C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 363 [339–377] 25.2.2015 5:24PM

In 2013, the ILC undertook work on the topic 'Protection of the Environment in Relation to Armed Conflict'. The expression 'in relation to' was specifically chosen in order to broaden the spectrum of norms to be considered. The Special Rapporteur, Marie Jacobsson from Sweden, has framed the work in temporal terms distinguishing 'three temporal phases: before, during and after an armed conflict (phase I, phase II and phase III, respectively)'.[121] Interestingly, the Rapporteur intends to focus on phases I and III, which have received less attention in codification efforts, and to target non-international armed conflicts in her work on phase II. At the same time, the Rapporteur has expressed its intention not to address questions such as environment-driven conflict, the protection of cultural property, the regulation of weapons and environment-driven displacement.[122]

The work on this topic is expected to result in 'conclusions' or 'guidelines' rather than on a draft leading to a treaty. Such conclusions will be most useful to clarify the operation of a wide corpus of norms addressing the impact of conflict on environmental protection.

11.2.2 Environmental dimensions of recourse to war

11.2.2.1 Overview

The body of norms regulating the recourse to force in international law may also be relevant for the protection of the natural environment. This topic has been addressed from three main angles.

One angle concerns the impact of environmental protection on the rules circumscribing the two exceptions to the prohibition of the use of force, i.e. self-defence and enforcement action under Chapter VII of the United Nations Charter. From a legal standpoint, this amounts to assessing the extent to which environmental protection is taken into account by these norms.

The second angle relates to the legal consequences of violating *jus ad bellum* with respect to the environmental damage caused during armed conflict. This question arose in connection with the UN Security Council's Resolution 687 (1991) condemning the environmental damage caused by Iraq on the territory of Kuwait.[123]

The third angle is broader, encompassing the new types of security threats that may arise as a result of environmental degradation. Properly understood, the questions raised go well beyond the norms of *jus ad bellum* and call for more general discussion. For this reason, only the first two angles are discussed in this section. The latter is discussed in some more detail in Section 11.3 of this chapter.

[121] Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts. Submitted by Marie G. Jacobsson, Special Rapporteur, 30 May 2014, UN Doc. A/CN.4/674 ('2014 Preliminary Report'), para. 58.

[122] *Ibid.*, paras. 64–7.

[123] UN Security Council Resolution 687 (1991), 8 April 1991, UN Doc. S/RES/687 (1991).

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 364 [339–377] 25.2.2015 5:24PM

11.2.2.2 *Jus ad bellum* and environmental protection

In its Advisory Opinion on the *Legality of Nuclear Weapons*, the ICJ briefly addressed the implications of environmental protection for the rules of *jus ad bellum* and, more specifically, for the customary and treaty rule on the right to self-defence. After concluding that environmental treaties could not be construed as entailing obligations of 'total restraint during military conflict', the Court concluded that environmental protection had to be taken into account in assessing whether an action is necessary and proportionate:

> The Court does not consider that the treaties in question could have intended to deprive a State of the exercise of its right of self-defence under international law because of its obligations to protect the environment. Nonetheless, *States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives*. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.[124]

Necessity and proportionality are both requirements of resort to self-defence and general principles governing the conduct of hostilities. Although distinct (because such general principles apply irrespective of whether the resort to force has been lawful), the two obligations are connected to the extent that, as noted by the Court:

> a use of force that is proportionate under the law of self-defence, must, in order to be lawful, also meet the requirements of the law applicable in armed conflict which comprise in particular the principles and rules of humanitarian law.

Thus, environmental considerations intervene already in the assessment of the legality of the use of force, which is distinct from the assessment of whether the hostilities have been lawfully conducted. One implication of this distinction, discussed in Section 11.2.2.3 *infra*, is that the mere breach of *jus ad bellum* may entail liability for environmental damage irrespective of an assessment of breach of *jus in bello*.

Environmental considerations are also relevant in connection with enforcement action under Chapter VII of the UN Charter.[125] One question is whether environment-driven conflict or, more broadly, environmental threats such as natural disasters and the like, may trigger the system of collective security. Legally, the UN Security Council could characterise such events as 'threats to international peace and security' and therefore adopt binding decisions under Chapter VII, whether they entail the use of force or softer forms of intervention, such as the provision of assistance to distressed populations despite the lack of authorisation of the territorial State or the adoption of economic

[124] *Legality of Nuclear Weapons, supra* n. 6, para. 30 (italics added).

[125] See C. Gray, 'Climate Change and the Law on the Use of Force', in R. Rayfuse and S. V. Scott (eds.), *International Law in the Era of Climate Change* (Cheltenham: Edward Elgar, 2011), pp. 219–40.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 365 [339–377] 25.2.2015 5:24PM

sanctions. In the past, the Security Council has considered human rights violations, flows of refugees and humanitarian disasters as threats to peace under Article 39 of the Charter, enabling the use of Chapter VII.[126] However, the involvement of the Security Council in environment-driven situations that are only loosely connected to the maintenance of international peace and security remains controversial. This is suggested by the different positions taken by States in two debates held by the Security Council in 2007 and, again, in 2011, on the issue of climate change.[127] The main opposition stems from the G-77 and China, which are reluctant to give a forum such as the Security Council, where their interests are less represented than in the UN General Assembly or ECOSOC, an additional opportunity to expand its remit.

