/C/WSM/CO/2-4 para 49(a); and 'Concluding Observations on the fifth periodic report of New Zealand' (21 October 2016) UN Doc CRC/C/NZL/CO/5 para 34(a).

scenarios, in order to formulate international, regional and national policies, frameworks and agreements accordingly.⁴³ The CRC has recommended that State Parties increase children's awareness of and preparedness for climate change and natural disasters by incorporating those issues into the school curriculum and teachers' training programmes⁴⁴ and to seek the necessary technical and financial assistance from relevant international, regional and bilateral partners to enable the progressive and full implementation of the Convention on the Rights of the Child in the context of climate change adaptation.⁴⁵

Finally, in addition to adopting provisions that take into account specific vulnerability aspects relevant to DRR policies, the IFRC and UNDP report mentioned above suggests that the extent and type of the gaps in the practical implementation of these provisions is an area requiring further study.⁴⁶ The Human Rights Committee (HRCtee) had the opportunity to discuss this issue while commenting on the United States (US) response to Hurricane Katrina.⁴⁷ Despite noting the existence of 'various

⁴³ See for instance UN CRC, UN Doc CRC/C/ATG/CO/2-4 (n 42) para 46(a); UN Doc CRC/C/VCT/CO/2-3 (n 42) para 51(a); UN Doc CRC/C/NZL/CO/5 (n 42) para 34(b); UN Doc CRC/C/WSM/CO/2-4 (n 42) para 49(d).

⁴⁴ See for instance UN CRC, UN Doc CRC/C/WSM/CO/2-4 (n 42) para 49(b); 'Concluding Observations on the combined fourth and fifth periodic reports of Chile (30 October 2015) UN Doc CRC/C/CHL/CO/4-5 para 64(b); 'Concluding Observations on the combined third to fifth periodic reports of Mauritius' (27 February 2015) UN Doc CRC/C/MUS/CO/3-5 para 58(c); and 'Concluding Observations on the combined second to fourth periodic reports of Fiji (13 October 2014) UN Doc CRC/C/FJI/CO/2-4 para 56(d).

⁴⁵ UN CRC, UN Doc CRC/C/ATG/CO/2-4 (n 42) para 46(c); UN Doc CRC/C/VCT/CO/2-3 (n 42) para 51(c); UN Doc CRC/C/FJI/CO/2-4 (n 44) para 56 (e); and 'Concluding Observations on the initial report of Tuvalu' (29 October 2013) UN Doc CRC/C/TUV/CO/1 para 7. Under Priority 1, the Sendai Framework calls upon States '[t]o promote the incorporation of disaster risk knowledge, including disaster prevention, mitigation, preparedness, response, recovery and rehabilitation, in formal and non-formal education, as well as in civic education at all levels, as well as in professional education and training' para 24(l).

⁴⁶ See IFRC and UNDP Report (n 10) 33.

⁴⁷ For a discussion of the Human Rights implications of the US response to Hurricane Katrina, see S Sirkin, 'The Debacle of Hurricane Katrina: A Human Rights Response' (2006) 30 *Fletcher Forum of World Affairs* 223.



rules and regulations prohibiting discrimination in the provision of disaster relief and emergency assistance',⁴⁸ the HRCtee remained concerned about how the rescue and evacuation plans affected in particular the African-Americans, and encouraged the United States to 'review [their] practices and policies to ensure the full implementation of [their] obligation to protect life and of the prohibition of discrimination, whether direct or indirect [...] in matters related to disaster prevention and preparedness, emergency assistance and relief measures'.⁴⁹ The HRCtee had already noted that non-discrimination, which includes the duty 'to take affirmative action in order to diminish or eliminate conditions which cause or help to perpetuate discrimination',⁵⁰ is generally considered an obligation that cannot be derogated from.⁵¹ It is thus a welcome development that, as suggested by the practice of UN HR monitoring bodies, IHRL is 'moving away from charity, paternalist and medical models of protection towards a rights-based framework for all vulnerable groups'.⁵²

3.2. *The relevant case law of the ECtHR*

The ECtHR case law offers further clarification on the type of DRR obligations incumbent upon States under the European Convention on Human Rights (ECHR).⁵³ In four landmark cases, the Court found that States had violated their positive obligations under the right to life by failing to take appropriate DRR measures. The type and impact of the hazards covered by these cases are quite diverse: *Öneryildiz*⁵⁴ involved

⁴⁸ UNHRC 'Concluding Observations of the Human Rights Committee on the United States of America' (18 December 2006) UN Doc CCPR/C/USA/CO/3/Rev.1 para 26.

