

# Greener insurgencies? Engaging non-State armed groups for the protection of the natural environment during non-international armed conflicts

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## **Abstract**

*As belligerent parties, non-State armed groups (NSAGs) contribute to environmental damage in non-international armed conflicts. Drawing from the actual practice and doctrine of NSAGs, this article unpacks the legal and policy framework for engaging them on the protection of the environment. It analyzes the international humanitarian law rules protecting the environment binding on NSAGs. To improve environmental protection, a model of environmental responsibilities under international human rights law and international environmental law based on the*

*NSAG's level of territorial control is suggested, as a matter of policy. This article then explores how to engage NSAGs on the legal and policy framework identified and proposes a model unilateral declaration for the protection of the natural environment.*

**Keywords:** environmental protection, environmental obligations, environment in armed conflicts, international humanitarian law, international human rights law, international environmental law, non-State armed groups, non-international armed conflicts, engagement, compliance, commitment.

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## Introduction

In addition to causing intense human suffering and destruction of infrastructures, armed conflicts may also lead to the degradation of the natural environment,<sup>1</sup> which has been characterized as the “silent victim” of such situations.<sup>2</sup> The adverse impact of armed conflicts on the environment became a serious concern with the Vietnam War. This conflict raised awareness due to the use of napalm and a herbicide known as Agent Orange, resulting in large-scale environmental damage.<sup>3</sup>

Nowadays, the majority of armed conflicts are of a non-international nature.<sup>4</sup> Under international humanitarian law (IHL), non-international armed conflicts (NIACs) are defined as

*protracted armed confrontations occurring between governmental armed forces and the forces of one or more armed groups, or between such groups, arising on the territory of a State [party to the Geneva Conventions]. The armed confrontation must reach a minimum level of intensity and the parties involved in the conflict must show a minimum of organization.*<sup>5</sup>

As belligerent parties to NIACs,<sup>6</sup> non-State armed groups (NSAGs) may contribute to the “degradation, or even destruction, of parts of the natural environment,

1 The natural environment consists of “the natural world together with the system of inextricable interrelations between living organisms and their inanimate environment, in the widest sense possible”. See ICRC, *Guidelines on the Protection of the Natural Environment in Armed Conflict*, Geneva, 2020 (ICRC Guidelines), p. 17, para. 16. The term “environment” is also used in this article.

2 United Nations Environment Programme (UNEP), *Protecting the Environment During Armed Conflict*, 2009, p. 9.

3 Karen Hulme, “Environmental Protection in Armed Conflict”, in Malgosia Fitzmaurice, David M. Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law*, Edward Elgar, Cheltenham, 2010, p. 586.

4 International Committee of the Red Cross (ICRC), *ICRC Engagement with Non-State Armed Groups: Why, How, for What Purpose, and Other Salient Issues*, position paper, Geneva, 2021, p. 3.

5 ICRC, *How Is the Term ‘Armed Conflict’ Defined in International Humanitarian Law?*, opinion paper, Geneva, 2008, p. 5; International Criminal Tribunal for the former Yugoslavia (ICTY), *Prosecutor v. Duško Tadić*, Case No. IT-94-1, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction (Appeals Chamber), 2 October 1995, para. 70.

6 Armed groups that are parties to a NIAC are called non-State armed groups (NSAGs). See ICRC, above note 4, pp. 2–3.

including animals, vegetation, soil, water systems and entire ecosystems”.<sup>7</sup> In addition, serious humanitarian consequences can result from environmental damage, as it further increases the vulnerability of civilian populations already affected by NIACs.<sup>8</sup> It is therefore essential to engage NSAGs in order to protect the environment and the conflict-affected communities dependent upon it. To this end, this article starts by exploring, in turn, the actual practice and doctrine of NSAGs in relation to the natural environment.

Building on the perspective of NSAGs, the following sections discuss the legal and policy framework for engaging them on the protection of the natural environment. The legal framework consists of the applicable IHL rules protecting the natural environment. Under the law of international responsibility, an NSAG is responsible for violating these rules, although the consequences of such violations remain unclear.<sup>9</sup> At the least, an insurrectional movement that becomes the new government of a State is responsible for any violation of its international obligations attributed to it during the insurrection period.<sup>10</sup> The article then highlights that NSAGs are increasingly seen as having certain non-binding responsibilities in addition to their legal obligations. Considering the need for greater environmental protection, the article proposes that as matter of policy, NSAGs should incur environmental responsibilities under international human rights law (IHRL) and international environmental law (IEL) according to their level of territorial control. Finally, recommendations on how to promote this legal and policy framework with NSAGs are provided. A model unilateral declaration for the protection of the natural environment in armed conflict is suggested as a potential way forward.

## The natural environment from the perspective of non-State armed groups

### Shaping the problem: Practices of non-State armed groups that are harmful to the environment during non-international armed conflicts

During NIACs, NSAGs damage the environment in a number of ways. First, the exploitation of natural resources has recently “attracted heightened international

7 ICRC, *Strengthening Legal Protection for Victims of Armed Conflicts*, report submitted to the 31st International Conference of the Red Cross and Red Crescent, 2011, p. 14.