11.2.2.3 Violations of *jus ad bellum* and environmental damage

An important, albeit controversial, environmental implication of violating the rules of *jus ad bellum* can be illustrated by reference to the 1990–1 Gulf War. After the invasion of Kuwait by Iraq, the UN Security Council adopted a stream of resolutions, including Resolution 687 (1991).[128] Paragraph 16 of this resolution reaffirmed that Iraq was to be considered:

> liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait.

The body set up to manage the claims, the United Nations Compensation Commission ('UNCC'), acted on the premise that Iraq was liable for all the environmental damage in a relation of causality with its invasion of Kuwait. No legal assessment of the principle of liability (which would have included consideration of *jus in bello* and environmental norms) was conducted by the UNCC. In fact, the panels established to hear the different claims[129] regularly reiterated this premise. By way of illustration, in the *Well Blowout Control Claim* ('*WBC Claim*'),[130] which related to the extinction of the oil wells set on fire by Iraqi troops in their retreat from Kuwait, the panel recalled that:

[126] *Ibid.*, p. 230. [127] On these debates, see *ibid.*, pp. 231–3. [128] See *supra* n. 123.

[129] The structure of the claims is rather complex. Six broad categories of claims were established (A, B, C, D, E and F). The F category, which concerned claims brought by other States (e.g. Kuwait, Saudi Arabia, Iran, etc.) and international organisations, was further subdivided into four sub-categories. Sub-category 4 covered claims for environmental damage and natural resource depletion. The panel established to hear F4 claims organised its work in five instalments of claims. By 2005 all claims (including F claims) had been processed.

[130] This claim was brought by the Kuwait Oil Company, under category E (claims from corporations). It provides, however, an apposite illustration of the constant position adopted by the UNCC panels regarding the premise of Iraq's liability. See *Report and Recommendation made by the Panel of Commissioners Appointed to Review the Well Blowout Control Claim ('WBC Claim')*, S/AC.26/1996/5/Annex, 18 December 1996.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 366 [339–377] 25.2.2015 5:25PM

> The Security Council having determined, under Chapter VII of the Charter, that compensation in accordance with international law should be provided to foreign Governments, nationals and corporations for any direct loss, damage or injury sustained by them as a result of Iraq's unlawful invasion and occupation of Kuwait, in order to restore international peace and security, *the issue of Iraq's liability has been resolved by the Security Council and constitutes part of the law applicable before the Commission*.[131]

Thus, the UNCC panels could not – and did not – assess whether the damage caused by Iraq in some cases was not excessive or was commensurate with the military advantage pursued, as potentially allowed by the rules of *jus in bello* normally applicable as a *lex specialis*.[132] The approach followed by the Security Council and the UNCC came under much criticism from legal commentators, who viewed it as a victor's justice.[133] Eventually, out of the US$ 85 billion claimed for environmental damage and resource depletion (F4), the UNCC awarded compensation for US$ 5.3 billion.[134]

For present purposes, the case of the UNCC is illustrative of the connection between *jus ad bellum* and environmental protection, but it also highlights the practical implications of what may otherwise appear as a purely theoretical distinction between breaches of *jus ad bellum* and *jus in bello* (or, by analogy, of environmental norms).

11.3 Environmental security in international law

11.3.1 Preventing environment-driven conflict

The connection between environmental protection and conflict is bi-directional. In the previous sections, we discussed the extent to which international law protects the environment from the consequences of armed conflict. This section takes the reverse approach and looks at how peace can be 'protected' (and conflicts be prevented) from environmental threats.

The importance of this connection must not be underestimated. According to a 2009 UNEP Report, no less than eighteen violent conflicts have been 'fuelled' by the exploitation of natural resources and at least 40 per cent of intra-State conflicts in the last sixty years can be 'associated' with natural

[131] *Ibid*., para. 68 (italics added).

[132] See the discussion in Section 11.2.1.2.3 in connection with the *Hostages Case* and, more generally, the difference between, on the one hand, the general principles of military necessity and proportionality and, on the other hand, Arts. 35(3) and 55(1) of the Additional Protocol I.

[133] See Mollard-Bannelier, *supra* n. 12, pp. 417–19; C. Greenwood, 'State Responsibility and Civil Liability for Environmental Damage caused by Military Operations', in Grunawalt, *supra* n. 10, pp. 397–415, at p. 407.