⁴⁹ *ibid.* The Sendai Framework's Guiding Principles posit that DRR be based on 'empowerment and inclusive, accessible and non discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest' para 19(d).

⁵⁰ UNHRC, General Comment No 18 on Non-Discrimination, adopted at the Thirty-seventh Session of the Human Rights Committee' (10 November 1989) para 10.

⁵¹ *ibid.*, para 2

⁵² M Crock, 'The Protection of Vulnerable Groups' in SC Breau, KLH Samuel (eds), *Research Handbook on Disasters and International Law* (Edward Elgar 2016) 383

⁵³ European Convention for the Protection of Human Rights and Fundamental Freedoms (adopted 4 April 1950, entered into force 3 September 1953) 213 UNTS 222.

⁵⁴ *Öneryildiz v Turkey* (2005) 41 EHRR 20.

the death of thirty-nine people caused by a methane explosion at a municipal rubbish tip close to a slum area of Istanbul; *Budayeva*⁵⁵ concerned the death of the applicants' relatives and the applicants' exposure to life-threatening risk due to the absence of defences and observation posts in a mudslide-prone area in central Caucasus; *Kolyadenko*⁵⁶ involved the risk to the applicants' lives due to a heavy flash flood in the town of Vladivostok, caused by an urgent massive evacuation of water from the Pionerskoye reservoir that had not been kept clear from debris; and *Ozel*⁵⁷ concerned the deaths of the applicants' family members who were buried alive under the buildings that collapsed during the 1999 earthquake in the Yalova district, a region classified as major risk zone.

The ECtHR affirms that positive obligations to protect rights are functional to the effective application of the ECHR, which 'is intended to guarantee not rights that are theoretical or illusory but rights that are practical and effective'.⁵⁸ On the other hand, the Court has repeatedly affirmed that 'an impossible or disproportionate burden must not be imposed'⁵⁹ on State authorities, who have considerable flexibility with regard to the operational choices they must make in terms of priorities and resources.⁶⁰ In relation to life-threatening risks, the scope of the obligations imputable to the State depends on the 'extent to which the risk is foreseeable and susceptible to mitigation',⁶¹ with more stringent requirements for man-made hazards such as dangerous industrial activities.⁶² In

⁵⁵ *Budayeva and Others v Russia* (2014) 59 EHRR 2.

⁵⁶ *Kolyadenko and Others v Russia* (2013) 56 EHRR 2.

⁵⁷ *Ozel and others v Turkey*, App no 14350/05, 15245/05, 16051/05 (ECtHR, 17 November 2015).

⁵⁸ *Airey v Ireland* (1979-80) 2 EHRR 305 para 24.

⁵⁹ *Budayeva* (n 55) para 135.

⁶⁰ *Kolyadenko* (n 56) para 160. Yet the Sendai Framework calls upon States to 'allocate the necessary resources, including finance and logistics, as appropriate, at all levels of administration for the development and the implementation of disaster risk reduction strategies, policies, plans, laws and regulations in all relevant sectors' para 30(a).

⁶¹ *Budayeva* (n 55) para 136-37. Discussing the *Budayeva* case, Lautau and Ritter have suggested that in order to determine the required level of protection, the three basic criteria – that are traceable in the Strasbourg Court's case law, but not systematically set out yet – shall be met, namely foreseeability, gravity and mitigability. See K Cedervall Lautau, J Elo Rytter, 'A Landslide on a Mudslide? Natural Hazards and the Right to Life under the European Convention on Human Rights' (2016) 7 J Human Rights and the Environment 111.

⁶² *Öneryıldız* (n 54) para 90. Previous case law affirming that the State has the obligation to regulate private industries that may impact on an individual's private and family



the Court's view, in principle natural hazards remain to some extent 'beyond human control',⁶³ unless these refer to cases involving 'a recurring calamity affecting a distinct area'⁶⁴ and negligence can be identified as 'an aggravating factor contributing to the damage caused by natural forces'.⁶⁵ In any case, State authorities have the duty 'to assess all the potential risks'⁶⁶ and to exercise due diligence in gaining knowledge of specific hazards. In relation to dangerous industrial activities, for instance, Xenos suggests that 'it is expected that early studies and reports must be prepared by the State's agents that control the industrial activity from the very beginning'.⁶⁷

Duties to take concrete steps to protect the right to life are based on the specific provision enshrined in Article 2 establishing that '[e]veryone's right to life shall be protected by law'.⁶⁸ The ECtHR thus affirms that States have a primary obligation to establish a clear legislative and administrative framework dealing with all aspects of risk and emergency management and designed to provide effective deterrence against any threat to the right to life.⁶⁹ Depending on the type of hazard under consideration, zoning laws, urban planning restrictions, building codes

life (article 8 ECHR) include *Lopez Ostra v Spain* (1995) 20 EHRR 277 and *Hatton and others v United Kingdom* (2003) 37 EHRR 28.