8 *Ibid.*

9 Marja Lehto, *Report of the Special Rapporteur on the Protection of the Environment in Relation to Armed Conflicts*, UN Doc. A/CN.4/728, 27 March 2019, pp. 23–28; Kubo Mačák, “Strengthening the Rule of Law in Time of War: An IHL Perspective on the Present and Future of the Articles on State Responsibility”, *EJIL: Talk!*, 6 August 2021, available at: [www.ejiltalk.org/strengthening-the-rule-of-law-in-time-of-war-an-ihl-perspective-on-the-present-and-future-of-the-articles-on-state-responsibility/](http://www.ejiltalk.org/strengthening-the-rule-of-law-in-time-of-war-an-ihl-perspective-on-the-present-and-future-of-the-articles-on-state-responsibility/) (all internet references were accessed in October 2021).

10 International Law Commission (ILC), *Draft Articles on the Responsibility of States for Internationally Wrongful Acts*, 2001, Art. 10.

attention mainly in its guise as a form of financing for [NSAGs]”.<sup>11</sup> The United Nations Environment Programme (UNEP) notes that “at least forty percent of all [NIACs] over the last sixty years have a link to natural resources”,<sup>12</sup> and specifies that

[s]ince 1990, at least eighteen civil wars have been fuelled by natural resources: diamonds, timber, oil, minerals and cocoa have been exploited in internal conflicts in countries such as the Democratic Republic of Congo, Côte d’Ivoire, Liberia, Sierra Leone, Angola, Somalia, Sudan, Indonesia and Cambodia.<sup>13</sup>

Poaching and hunting may also constitute another source of financing for NSAGs. It has been reported that

a range of NSAGs, including the LRA [Lord’s Resistance Army] and the Janjaweed, are significantly involved in elephant poaching in the Garamba National Park of north-eastern DRC [Democratic Republic of the Congo]. The evidence suggests that these groups are involved with the actual poaching of the animals, following which they trade the ivory for supplies and funds.<sup>14</sup>

In addition, the LRA launched attacks inside the Garamba Park and killed park rangers.<sup>15</sup> These practices can result in the significant decline of wildlife populations. For example,

[d]uring the 15-year civil war in Mozambique, the Gorongosa National Park lost more than 90% of its animals. ... The elephant population declined from 2,000 to 200, as elephants’ meat was used to feed soldiers and their ivory sold to finance the purchase of weapons, ammunition and supplies.<sup>16</sup>

The conduct of hostilities can cause significant environmental damage, in particular when it takes place in urban areas.<sup>17</sup> The use of explosive weapons in urban areas is notably concerning for the environment, as it “creates vast quantities of debris and

11 M. Lehto, above note 9, p. 9.

12 UNEP, above note 2, p. 10.

13 *Ibid.*, p. 8.

14 Gus Waschefort, “Wild Fauna and Flora Protection”, in Robin Geiß and Nils Melzer (eds), *The Oxford Handbook of the International Law of Global Security*, Oxford University Press, Oxford, 2021, p. 618.

In 2013, the UN Secretary-General held that the “illegal ivory trade may currently constitute an important source of funding for armed groups, including [the] LRA”. See UN Security Council, *Report of the Secretary-General on the Activities of the United Nations Regional Office for Central Africa and on the Lord’s Resistance Army-Affected Areas*, UN Doc. S/2013/297, 20 May 2013, para. 9.

15 Sandesh Sivakumaran, *The Law of Non-International Armed Conflict*, Oxford University Press, Oxford, 2012, p. 528.

16 ICRC, “Natural Environment: Neglected Victim of Armed Conflict”, 5 June 2019, available at: [www.icrc.org/en/document/natural-environment-neglected-victim-armed-conflict](http://www.icrc.org/en/document/natural-environment-neglected-victim-armed-conflict).

17 See, for example, *Joint Urban Operations*, US Joint Publication 3-06, 20 November 2013, p. III-11, section m(1)(b), cited in Emanuela-Chiara Gillard, *Proportionality in the Conduct of Hostilities: The Incidental Harm Side of the Assessment*, Chatham House, 2018, p. 48. “In urban concentrations of people and infrastructure, the potential for serious environmental consequences is typically greater than in less populated areas.”

rubble, which can cause air and soil pollution”.<sup>18</sup> In 2019, Action on Armed Violence “recorded 44 different non-State actors using explosive weapons”.<sup>19</sup> The biggest non-State users of explosive weapons were the so-called Islamic State (IS), the Ukrainian separatists, the Taliban, the Houthi rebels and the Haftar forces.<sup>20</sup> The prevailing category of explosive weapons used by NSAGs were improvised explosive devices, a large proportion of which were deployed in urban areas.<sup>21</sup>

The use of landmines by NSAGs is also well documented. Between 2003 and 2004, “it was found that 60 armed groups allegedly used landmines in 21 countries”.<sup>22</sup> In 2019, “Landmine Monitor identified new use of antipersonnel mines by NSAGs in Afghanistan, India, Myanmar, Nigeria, Pakistan, and Yemen”.<sup>23</sup> The use of landmines is concerning for the environment; indeed, they

have killed and maimed large numbers of specimens of wildlife and domestic species worldwide. Landmines set in motion a series of events leading to environmental degradation in the forms of soil degradation, deforestation, pollution of water resources with heavy metals and possibly altering entire species’ populations by degrading habitats and altering food chains.<sup>24</sup>

Finally, certain tactics of warfare employed by NSAGs have caused varying degrees of environmental damage. The Revolutionary Armed Forces of Colombia have strapped bombs to donkeys or horses to conduct attacks.<sup>25</sup> Serious environmental consequences resulted from the scorched earth tactic employed by IS when it was forced to retreat as the Iraqi forces, supported by an international coalition, advanced.<sup>26</sup> In 2016, the group set ablaze nineteen oil wells near Mosul, creating vast toxic fumes which poisoned the surrounding environment and the local

18 Conflict and Environment Observatory (CEOBS), “How Does War Damage the Environment?”, 4 June 2020, available at: <https://ceobs.org/how-does-war-damage-the-environment/>.