[134] On the valuation methods used by the F4 panel, see O. Das, *Environmental Protection, Security and Armed Conflict: A Sustainable Development Perspective* (Cheltenham: Edward Elgar, 2013), pp. 200–5.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 367 [339–377] 25.2.2015 5:25PM

resources.[135] From this perspective, environmental and natural resource variables are seen (i) to contribute to the outbreak of conflict (e.g. Darfur; Sierra Leone and Liberia), (ii) to finance or sustain conflict (e.g. Sierra Leone and Liberia; Angola; Cambodia), or (iii) undermining peace (e.g. Ivory Coast).[136]

The bi-directional character of the environment-conflict link has been increasingly recognised in policy instruments.[137] One example is Principle 25 of the Rio Declaration, according to which '[p]eace, development and environmental protection are interdependent and indivisible'.[138] More recently, the UN has undertaken some initiatives, including the establishment of an International Resource Panel,[139] a UN–EU Partnership on Natural Resources and Conflict Prevention,[140] and a Division of Early Warning and Assessment ('DEWA') within the UNEP.[141]

Yet, concrete legal initiatives in this regard have so far remained elusive. As noted earlier in this chapter, the UN Security Council has discussed the implications of climate change on two occasions but it has not addressed specifically any environment-driven situation as a 'threat to peace' under Article 39 of the Charter. Similarly, the ILC Special Rapporteur on the 'Protection of the Environment in Relation to Armed Conflict' has explicitly excluded the question of environment-driven conflict from the scope of her work.[142] As for treaties, although several environmental treaties can be relevant to address the root environmental causes that may fuel conflict (e.g. the UN Convention to Combat Desertification[143]), there is to date no treaty framework specifically addressing the prevention of environment-driven conflict. As discussed next, for some questions such as environmentally-induced displacement, international law offers in fact very little to accommodate problems that may become increasingly pressing in the near future.

[135] See UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (Geneva: UNEP, 2009) ('UNEP Environmental Conflict Report'), p. 8.

[136] *Ibid*., pp. 8–14. [137] For a concise overview, see Das, *supra* n. 134, pp. 66–119.

[138] Rio Declaration on Environment and Development, 13 June 1992, UN Doc. A/CONF.151/26 ('Rio Declaration').

[139] See www.unep.org/resourcepanel/ (last visited on 20 April 2014). The objective of this panel is to provide reliable policy-relevant information on the use and state of the world's natural resources.

[140] The partnership brings together the UNEP, the UN Development Programme, UN Habitat, the UN Department of Political Affairs, the UN Department of Economic and Social Affairs, the UN Peacebuilding Support Office, and the EU. The key project is to develop a 'Tool-kit and Guidance for Preventing and Managing Land and Natural Resource Conflict'. See www.un.org/en/land-natural-resources-conflict/ (last visited on 20 April 2014).

[141] See www.unep.org/dewa/ (last visited on 20 April 2014). DEWA develops and provides policy-relevant information and capacity building regarding environmental threats.

[142] See 2014 Preliminary Report, *supra* n. 121, para. 64.

[143] United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, UN Doc. A/AC.241/15/Rev. 7 (1994), 17 June 1994, 33 ILM 1328 ('UNCCD'). This example is referred to in Das, *supra* n. 134, p. 112. On this treaty, see Chapter 6.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 368 [339–377] 25.2.2015 5:25PM

11.3.2 Environmentally-induced displacement

11.3.2.1 Circumscribing the problem

In the last two decades, growing concern has been expressed as to the impact of environmentally-induced migrations, particularly in connection with the effects (sudden, such as a hurricane, or slow-onset, such as sea-level rise or desertification) of climate change.[144] From a legal perspective, the question is extremely challenging both because of the potential magnitude of the phenomenon (some estimates go as far as to predict movements of many millions of people[145]) and because of the perceived inadequacy of existing international instruments. Perhaps more fundamentally, it is not even clear how to legally frame the phenomenon given that environmental displacement is but a general term encompassing a diverse array of more specific types of population movements (temporary or permanent; forced or voluntary; environment-driven or environmentally-induced; internal or international; etc.).[146]

A useful characterisation of five scenarios encompassed by the notion of environmentally-induced displacement has been provided by Walter Kälin, the former UN Secretary-General's Representative on the Human Rights of Internally Displaced Persons.[147] These scenarios are intended as a taxonomy of 'causes of movement': (i) sudden onset disasters (e.g. hurricanes, typhoons, cyclones, floods, mudslides); (ii) slow onset environmental

[144] Aside from some previous occasional uses, the term environmental refugee was introduced in a 1985 UNEP report: E. El-Hinnawi, *Environmental Refugees* (United Nations Environment Programme, 1985). The current debate is however more recent and it was not until the mid-2000s that major international organisations took full notice of its importance. See e.g. Council of Europe Parliamentary Assembly, Committee on Migration, Refugees and Population, *Environmentally Induced Migration and Displacement: A 21st Century Challenge*, COE Doc 11785 (23 December 2008); *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights*, UN Doc. A/HRC/10/61, 15 January 2009, paras. 55–60; *Climate Change and Its Possible Security Implications: Report of the Secretary-General*, UN Doc. A/64/350, 11 September 2009, paras. 54–63; United Nations High Commissioner for Refugees, *Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective* (14 August 2009) ('UNHCR Report'). For a concise overview of the literature see J. Morrissey, 'Rethinking the "Debate on Environmental Refugees": from "Maximilists and Minimalists" to "Proponents and Critics"' (2012) 19 *Journal of Political Ecology* 36.