⁶³ *Budayeva* (n 55) para 135.

⁶⁴ *ibid* para 136.

⁶⁵ *Budayeva* (n 55) para 182.

⁶⁶ *Kolyadenko* (n 56) para 166. Similarly, Priority 1 of the Sendai Framework encourages States to 'periodically assess disaster risks, vulnerability, capacity, exposure, hazard characteristics and their possible sequential effects at the relevant social and spatial scale on ecosystems' para 24(b).

⁶⁷ D Xenos, 'Asserting the Right to Life (Article 2, ECHR) in the context of Industry' (2012) 8 German L J 231, 245. This view seems to be confirmed by the ECtHR case law under article 8 (private and family life) establishing that States have to take into account relevant studies and experts opinions on environmental risks which may impact on the population's health, to make this information available to the public and to establish procedures for redress if individuals believe that their interests have not been duly taken into account in the decision-making process. See *Tatar v Romania*, App no 67021/01 (ECtHR, 27 January 2009, available only in French) para 88 and *Taşkın v Turkey* (2006) 42 EHRR 50 para 119.

⁶⁸ In relation to other Convention rights, the legal base for the development of positive obligations is found in the duty 'to secure' – and not merely respect – rights as enshrined in article 1 ECHR. See W Schabas, *The European Convention on Human Rights: A Commentary* (OUP 2015) 91.

⁶⁹ *Öneryıldız* (n 54) para 89; *Budayeva* (n 55) para 129; *Kolyadenko* (n 56) para 157.

or health and safety standards are required. For dangerous industrial activities, the Court clarified that these frameworks ‘must govern the licensing, setting up, operation, security and supervision of the activity and must make it compulsory for all those concerned to take practical measures to ensure the effective protection of citizens whose lives might be endangered by the inherent risks’.⁷⁰ With reference to natural events over which States have no control, such as earthquakes, the Court affirms that ‘the prevention obligation comes down to adopting measures to reinforce the State’s capacity to deal with the unexpected and violent nature of such natural phenomena’.⁷¹ Relevant regulations must also include procedures to identify any shortcomings or errors committed by those responsible for implementing these frameworks in practice.⁷²

From the analysis of the Court’s case law, it emerges that the frameworks’ implementation measures must cover at least the adoption of technical precautionary measures, such as flood protection barriers,⁷³ and the establishment of contingency plans and emergency warning systems.⁷⁴ The Court puts particular emphasis on the population’s right to be adequately informed, alerted of an imminent risk and, if necessary, forcibly evacuated. In *Öneryıldız*, it stated that ‘particular emphasis should be placed on the public’s right to information’.⁷⁵ In *Budayeva*, it reiterated that States had ‘a positive obligation to adequately inform the public about any life-threatening emergency’⁷⁶, affirmed that ‘the authorities’ omission in ensuring the functioning of the early warning system was not

⁷⁰ *Öneryıldız* (n 54) para 90. Priority 2 of the Sendai Framework asks for ‘the establishment of necessary mechanisms and incentives to ensure high levels of compliance with the existing safety-enhancing provisions of sectoral laws and regulations, including those addressing land use and urban planning, building codes, environmental and resource management and health and safety standards, and update them, where needed, to ensure an adequate focus on disaster risk management’ para 27(d).

⁷¹ *Ozel* (n 57) para 173.

⁷² *Öneryıldız* (n 54) paras 89-90; *Budayeva* (n 55) para 132; *Kolyadenko* (n 56) para 159.

⁷³ *Kolyadenko* (n 56) para 168; *Ozel* (n 57) para 174.

⁷⁴ *Budayeva* (n 55) para 152; *Kolyadenko* (n 56) para 174.

⁷⁵ *Öneryıldız* (n 54) para 90.