19 Jennifer Dathan, *Explosive Violence Monitor 2019*, Action on Armed Violence, London, 2020, p. 16.

20 *Ibid.*

21 *Ibid.*, p. 28. On the use of explosive weapons by NSAGs, see also Maya Brehm, “The Use of Explosive Weapons in Populated Areas in 2012”, in Stuart Casey-Maslen (ed.), *The War Report: 2012*, Oxford University Press, Oxford, 2013; United Nations Institute for Disarmament Research, *Addressing Improvised Explosive Devices: Options and Opportunities to Better Utilize UN Processes and Actors*, Geneva, 2015.

22 Anki Sjöberg, “The Involvement of Armed Non-State Actors in the Landmine Problem: A Call for Action”, executive summary, Geneva Call, Geneva, 2004, p. 13.

23 International Campaign to Ban Landmines – Cluster Munition Coalition (ICBL-CMC), *Landmine Monitor 2019*, 2019, p. 11.

24 Claudio Torres-Nachón, “Environmental Aspects of the International Crisis of Antipersonnel Landmines and the Implementation of the 1997 Mine Ban Treaty”, in ICBL-CMC, *Landmine Monitor 2000*, 2000, available at: [www.hrw.org/reports/2000/landmines/LMWeb-54.htm#TopOfPage](http://www.hrw.org/reports/2000/landmines/LMWeb-54.htm#TopOfPage).

25 See Carmen M. Cusack, *Animals and Criminal Justice*, Routledge, New York, 2017, p. 209; “Police: Bombs Tied to Donkeys Kill 2, Wound 6”, *NBC News*, 12 September 2009, available at: [www.nbcnews.com/id/wbna32809264](http://www.nbcnews.com/id/wbna32809264).

26 See Wim Zwijnenburg and Foeke Postma, *Living Under a Black Sky: Conflict Pollution and Environmental Health Concerns in Iraq*, PAX, Utrecht, 2017.

population.<sup>27</sup> Boko Haram uses Lake Chad’s “wetlands for shelter to launch attacks”,<sup>28</sup> and

has resorted to using natural resources as a weapon and part of their strategy of violence. They have poisoned water sources such as wells and streams in areas where they were dislodged by state troops, making water use dangerous for both humans and livestock.<sup>29</sup>

## The doctrine of non-State armed groups: Guardians of the environment?

Doctrine refers to

all standard principles that guide the action of arms carriers at strategic, operational and tactical levels, independently of the forms these principles take. It therefore encompasses all directives, policies, procedures, codes of conduct, reference manuals and rules of engagement – or their equivalents – that serve to educate, train and guide arms carriers during their careers, giving them a common vocabulary and shaping the decision-making process, tactics and behaviour in operations.<sup>30</sup>

The doctrine of NSAGs sheds light on their position regarding the environment. It allows us to understand the environmental rules that they have decided to adopt. Analyzing NSAG doctrine is also relevant for engaging these groups on the protection of the environment. When NSAGs share their doctrine externally, accountability for violations can be required. If the doctrine falls short of their environmental legal obligations, it still represents an entry point for engaging them on the adoption of standards consistent with applicable law.<sup>31</sup>

The National Movement for the Liberation of Azawad (Mouvement National de Libération de l’Azawad, MNLA) has expressed a general commitment to observe IHL rules protecting the natural environment. The “Texte organique pour l’organisation et la réglementation des forces armées du MNLA” requires “regional commanders, including senior officers responsible for the supervision, training and operations of MNLA forces ...[,] to ensure that IHL

27 “IS Oil Wells Set on Fire as Iraqi Troops Approach Mosul”, *BBC News*, 6 November 2016, available at: [www.bbc.com/news/av/world-middle-east-37891389](http://www.bbc.com/news/av/world-middle-east-37891389).

28 Katharina Nett and Lukas Rüttinger, *Insurgency, Terrorism and Organised Crime in a Warming Climate: Analysing the Links between Climate Change and Non-State Armed Groups*, Climate Diplomacy, Berlin, 2016, p. 12.

29 *Ibid.*, p. 18.

30 ICRC, *Handbook on International Rules Governing Military Operations*, Geneva, 2013, pp. 30–31.

31 On the importance of NSAG doctrine, see, for example, Anne Quintin and Marie-Louise Tougas, “Generating Respect for the Law by Non-State Armed Groups: The ICRC’s Role and Activities”, in Ezequiel Heffes, Marcos D. Kotlik and Manuel J. Ventura (eds), *International Humanitarian Law and Non-State Actors*, Asser Press, The Hague, 2020, pp. 359–366; Jonathan Somer, “Environmental Protection and Non-State Armed Groups: Setting a Place at the Table for the Elephant in the Room”, *CEOBS*, 4 December 2015, available at: <https://ceobs.org/environmental-protection-and-non-state-armed-groups-setting-a-place-at-the-table-for-the-elephant-in-the-room/>; ICRC, “A Collection of Codes of Conduct Issued by Armed Groups”, *International Review of the Red Cross*, Vol. 93, No. 882, 2011, pp. 483–486.