[145] On the limitations of these estimates see D. Kniveton, K. Schmidt-Verkerk and C. Smith, 'Climate Change and Migration: Improving Methodologies to Estimate Flows' (2008) *IOM Migration Research Series* No. 33.

[146] See J. McAdam, 'Climate Change, Displacement and the Role of International Law and Policy', paper presented at International Dialogue on Migration 2011, Intersessional Workshop on Climate Change, Environmental Degradation and Migration, 29–30 March 2011, p. 1.

[147] 'Displacement and Climate Change: Towards Defining Categories of Affected Persons', *Working paper submitted by the Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons* (25 August 2008). The initial typology (hydrometeorological disasters, areas designated as high risk zones, environmental degradation and slow onset disasters, sinking islands, armed conflict and violence driven by resource depletion) was subsequently revised in W. Kälin and N. Schrepfer, *Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches*, UNHCR (PPLA/2012/01), February 2012. We follow the latter.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 369 [339–377] 25.2.2015 5:25PM

degradation (e.g. sea-level rise, salinization of groundwater, drought, desertification); (iii) slow onset events for low lying small island States (resulting in the loss of their territory); (iv) designation of areas prohibited for human habitation (either because they present risks or because they are allocated to mitigation/adaptation purposes); (v) resource stress triggering disturbances, violence and armed conflict.[148]

This characterisation is very helpful because the law applicable or at least relevant for different scenarios is not the same. It thus advances our understanding of how international law may capture an object as multifaceted as environmentally-induced displacement.

11.3.2.2 Legal response

With respect to the legal response given to this problem at the international level, there are two main lines in the debate. The first concerns the extent to which it is legally possible or wise to address environmentally-induced displacement through international refugee law. If it is not, as argued among others by the UNHCR itself, the second debate focuses on what would be the most promising alternative frameworks of protection.

Regarding the first debate, one question is whether the 1951 Refugees Convention[149] could potentially be used to provide protection to 'environmental refugees'. In most cases, it cannot, because the Convention requires the crossing of an international border (thus excluding people displaced within the territory of their own State, which makes for a large proportion of environmental refugees) and, most importantly, it seems extremely difficult to characterise the environmental driver of displacement as 'persecution' and, even more so, as persecution 'for reasons of race, religion, nationality, membership of a particular social group or political opinion'.[150] Although the African and Latin American regional instruments on refugee law[151] contain somewhat broader definitions of refugees, potentially covering people fleeing natural disasters,[152] their expansion could at best cover movements caused by sudden onset disasters. More generally, there is a general policy reluctance to bring environmentally-induced displacement under the framework protecting refugees to avoid blurring a line that it took so much effort to clarify. In its 2009

[148] Kälin and Schrepfer, *supra* n. 147, pp. 13–17.

[149] Convention relating to the Status of Refugees, 28 July 1951, 189 UNTS 137 ('1951 Refugees Convention'), and Protocol Relating to the Status of Refugees, 31 January 1967, 606 UNTS 267 (removing the geographical and time limitations included in the text of the Convention).

[150] 1951 Refugees Convention, *supra* n. 149, Art. 1A(2).

[151] Convention Governing the Specific Aspects of Refugee Problems in Africa, 10 September 1969, 1001 UNTS 45, and the Cartagena Declaration on Refugees, 22 November 1984, Annual Report of the Inter-American Commission on Human Rights, OAS Doc. OEA/Ser.L/V/II.66/doc.10, rev. 1, pp. 190–3 (1984–5).

[152] See W. Kälin, 'Conceptualising Climate-Induced Displacement' in J. McAdam (ed.), *Climate Change and Displacement: Multidisciplinary Perspectives* (Oxford: Hart Publishing, 2010), pp. 81–103, at pp. 88–9.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 370 [339–377] 25.2.2015 5:25PM

initial report on the question, the UNHCR expressed 'serious reservations with respect to the terminology and notion of environmental refugees or climate refugees' and took the stance that:

> the use of such terminology could potentially undermine the international legal regime for the protection of refugees whose rights and obligations are quite clearly defined and understood. It would also not be helpful to appear to imply a link and thus create confusion regarding the impact of climate change, environmental degradation and migration and persecution that is at the root of a refugee fleeing a country of origin and seeking international protection.[153]

Given the challenges of addressing the problem through international refugee law, the attention has moved towards alternative legal frameworks, including the instruments on international humanitarian law, international human rights law (most notably under the so-called 'complementary protection'), the law governing internally displaced persons ('IDPs') and international environmental law.

In the latter context, the question has received some attention in climate negotiations, particularly after the 2010 Cancun Agreements, which set up a 'Cancun Adaptation Framework' encompassing matters of 'climate change induced displacement, migration and planned relocation ... at national, regional and international levels'.[154]

Yet, from a practical perspective, the most important instruments regarding this problem are those relating to IDPs. An influential soft-law instrument, the 1998 Guiding Principles on Internal Displacement, provide a sufficiently broad definition of covered persons, namely:

> persons or groups of persons who have been forced or obliged to flee or leave their homes or habitual places of residence, *in particular as a result of or in order to avoid the effects of ... natural or human-made disaster*, and who have not crossed an internationally recognized State border.[155]

These principles operate in addition to human rights and international humanitarian law[156] and stress the obligation of States to grant covered persons protection against displacement, participatory rights in the decision-making process relating to displacement, return or relocation, the right to remain together as a family or be reunited, or the right to seek safety in other parts of the country or leave the country, among others. Although the Guiding Principles are a soft-law instrument, a significant part of its content reflects basic human rights and humanitarian law obligations with customary

[153] UNHCR Report, *supra* n. 144, pp. 8–9.