⁷⁶ *Budayeva* (n 55) para 133.



justified⁷⁷ and established a causal link between the deaths and these ‘serious administrative flaws’.⁷⁸

In addition to the right to life, the ECtHR has identified relevant positive obligations under other Convention rights, including Article 8 (right to private and family life) and Article 1 Protocol 1 (right to property). Under Article 8, the Court recognises the duty of public authorities to assess serious health risks⁷⁹ and to provide the population with information on their exposure to extensive environmental pollution and on potential accidents.⁸⁰ In these cases, the Court affirms that the onus is on the State ‘to justify, using detailed and rigorous data, a situation in which certain individuals bear a heavy burden on behalf of the rest of the community’.⁸¹ With reference to the right to property, it is interesting to note that, in contrast to cases concerning dangerous industrial activities, such as *Oneryildiz* and *Kolyadenko*, in relation to disasters caused by weather hazards the Court has not been ready to find a violation of Article 1 Protocol 1. In the *Budayeva* and *Hadzhiyska* cases, which both touched upon the issue of damage to houses caused by severe flooding, the Court affirmed that ‘natural disasters, which are as such beyond human control, do not call for the same extent of State involvement as dangerous activities of a man-made nature’.⁸² Contrary to the positive obligations under the right to life that ‘include a duty to do everything within the authorities’ power in the sphere of disaster relief for the protection of that right⁸³, a wider margin of appreciation is thus granted to national authorities in relation to the obligation to protect the right to the peaceful enjoyment of possessions, which ‘is not absolute, and cannot extend further

⁷⁷ *ibid* para 155.

⁷⁸ *ibid* para 158. With respect to the right to information and the need to introduce effective early warning systems, Priority 4 of the Sendai Framework invites States ‘[t]o invest in, develop, maintain and strengthen people-centred multi-hazard, multisectoral forecasting and early warning systems, disaster risk and emergency communications mechanisms, social technologies and hazard-monitoring telecommunications systems; develop such systems through a participatory process; tailor them to the needs of users, including social and cultural requirements’, para. 33(b).

⁷⁹ See the *Tatar* and *Taşkin* cases mentioned above (n 67)

⁸⁰ See *Guerra and Others v Italy* (1998) 26 EHRR 357 para 60; *Tatar* (n 67) para 88.

⁸¹ *Fedayeva v Russia* (2007) 45 EHRR 10 para 129.

⁸² *Hadzhiyska v Bulgaria*, App no 20701/09 (ECtHR, 15 May 2012) para 15, referring to *Budayeva* (n 55) paras 173-175.

⁸³ *ibid*.

than what is reasonable in the circumstances'.⁸⁴ As Sossai notes, however, if on one side the margin of appreciation in taking the most appropriate measures 'seems to depend on the importance of the rights involved as well as on the nature of the disasters', on the other 'the still limited jurisprudence cannot be said to be definitively settled yet'.⁸⁵

4. *Conclusions*

Although the interplay between IHRL and DRR has not yet been addressed in a systematic manner by human rights supervising authorities, recent practice suggests that under IHRL States already have specific DRR obligations, particularly in relation to the Sendai Framework's Priorities 1, 2 and 4, and in accordance with its Guiding Principles. Relevant duties under IHRL include the requirement that DRR policies and plans are informed by disaggregated data on specific vulnerabilities and take into account the needs and views of the most vulnerable groups in society. Moreover, States are required to assess all potential risks and perform due diligence in gaining knowledge of specific hazards and to establish adequate regulatory frameworks that provide for effective deterrence against threats to the right to life and effective protection against natural hazards. The implementation of such frameworks has to be diligently monitored, and particular attention must be devoted to informing the public of any life-threatening risk, including by putting in place early warning systems.

More generally, additional work is needed to reduce exposure and vulnerability to natural and technological hazards, thus preventing the creation of new disaster risks. The human rights framework reminds us that increased accountability for disaster risk management is needed and, even before that, that dedicated action must be focused on tackling underlying disaster risk drivers, such as poverty and inequality. Yet DRR reaches out to broader areas of public concern: climate change and variability, unplanned and rapid urbanization, poor land management, demographic change, weak institutional and non-risk-informed policies,

⁸⁴ *ibid.*

⁸⁵ M Sossai (n 9) 125.



unsustainable uses of natural resources, just to name a few. It is paramount that DRR activities in these areas are properly informed by human rights considerations and that the potential of IHRL in advancing DRR is more fully taken into account.