rules are respected during military operations, in particular in relation to ‘... the environment’”.<sup>32</sup>

The doctrine of some NSAGs includes absolute prohibitions protecting the environment. The Rules for the Conduct of War of the Kurdistan Workers Party (Partiya Karkerên Kurdistanê, PKK) state that “[f]orests will not be burned or otherwise destroyed”<sup>33</sup> and that “[w]eapons that burn, such as napalm, lava, and phosphorous, or create destruction to humans, plants, animals and the ecological balance shall not be used”.<sup>34</sup> The Guidelines on the Code of War of the Chin National Front (CNF) hold that “[t]he use of weapons and technologies that can damage the environment for a very long period of time must be avoided”.<sup>35</sup> On the other hand, the National Liberation Army of Colombia adopted a qualified provision to refrain from damaging the environment; according to its Code of War, “acts of sabotage shall, *as far as possible*, avoid causing environmental damage”.<sup>36</sup>

Some NSAGs have committed to protecting the environment with the aim of preserving it for future generations. The Ogaden National Liberation Front (ONLF) has affirmed that it “shall confront all initiatives, which negatively impact our environment as a matter of national duty to protect our environment for future generations”.<sup>37</sup> Other NSAGs have combined the protection of posterity with the preservation of wildlife. According to a resolution of the Sudan People’s Liberation Movement/Army (SPLM/A), the group “shall do everything to ... protect and develop [our wildlife resources] for us and for posterity”.<sup>38</sup> The decline of rhinos and other wildlife populations in the DRC prompted the commitment of the LRA to do “whatever possible to live in harmony with the animals, and to act as their curators, and do everything possible to see that they are not harmed for posterity”.<sup>39</sup> During peace talks with Uganda, the head of the LRA delegation said that “the statistics we were shown were devastating and shocked us”.<sup>40</sup> The LRA representative also signed a pact assuring rangers of the Garamba park that, “provided they properly identify themselves and not attack us, we undertake to fully cooperate with them”.<sup>41</sup> Despite its commitment to protecting endangered species and collaborating with park rangers, however, the LRA “continued to launch attacks inside the park and kill rangers, as well as poaching elephants to finance operations”.<sup>42</sup>

32 Pascal Bongard, *From Words to Deeds: A Research Study of Armed Non-State Actors’ Practice and Interpretation of International Humanitarian and Human Rights Norms: The National Movement for the Liberation of Azawad, Mali*, Geneva Academy of International Humanitarian Law and Human Rights (Geneva Academy), Geneva, 2021, pp. 14–15.

33 As cited in J. Somer, above note 31.

34 *Ibid.*

35 *Ibid.*

36 *Ibid.* (emphasis added).

37 *Ibid.*

38 *Ibid.*

39 *Ibid.*

40 “Wanted Rebels Pledge to Save Rhinos”, *Al Jazeera*, 21 August 2006, available at: [www.aljazeera.com/news/2006/8/21/wanted-rebels-pledge-to-save-rhinos/](http://www.aljazeera.com/news/2006/8/21/wanted-rebels-pledge-to-save-rhinos/); S. Sivakumaran, above note 15, p. 528.

41 *Ibid.*

42 J. Somer, above note 31; see also S. Sivakumaran, above note 15, p. 528.

The example of the LRA shows that there can be a gap between the doctrine of NSAGs and their actual practice. According to Bangerter, the effectiveness of codes of conduct – as a form of doctrine – depends on many factors, including the existence of complementary measures such as “dissemination, training and sanctions”.<sup>43</sup> Bangerter has highlighted three additional factors that need to be taken into consideration. First, “codes of conduct are aspirational”.<sup>44</sup> This means that they are “not a description of *what is*, but of what *should be*, what the group *wants to be*”.<sup>45</sup> The fact that environmental protection is part of an NSAG’s doctrine may signify that the group’s leadership recognizes it as a challenge in terms of members’ behaviour, rather than a reflection of the group’s “ability to successfully prevent such acts from ever taking place”.<sup>46</sup> Second, individual fighters do not always follow group rules.<sup>47</sup> Third, an NSAG may “be blamed for acts committed by people whom it does not control”.<sup>48</sup> It is notably acknowledged that “the underlying evidence linking NSAGs to poaching is often more tentative than may be thought”,<sup>49</sup> and that in some contexts “[p]oachers do not belong to [NSAGs] but are rather related to criminal networks”.<sup>50</sup>

In conclusion, failing to consider the role of NSAGs regarding environmental protection in NIACs would miss an important part of the equation. On the one hand, NSAGs are part of the problem, as they have proven to be perpetrators of environmental damage in many cases. On the other hand, a study of their doctrines reveals that at least some of them are not indifferent to the environment. However, the doctrines of NSAGs express different standards of environmental protection. It is thus important to identify the legal and policy framework for engaging them on this matter.

## **The legal framework: Environmental obligations under international humanitarian law**

In 2020, the International Committee of the Red Cross (ICRC) released the updated *Guidelines on the Protection of the Natural Environment in Armed Conflict* (ICRC Guidelines).<sup>51</sup> The ICRC Guidelines set down a concise commentary of the IHL rules protecting the natural environment, “more than half” of which reflect

43 Olivier Bangerter, *Internal Control: Codes of Conduct within Insurgent Armed Groups*, Small Arms Survey, Graduate Institute of International and Development Studies, Geneva, 2012, p. 28. These measures are addressed in more detail below.