[154] 'The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention', Decision 1/CP.16, 15 March 2011, Doc. FCCC/CP/2010/7/Add.1, paras. 13, 14(f).

[155] 'Guiding Principles on Internal Displacement', 11 February 1998, UN Doc. E/CN.4/1998/53/Add.2 (1998), Annex, para. 2 (italics added).

[156] *Ibid.*, Principle 2(2).

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 371 [339–377] 25.2.2015 5:25PM

grounding. In addition, an important treaty was concluded in 2009 in Kampala (Uganda) addressing the situation of IDPs in Africa.[157] The Kampala Convention largely incorporates the wording used in the 1998 Guiding Principles, but it provides further elaboration in areas such as the right to be protected from arbitrary displacement[158] or accountability.[159]

Basic human rights provisions are also relevant in connection with 'complementary protection'.[160] This is the human rights-based protection owed to persons who are not entitled to protection under the 1951 Refugees Convention but, at the same time, cannot be returned to their countries because of serious risks that they may be tortured or subject to cruel, inhuman and degrading treatment. However, the risks justifying complementary protection have been judicially construed in a manner that leaves limited room for accommodating environmental threats.[161]

Still another option would be to adopt a new treaty or amend an existing one. There have been proposals to amend the 1951 Refugees Convention to accommodate environmental refugees,[162] but they have met with much scepticism, including from the UNHCR itself.[163] Some commentators go further and propose an entire new instrument.[164] Among these efforts the 2005 *Appel de Limoges* deserves to be singled out,[165] as it has been followed by a detailed and regularly updated Draft Convention on the International Status of Environmentally-Displaced Persons.[166] Article 2(2) of the Draft defines 'environmentally-displaced persons' as:

> individuals, families, groups and populations confronted with a sudden or gradual environmental disaster that inexorably impacts their living conditions, resulting in their forced displacement, at the outset or throughout, from their habitual residence.

[157] African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa, 23 October 2009, 49 ILM 86 ('Kampala Convention').

[158] *Ibid*., Art. 4.

[159] Significantly, Art. 12(3) of the Convention provides that a 'State Party shall be liable to make reparation to internally displaced persons for damage when such a State Party refrains from protecting and assisting internally displaced persons in the event of natural disasters'.

[160] See J. McAdam, *Complementary Protection in International Refugee Law* (Oxford University Press, 2007).

[161] For a detailed discussion of the different legal bases that could be used, see J. McAdam, *Climate Change Displacement and International Law: Complementary Protection Standards*, UNHCR (PPLA/2011/03), May 2011, pp. 15–36.

[162] See the proposals of the Maldives and Bangladesh, reported in E. Piguet *et al.* (eds.), *Migration and Climate Change* (Cambridge University Press, 2011), p. 103.

[163] UNHCR Report, *supra* n. 144, p. 9.

[164] See e.g. B. Docherty and T. Giannini, 'Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees' (2009) 33 *Harvard Environmental Law Review* 349.

[165] 'Appel de Limoges sur les refugiés écologiques et environnementaux', 23 June 2005, available at: www.cidce.org (last visited on 20 April 2014).

[166] The third version of this text was elaborated in May 2013. See www.cidce.org (last visited on 20 April 2014).

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 372 [339–377] 25.2.2015 5:25PM

The Draft makes a distinction between persons threatened with displacement, whose rights are addressed in Chapter 3, and environmentally-displaced persons, whose rights are defined in Chapters 4 and 5, including a right to the recognition of their status. Despite the considerable political obstacles that would have to be overcome for an amendment or a new instrument to be adopted on this topic, the Limoges project provides a useful outline of how the many difficult questions raised by commentators could be addressed in the actual drafting of a text.

11.3.3 Environmental security in post-conflict settings

11.3.3.1 The rise of environmental peacebuilding

Together with the role of environmental variables in igniting conflict, increasing attention has been paid in the last years to their role in a post-conflict setting and, more precisely, in reigniting conflict or, conversely, in helping build trust.[167]

The focus of this work is on the economic and political dimensions of peacebuilding processes and how they are affected (positively or negatively) by environmental variables such as natural resource exploitation, the availability of basic resources and services (food and water), and the broader impact of massive pollution. Environmental variables are seen as both threats and opportunities and the bulk of the work is, understandably, on the analysis of case-studies as a basis for deriving policy lessons.

Somewhat less clear is the role of law in this context. Of course, the importance of legal and institutional frameworks cannot be questioned as they are a necessary part of establishing agreed solutions, from the negotiation of a peace agreement,[168] to the arbitral settlement of a dispute,[169] to the implementation of a land-tenure regime.[170] But the role of international law and, specifically, of international environmental obligations in this context needs further clarification.

[167] For overviews of this work, see UNEP Environmental Conflict Report, *supra* n. 135; Das, *supra* n. 134; C. Bruch, D. Jensen, M. Nakayama and J. Unruh, 'Post-Conflict Peace Building and Natural Resources' (2008) 19 *Yearbook of International Environmental Law* 58.

[168] See e.g. section 3.7 of the Comprehensive Peace Agreement between the Government of Nepal and the Communist Party of Nepal (Maoist), which requires the implementation of a land reform programme, referred to in Bruch *et al.*, *supra* n. 167, pp. 63–4.

[169] See e.g. the allocation of oil resources resulting from the arbitral award in the *Abyei* case: *In the Matter of an Arbitration before a Tribunal Constituted in Accordance with Article 5 of the Arbitration Agreement between the Government of Sudan and the Sudan People's Liberation Movement/Army on Delimiting Abyei Area*, Final Award, 22 July 2009, available at: www.pca-cpa.org (last visited on 20 April 2014).

[170] See J. Unruh and R. C. Williams, 'Land: A Foundation for Peacebuilding', in J. Unruh and R. C. Williams (eds.), *Land and Post-Conflict Peacebuilding* (London: Earthscan, 2013), pp. 1–20.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 373 [339–377] 25.2.2015 5:25PM

11.3.3.2 Environmental peacebuilding and environmental obligations

International environmental obligations will likely require the proper consideration of international environmental and human rights' principles (e.g. prevention, environmental impact assessment, participation, the rights to health, natural resources and a generally satisfactory environment, indigenous peoples' rights) in developing the domestic legal frameworks applicable to the management of high-value (e.g. timber, diamonds, gold or oil) and other resources (e.g. land and water), to prevent situations such as the conflict in the Niger Delta[171] or in many other regions of the world where the interests of States, extractive industries and local communities conflict with each other.[172]

International environmental law may also help to mainstream environmental considerations into the post-conflict activities of international organisations, either through the setting up of a 'fund'[173] or a dedicated 'branch'[174] or, still, through the development of guidelines to reduce the environmental impact of the organisation's activities.[175] This type of impact is perhaps less legal but not less important, as it provides organisations with the legal mandate to integrate environmental considerations in to their work. Since 1999, UNEP's Post Conflict and Disaster Management Branch has conducted several post-crisis environmental assessments in regions such as the Balkans, Afghanistan, the occupied Palestinian territories, Nigeria or the Democratic Republic of the Congo.[176] This type of assessments may feature in international litigation, as illustrated by the Report of the Committee established by

[171] On the legal dimensions of this conflict from a human rights perspective, see *Social and Economic Rights Action Center (SERAC) and others* v. *Nigeria*, African Commission Application no. 155/96 (2001–2002) ('*Ogoni*').

[172] For a map of environmental conflicts (including this form of tripartite conflicts) in the world see: www.ejolt.org (last visited on 20 July 2014).

[173] In 1997, the World Bank created a Post-Conflict Fund that has financed programmes with environmental sustainability components. An example is the participation of the PCF in the recovery plan of the Mindanao area, in the Philippines. See World Bank, *Post-Conflict Fund and Licus Trust Fund. Annual Report (fiscal year 2006)*, p. 5, available at: http://www.worldbank.org (last visited on 20 April 2014).

[174] UNEP started its dedicated programme in 1999 leading to the Post-Conflict and Disaster Management Branch, based in Geneva. See www.unep.org/disastersandconflicts/ (last visited on 20 April 2014). Similarly, the International Union for the Conservation of Nature ('IUCN') has established an Armed Conflict and the Environment Specialist Group, active mostly in research and advocacy. See www.iucn.org/about/union/commissions/cel/cel_working/cel_wt_sg/cel_sg_armed/ (last visited on 20 April 2014).

[175] In June 2009, the UN Departments of Peacekeeping Operations and of Field Support, with input from UNEP, adopted an 'Environmental Policy for UN Field Missions' aimed at reducing the environmental footprint of peacekeeping operations. Environmental considerations have also been integrated into the Global field support strategy. Report of the Secretary General, 26 January 2010, UN Doc. A/64/633. Similar steps had previously been taken by the UNHCR. See the UNHCR's 2005 Environmental Guidelines, available at: www.unhcr.org/3b03b2a04.html (last visited on 20 April 2014).

[176] For a concise overview, see K. Conca and J. Wallace, 'Environment and Peacebuilding in War-torn Societies: Lessons from the UN Environment Programme's Experience with Post-conflict Assessment', in D. Jensen and S. Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Earthscan, 2012), pp. 63–84.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 374 [339–377] 25.2.2015 5:25PM

the ICTY Prosecutor in connection with the NATO bombing mentioned earlier in this chapter.[177]

More specifically, the international or internationalised management of natural resources may provide a useful opportunity to build confidence between the parties to a conflict. Examples referred to in the literature include the 'peace parks' (i.e. cross-border ecological preserves) jointly managed by Ecuador and Peru as part of peacebuilding efforts ending a long-lasting border dispute[178] or cooperation on water resources between Israel and Jordan following the October 1994 peace agreement.[179]

Overall, these efforts suggest that although the explicit presence of international environmental law may still be limited, environmental protection considerations are increasingly influencing peacemaking activities at the international level.