44 *Ibid.*, p. 36.

45 *Ibid.*

46 *Ibid.*

47 *Ibid.*, pp. 36–37.

48 *Ibid.*, p. 37.

49 G. Waschefort, above note 14, p. 617.

50 *Ibid.*, p. 618.

51 ICRC Guidelines, above note 1.

obligations for NSAGs.<sup>52</sup> The purpose of this section is to identify these rules and discuss the main issues arising from their application by NSAGs, in light of these groups' actual practice and doctrine.

NSAGs are bound by IHL,<sup>53</sup> no matter the content of their doctrine.<sup>54</sup> Under customary IHL, the natural environment is a civilian object to which the general rules on the conduct of hostilities apply.<sup>55</sup> Consequently, the principle of distinction prohibits the direct – or indiscriminate – targeting of the environment, unless and for such time as it meets all the constitutive elements of a military objective.<sup>56</sup> The absolute prohibition against burning forests enshrined in the PKK Rules for the Conduct of War thus goes beyond the law, as a part of a forest could be burned if it were to become a military objective under IHL.

Even when a legitimate objective is targeted, the principle of proportionality prohibits launching an attack “which may be expected to cause incidental damage to the environment which would be excessive in relation to the concrete and direct military advantage anticipated”.<sup>57</sup> The scope of incidental damage to be taken into account includes the indirect effects of the attack on the environment which are “reasonably foreseeable”.<sup>58</sup> For example, an NSAG planning an attack on a military base close to a river “should ask questions such as, is the river used as drinking water for nearby communities, is there sensitive fish habitat in the river, [and] what would the impact of harmful chemicals be on water quality over the longer term”.<sup>59</sup>

The question that arises is how to assess whether an attack is excessive or not. It is acknowledged that “in order to satisfy the requirement of proportionality, attacks against military targets which are known or can reasonably be assumed to cause grave environmental harm may need to confer a very substantial military advantage in order to be considered legitimate”.<sup>60</sup> A straightforward example of a disproportionate attack would be the burning of “an entire forest to reach a single minor target”.<sup>61</sup> However, striking a balance between a military advantage and incidental environmental damage may be more difficult in less clear-cut

52 Vanessa Murphy and Helen Obregón Gieseken, “Fighting Without a Planet B: How IHL Protects the Natural Environment in Armed Conflict”, *Humanitarian Law and Policy Blog*, 25 May 2021, available at: <https://blogs.icrc.org/law-and-policy/2021/05/25/fighting-without-planet-b/>.

53 ICRC, *Commentary on the Third Geneva Convention: Convention (III) relative to the Treatment of Prisoners of War*, 2nd ed., Geneva, 2020 (ICRC Commentary on GC III), para. 551.

54 ICRC, above note 31, p. 484.

55 Jean-Marie Henckaerts and Louise Doswald-Beck (eds), *Customary International Humanitarian Law*, Vol. 1: *Rules*, Cambridge University Press, Cambridge, 2005 (ICRC Customary Law Study), Rule 43, available at: [https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1\\_rul](https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul). On the civilian character of the natural environment, see ICRC Guidelines, above note 1, pp. 19–21, paras 18–21.

56 ICRC Customary Law Study, above note 55, Rules 11, 43(A).

57 *Ibid.*, Rule 43(C).

58 ICRC Guidelines, above note 1, p. 56, para. 117.

59 Ahmed Al-Dawoody and Sarah Gale, “Protection of the Environment and Non-State Armed Groups: IHL and Islamic Law Perspectives”, *Armed Groups and International Law*, 6 November 2020, available at: <https://armedgroups-internationallaw.org/2020/11/06/protection-of-the-environment-and-non-state-armed-groups-ihl-and-islamic-law-perspectives/>.

60 ICTY, *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia*, 13 June 2000, para. 22.

61 UNEP, above note 2, p. 13.

scenarios, as “[t]here is no precise formula”<sup>62</sup> for such a calculation. Some consider that the proportionality assessment “inevitably involves subjective value judgments”.<sup>63</sup> Consequently, incidental damage to the environment is likely to carry more weight for NSAGs fighting “for the rights of national, ethnic or religious minorities, which often include an environment, natural resources or ‘homeland protection’ aspect”,<sup>64</sup> compared to those exclusively seeking to weaken their enemy’s military force.

Pursuant to the principle of precautions, NSAGs must take “constant care” to spare the natural environment in the conduct of military operations, which includes troop movements and manoeuvres.<sup>65</sup> The principle of precautions in attack requires NSAGs to take “all feasible precautions ... to avoid, and in any event to minimize”, incidental damage to the natural environment, notably through their choice of means and methods of warfare.<sup>66</sup> Before an attack, an NSAG must do everything feasible to ascertain that a part of the natural environment targeted qualifies as a military objective, and to assess whether an attack against another legitimate objective may be expected to cause excessive incidental damage to the natural environment.<sup>67</sup> During an attack, if the part of the natural environment directly targeted proves to be mistakenly regarded as a military objective, or the incidental damage to the environment is disproportionate, the NSAG “must do everything feasible to cancel or suspend the attack”.<sup>68</sup> An NSAG which has a part of the natural environment under its control must, as a defending party, “take all feasible precaution to protect [it] against the effects of attacks”.<sup>69</sup>