Select bibliography

Austin, J. E. and C. E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic and Scientific Perspectives* (Cambridge University Press, 2000).

Bardonnet, D., *La convention sur l'interdiction et l'élimination des armes chimiques* (Dordrecht: Martinus Nijhoff, 1995).

Boelaert-Suominen, S. A. J., *International Environmental Law and Naval War: The Effect of Marine Safety and Pollution Conventions During International Armed Conflict* (Newport RI: Naval War College, 2000).

Boisson de Chazournes, L. and P. Sands (eds.), *International Law, the International Court of Justice and Nuclear Weapons* (Cambridge University Press, 1999).

Bothe, M., 'Criminal Responsibility for Environmental Damage in Times of Armed Conflict', in R. J. Grunawalt, J. E. King and R. S. McClain (eds.), *Protection of the Environment during Armed Conflict* (Newport RI: Naval War College, 1996), pp. 473–8.

Bothe, M., C. Bruch, J. Diamond and D. Jensen, 'International Law Protecting the Environment during Armed Conflict: Gaps and Opportunities' (2010) 92 *International Review of the Red Cross* 569.

Bruch, C., D. Jensen, M. Nakayama, J. Unruh, R. Gruby and R. Wolfarth, 'Post-Conflict Peace Building and Natural Resources' (2008) 19 *Yearbook of International Environmental Law* 58.

Chevrier, M. I., K. Chomiczewski, H. Garrigue, G. Granasztói, M. R. Dando and G. S. Pearson (eds.), *The Implementation of Legally Binding Measures to Strengthen the Biological and Toxin Weapons Convention* (Dordrecht: Kluwer, 2004).

[177] See *supra* n. 21.

[178] The Acta de Brasilia, signed on 26 October 1998, mentions in Art 3 a number of bilateral co-operation agreements, which among others led to the creation of adjacent natural preserves. The treaty is available at: www.afese.com/img/revistas/revista44/tratadopaz.pdf (last visited on 20 April 2014).

[179] Environmental co-operation is specifically addressed in Annex IV (Environment) of the Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan, 26 October 1994, referred to in Bruch *et al., supra* n. 167, pp. 65–6.

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 375 [339–377] 25.2.2015 5:25PM

Conca, K. and G. Dabelko (eds.), *Environmental Peacemaking* (Princeton NJ: Woodrow Wilson Center Press, 2002).

Council of Europe Parliamentary Assembly, Committee on Migration, Refugees and Population, *Environmentally Induced Migration and Displacement: A 21st Century Challenge*, COE Doc 11785 (23 December 2008).

Cournil, C. and B. Mayer, *Les migrations environnementales. Enjeux et gouvernance* (Paris: Presses de Sciences Po, 2014).

Das, O., *Environmental Protection, Security and Armed Conflict: A Sustainable Development Perspective* (Cheltenham: Edward Elgar, 2013).

Gray, C., 'Climate Change and the Law on the Use of Force', in R. Rayfuse and S. V. Scott (eds.), *International Law in the Era of Climate Change* (Cheltenham: Edward Elgar, 2011), pp. 219–40.

Greenwood, C., 'State Responsibility and Civil Liability for Environmental Damage caused by Military Operations', in R. J. Grunawalt, J. E. King and R. S. McClain (eds.), *Protection of the Environment during Armed Conflict* (Newport RI: Naval War College, 1996), pp. 397–415.

Grunawalt, R. J., J. E. King and R. S. McClain (eds.), *Protection of the Environment during Armed Conflict* (Newport RI: Naval War College, 1996).

Henckaerts, J.-M. and L. Doswald-Beck, *Customary International Humanitarian Law* (Cambridge University Press, 2009).

Hulme, K., 'Armed Conflict, Wanton Ecological Devastation and Scorched Earth Policies: How the 1990–91 Gulf Conflict Revealed the Inadequacies of the Current Laws to Ensure Effective Protection and Preservation of the Natural Environment' (1997) 2 *Journal of Armed Conflict Law* 55.

Jensen, D. and S. Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Earthscan, 2012).

Joyner, D. H., *International Law and the Proliferation of Weapons of Mass Destruction* (Oxford University Press, 2009).

Kadelbach, S., 'Nuclear Weapons and Warfare', in *Max Planck Encyclopedia of Public International Law* (2009).

Kälin, W., 'Conceptualising Climate-Induced Displacement' in J. McAdam (ed.), *Climate Change and Displacement: Multidisciplinary Perspectives* (Oxford: Hart Publishing, 2010), pp. 81–103.

Kälin, W. and N. Schrepfer, *Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches*, UNHCR (PPLA/2012/01), February 2012.

Kazazi, M., 'Environmental Damage in the Practice of the UN Compensation Commission' in M. Bowman and A. Boyle (eds.), *Environmental Damage in International and Comparative Law* (Oxford University Press, 2002), pp. 111–31.