Some NSAGs have reported that, based on their proportionality assessment, “a decision is made with regards to whether to proceed or not, and if so, to plan the attack in such a way as to minimize collateral damage to civilians and, in one case, to the environment”.<sup>70</sup> However, collecting information to ascertain the military nature of a targeted part of the environment, predicting the direct and reverberating consequences of an attack to the environment and ultimately minimizing such consequences may be practically challenging for NSAGs, in particular those with limited capabilities.<sup>71</sup> Legally speaking, every NSAG is bound by the principles of proportionality and precaution, which means that every NSAG has to make such an assessment when planning and conducting an attack. However, an NSAG’s respect for these principles, or lack thereof, is

62 ICRC Guidelines, above note 1, p. 57, para. 121.

63 Marco Sassòli, *International Humanitarian Law: Rules, Controversies, and Solutions to Problems Arising in Warfare*, Edward Elgar, Cheltenham, 2019, p. 362.

64 Pascal Bongard, cited in Kira Walker, “Can Militant Groups Be Environmentalists?”, *World Politics Review*, 29 April 2020, available at: [www.worldpoliticsreview.com/articles/28718/the-case-for-engaging-with-militant-groups-to-protect-the-environment](http://www.worldpoliticsreview.com/articles/28718/the-case-for-engaging-with-militant-groups-to-protect-the-environment).

65 ICRC Customary Law Study, above note 55, Rule 15; ICRC Guidelines, above note 1, p. 58, para. 126.

66 ICRC Customary Law Study, above note 55, Rules 15, 17.

67 *Ibid.*, Rules 16, 18.

68 *Ibid.*, Rule 19.

69 *Ibid.*, Rule 22.

70 Geneva Call, *In Their Words: Six Armed Non-State Actors Share Their Policies and Practice with Regards to Protecting Civilians from Explosive Weapons*, Geneva, 2017, p. 5.

71 A. Al-Dawoody and S. Gale, above note 59.

conditioned by what the group can materially comply with in practice.<sup>72</sup> The “feasible” nature of precautions indicates that they may “vary depending on factors such as ... the situation and capabilities of the parties to the conflict, the resources, methods and means available, and the type, likelihood and severity of the expected incidental civilian harm, including harm to the natural environment”.<sup>73</sup> What matters is whether the NSAG has exhausted all the available means when assessing environmental damage.<sup>74</sup>

The means and methods of warfare that NSAGs may employ are not unrestricted. In terms of methods (i.e., tactics), for example, the starvation of the civilian population is prohibited.<sup>75</sup> A corollary to this rule is the prohibition against “attack[ing], destroy[ing], remov[ing] or render[ing] useless, for that purpose, objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works”.<sup>76</sup> The latter represent “natural elements that are or may be the product of human intervention”, which are by definition part of the natural environment.<sup>77</sup> The incidental effects of hostilities on the environment are also indirectly inhibited by the prohibition against attacking works or installations containing dangerous forces (such as dams and nuclear power stations) if such attacks “may cause the release of dangerous forces and consequent severe losses among the civilian population”.<sup>78</sup> Finally, attacks against the natural environment by way of reprisal are prohibited.<sup>79</sup>

The regulation of means of warfare (i.e., weapons) also provides indirect protection to the environment, because of the inherent capacity of those means to cause extensive environmental damage. Accordingly, all NSAGs are prohibited from using weapons that are by nature indiscriminate,<sup>80</sup> as well as poisonous,<sup>81</sup> biological<sup>82</sup> or chemical weapons.<sup>83</sup> The use of herbicides,<sup>84</sup> landmines<sup>85</sup> and incendiary weapons<sup>86</sup> is also restricted for all NSAGs. An NSAG engaged in a NIAC against a State party to the relevant weapon treaty may be bound by additional

72 On the contextual factors influencing the application of the principle of proportionality, see ICRC, *The Principle of Proportionality in the Rules Governing the Conduct of Hostilities under International Humanitarian Law*, report of the International Expert Meeting, Geneva, 2016, pp. 60–62.

73 ICRC Guidelines, above note 1, p. 59, para. 129.

74 *Ibid.*, paras 129–130.

75 ICRC Customary Law Study, above note 55, Rule 53; Protocol Additional (II) to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts, 1125 UNTS 609, 8 June 1977 (entered into force 7 December 1978) (AP II), Art. 14.

76 AP II, Art. 14; ICRC Customary Law Study, above note 55, Rule 54.

77 ICRC Guidelines, above note 1, p. 18, para. 16.

78 AP II, Art. 15; ICRC Customary Law Study, above note 55, Rule 42.

79 ICRC Customary Law Study, above note 55, Rule 148.

80 *Ibid.*, Rule 71.

81 *Ibid.*, Rule 72.

82 *Ibid.*, Rule 73.

83 *Ibid.*, Rule 74.

84 *Ibid.*, Rule 76.

85 *Ibid.*, Rules 81, 83.