'The UNCC Follow-up Programme for Environmental Awards', in *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum Judge Thomas A. Mensah* (Leiden: Martinus Nijhoff, 2007), pp. 1109–29.

Koppe, E., *The Use of Nuclear Weapons and the Protection of the Environment during International Armed Conflict* (Oxford: Hart, 2008).

Krutzsch, W., E. Myjer and R. Trapp (eds.), *The Chemical Weapons Convention. A Commentary* (Oxford University Press, 2014).

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 376 [339–377] 25.2.2015 5:25PM

Kunz, M. and J. E. Viñuales, 'Environmental Approaches to Nuclear Weapons', in G. Nystuen, S. Casey-Maslen and A. Golden Bersagel (eds.), *Nuclear Weapons under International Law* (Cambridge University Press, 2014), pp. 269–91.

Lujala, P. and S. A. Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (London: Earthscan, 2011).

Marauhn, T., 'Chemical Weapons and Warfare', in *Max Planck Encyclopedia of Public International Law* (2010).

McAdam, J., *Climate Change Displacement and International Law: Complementary Protection Standards*, UNHCR (PPLA/2011/03), May 2011.

Complementary Protection in International Refugee Law (Oxford University Press, 2007).

Mollard-Bannelier, K., *La protection de l'environnement en temps de conflit armé* (Paris: Pédone, 2001).

Morrissey, J., 'Rethinking the "Debate on Environmental Refugees": from "Maximilists and Minimalists" to "Proponents and Critics"' (2012) 19 *Journal of Political Ecology* 36.

Nystuen, G., S. Casey-Maslen and A. Golden Bersagel (eds.), *Nuclear Weapons under International Law* (Cambridge University Press, 2014).

Penny, C., 'Greening the Security Council: Climate Change as an Emerging "Threat to International Peace and Security"' (2007) 7 *International Environmental Agreements: Politics, Law, Economics* 35.

Piguet, E. *et al.* (eds.), *Migration and Climate Change* (Cambridge University Press, 2011).

Sandoz, Y., C. Swinarsky and B. Zimmermann, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Convention of 12 August 1949* (Leiden/Geneva: Martinus Nijhoff/International Committee of the Red Cross, 1987).

Schmitt, M. N., 'Green War: An Assessment of the Environmental Law of International Armed Conflict' (1997) 22 *Yale Journal of International Law* 1.

'War and the Environment: Fault Lines in the Prescriptive Landscape', in J. E. Austin and C. E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic and Scientific Perspectives* (Cambridge University Press, 2000), pp. 87–136.

Shelton, D. and A. Kiss, 'Martens Clause for Environmental Protection' (2000) 30 *Environmental Policy and Law* 285.

Sindico, F., 'Climate Change: A Security (Council) Issue?' (2007) 1 *Carbon and Climate Law Review* 26.

Sur, S. (ed.), *Le droit international des armes nucléaires* (Paris: Pedone, 1998).

Svarc, D., 'Biological Weapons and Warfare', in *Max Planck Encyclopedia of Public International Law* (2011).

Szurek, S., 'De Rarotonga à Bangkok et Pelindaba: Note sur les traités constitutifs de nouvelles zones exemptes d'armes nucléaires' (1996) 42 *Annuaire français de droit international* 164.

Tignino, M., L'eau et la guerre : éléments pour un régime juridique (Brussels: Bruylant, 2011).

United Nations Environment Programme, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (Geneva: UNEP, 2009).

Protecting the Environment During Armed Conflict. An Inventory and Analysis of International Law (Nairobi: UNEP, 2009).

PROOF

C:/ITOOLS/WMS/CUP-NEW/5969431/WORKINGFOLDER/DUPUY/9781107041240C11.3D 377 [339–377] 25.2.2015 5:25PM

United Nations High Commissioner for Refugees, *Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective* (14 August 2009).

United Nations Institute for Disarmament Research, *A Fissile Material Cut-off Treaty. Understanding the Critical Issues* (Geneva: UNIDIR, 2010).

United Nations Secretary-General, *Climate Change and Its Possible Security Implications: Report of the Secretary-General*, UN Doc. A/64/350, 11 September 2009.

Unruh, J. and R. C. Williams (eds.), *Land and Post-Conflict Peacebuilding* (London: Earthscan, 2013).

Vöneky, S., 'A New Shield for the Environment: Peacetime Treaties as Legal Restraints of Wartime Damage' (2000) 9 *Review of Community and International Environmental Law* 20.

'Peacetime Environmental Law as a Basis of State Responsibility for Environmental Damage Caused by War' in J. E. Austin and C. E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic and Scientific Perspectives* (Cambridge University Press, 2000), pp. 190–225.

Weinthal, E., J. Troel and M. Nakayama (eds.), *Water and Post-Conflict Peacebuilding* (London: Earthscan, 2014).

Yee Woon Chin, L., 'Nuclear Weapon-Free Zones – A Comparative Analysis of the Basic Undertakings in the SEANWFZ Treaty and their Geographical Scope of Application' (1998) 2 *Singapore Journal of International and Comparative Law* 275.

PROOF