86 *Ibid.*, Rules 84–85.

restrictions in the use of incendiary weapons<sup>87</sup> and landmines,<sup>88</sup> and by positive obligations aiming to minimize the impact of explosive remnants of war.<sup>89</sup> IHL does not prohibit *per se* the use of explosive weapons. However, whether their deployment can comply with the general rules on the conduct of hostilities, particularly in populated areas, raises “serious questions”.<sup>90</sup> In the ICRC’s view, “explosive weapons with a wide impact area should be avoided in densely populated areas”.<sup>91</sup>

Rules on the treatment of persons not or no longer taking a direct part in hostilities may also provide indirect protection to the natural environment. Environmental damage amounting to violence to their lives and persons, as well as any form of ill-treatment, is absolutely prohibited.<sup>92</sup> Environmental damage which would *de facto* result in the displacement of the civilian population is also prohibited.<sup>93</sup>

In addition to the prohibition against attacking objects indispensable to the survival of the civilian population and works and installations containing dangerous forces mentioned above, the respect of certain other specially protected objects represents indirect environmental obligations for NSAGs. Parts of the environment may qualify as cultural property benefiting from special protection.<sup>94</sup> The natural environment forming part of non-defended localities or demilitarized zones is also protected against attacks.<sup>95</sup>

Environmental protection is also provided by rules governing enemy property. The destruction or seizure of property of an adversary, including parts of the natural environment such as natural resources, is prohibited, unless required by imperative military necessity.<sup>96</sup> The necessity must be of a *military* nature, which means that destruction or seizure must be necessary to achieve the only legitimate aim during an armed conflict—that is, “to weaken the military forces of the enemy”.<sup>97</sup> Other necessities based on “political, economic, diplomatic or personal considerations”<sup>98</sup> are excluded. Consequently, it would not be justified to destroy or seize any part of the natural environment in order to finance the armed conflict.<sup>99</sup> The destruction or seizure of a part of the natural environment qualifying as a military objective would *a fortiori* be lawful.<sup>100</sup> In

87 ICRC Guidelines, above note 1, Rule 23.

88 *Ibid.*, Rule 24

89 *Ibid.*, Rule 25.

90 ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts*, Geneva, 2019, pp. 20–21.

91 *Ibid.*

92 Article 3 common to the four Geneva Conventions; AP II, Art. 4.

93 AP II, Art. 17; ICRC Customary Law Study, above note 55, Rule 129(B).

94 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, 249 UNTS 215, 14 May 1954 (entered into force 7 August 1956), Art. 1; AP II, Art. 16; ICRC Customary Law Study, above note 55, Rule 38; ICRC Guidelines, above note 1, Rule 12.

95 ICRC Customary Law Study, above note 55, Rules 36–37.

96 *Ibid.*, Rules 43(B), 50.

97 Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight, Saint Petersburg, 29 November/11 December 1868.

98 Sigrid Redse Johansen, *The Military Commander’s Necessity*, Cambridge University Press, Cambridge, 2019, p. 27.

99 Daniëlla Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations*, Cambridge University Press, Cambridge, 2015, p. 226.

100 S. R. Johansen, above note 98, p. 348.

addition, the rule applies to “operations not amounting to attacks”, such as during “military movements and manoeuvres”.<sup>101</sup> For example, imperative military necessity may authorize chopping down a section of trees, either to provide construction material for military barracks<sup>102</sup> or because the trees are preventing access to the only safe location in which to establish a military camp.<sup>103</sup>

Contrary to the prohibition against destruction or seizure, the prohibition against pillage<sup>104</sup> requires appropriation “for private or personal use”.<sup>105</sup> The act of pillage covers the appropriation of parts of the natural environment constituting private or public property, including natural resources, without the consent of the owner, and in violation of IHL.<sup>106</sup> As the owner of natural resources will most often be the State, the State will never, by definition, commit pillage. It can thus be considered that the prohibition of pillage as applicable in NIACs is discriminatory against NSAGs.<sup>107</sup>

If the latter two rules apply to the exploitation of natural resources, it is concerning from a humanitarian perspective that an NSAG would be prevented from exploiting natural resources for the benefit of the civilian population under its control because it would either violate the prohibition against destruction and seizure, or amount to pillage. One suggested solution is to apply a specific provision of the law of occupation by analogy.<sup>108</sup> According to Article 55 of the Hague Regulations, the Occupying Power is designated

as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct.<sup>109</sup>

The rules of usufruct “allow the occupying power to use and to own the fruits or proceeds of immovable public property but not to use the underlying capital, or substance, of such property”;<sup>110</sup> this permits “reasonable exploitation [of natural resources] if it takes place at the same rate as before the occupation began”.<sup>111</sup> Applying the rules of usufruct by analogy to NSAGs exercising territorial control has the advantage of providing “a legal basis for natural resource exploitation to [NSAGs] as *de facto* authorities without undermining the fabric of State

101 *Ibid.*, p. 346.

102 US Department of Defense, *Law of War Manual*, 2016, para. 5.17.2.2.

103 ICRC Guidelines, above note 1, p. 75, para. 180.

104 ICRC Customary Law Study, above note 55, Rule 52.

105 International Criminal Court, *Elements of Crimes*, Art. 8(2)(e)(v).

106 ICRC Guidelines, above note 1, p. 76, para. 183.

107 M. Sassòli, above note 63, p. 294.

108 Daniëlla Dam-de Jong, “Between Paradox and Panacea: Legalizing Exploitation of Natural Resources by Armed Groups in the Fight against Conflict Resources”, *Armed Groups and International Law*, 18 June 2019, available at: <https://armedgroups-international.org/2019/06/18/between-paradox-and-panacea-legalizing-exploitation-of-natural-resources-by-armed-groups-in-the-fight-against-conflict-resources/>.

109 Hague Convention (IV) respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land, 205 CTS 227, 18 October 1907 (entered into force 26 January 1910), Art. 55.

110 M. Sassòli, above note 63, p. 332.

111 *Ibid.*

sovereignty”.<sup>112</sup> This attractive solution comes up against the fact that in NIACs, “neither territory seized by insurgents nor that retained or regained by the incumbent Government can be tagged as subject to belligerent occupation”.<sup>113</sup>

Other customary rules are only “arguably” applicable in NIACs, and it is therefore unclear whether they are binding on NSAGs. This includes the obligation of “due regard” for the natural environment in military operations,<sup>114</sup> the prohibition of “widespread, long-term and severe damage to the natural environment”,<sup>115</sup> and the prohibition of using the destruction of the natural environment as a weapon.<sup>116</sup> In light of the current trend towards greater environmental protection, even if these rules may not be part of customary IHL yet, they are likely to become so in the future.<sup>117</sup> It should be noted that the CNF Guidelines establish a lower threshold than the IHL prohibition against causing serious damage to the natural environment, as they only require “long-term” damage to the environment rather than the three cumulative elements of “widespread, long-term and severe” damage under IHL.

The rules with uncertain customary status in NIACs may be brought into force by means of *ad hoc* commitments, such as the conclusion of special agreements under Article 3 common to the four Geneva Conventions, or unilateral declarations including those provided under Article 96(3) of Additional Protocol I (AP I) in the case of national liberation wars as defined in Article 1(4) of AP I.<sup>118</sup> It is therefore encouraged that NSAGs bring into force additional rules protecting the environment through the conclusion of *ad hoc* commitments, either unilaterally or with other belligerent parties.<sup>119</sup> The ICRC and the International Law Commission (ILC) have notably recommended that such agreements designate “areas of major environmental importance” as demilitarized zones or non-defended localities.<sup>120</sup>

## **The policy framework: Environmental responsibilities under international human rights law and international environmental law**

### Environmental responsibilities under international human rights law

While the continued applicability of IHRL in armed conflict is uncontroversial,<sup>121</sup> whether and to what extent it is binding on NSAGs as a matter of law remains

112 D. Dam-de Jong, above note 108.

113 Yoram Dinstein, *The International Law of Belligerent Occupation*, 2nd ed., Cambridge University Press, Cambridge, 2019, pp. 37–38.

114 ICRC Customary Law Study, above note 55, Rule 44.

115 *Ibid.*, Rule 45.

116 *Ibid.*

117 *Ibid.*, commentary on Rule 45; S. Sivakumaran, above note 15, p. 527.

118 Protocol Additional (I) to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, 1125 UNTS 3, 8 June 1977 (entered into force 7 December 1978) (AP I), Arts 1(4), 96(3).

119 ICRC Guidelines, above note 1, Recommendation 18.

120 *Ibid.*, Recommendation 17, pp. 82–83; ILC, *Draft Principles on the Protection of the Environment in Relation to Armed Conflicts*, UN Doc. A/CN.4/L.937, 6 June 2019, Principle 4.

121 See S. Sivakumaran, above note 15, pp. 83–86.

unsettled.<sup>122</sup> In light of recent practice,<sup>123</sup> “it seems accepted that armed groups that exercise territorial control and fulfil government-like functions thereby incur responsibilities under [IHRL]”.<sup>124</sup> The purpose of this section is not to rehearse the practice and debate surrounding this issue, but rather to address the environmental responsibilities of NSAGs under IHRL as a matter of policy.

IHRL can contribute to the protection of the environment by covering areas not addressed by the IHL of NIACs, such as through the protection of minorities or the right to an effective remedy, as discussed below. When both IHL and IHRL apply simultaneously to a particular issue, the two bodies of law are “complementary” and “mutually reinforcing”.<sup>125</sup> For example, the right to health under IHRL<sup>126</sup> can complement the IHL obligations to protect and care for the wounded and sick,<sup>127</sup> as it “addresses medical needs which are independent from the armed conflict as such, and extends to healthy people as well as those who are already sick”.<sup>128</sup> This discussion is important not only for the protection of the environment as such, but also for the “60 to 80 million people [living] under the direct State-like governance of armed groups”,<sup>129</sup> who may suffer from environmental harm without benefiting from the protection of the territorial State.

Two approaches to environmental protection under IHRL can be discerned. The approach generally adopted by human rights bodies consists of identifying specific human rights within the IHRL framework that protect the environment, including civil and political rights such as the right to life, as well as economic, social and cultural rights, such as the rights to an adequate standard of living, of minority groups to enjoy their own culture and traditional practices, and to health, housing and family.<sup>130</sup> For instance, in its General Comment No. 36, the Human Rights Committee (HRC) reiterates the adverse impact of environmental degradation on the enjoyment of the right to life, and lists environmental measures that should be implemented to “respect and ensure” this right.<sup>131</sup> The jurisprudence of the HRC also indicates that States have the

122 ICRC Commentary on GC III, above note 53, para. 551.

123 See, for example, UN Office of the High Commissioner for Human Rights (UN Human Rights), “Joint Statement by Independent United Nations Human Rights Experts on Human Rights Responsibilities of Armed Non-State Actors”, 25 February 2021, Geneva, available at: [www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26797&LangID=E](http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26797&LangID=E); Annysa Bellal, *Human Rights Obligations of Armed Non-State Actors: An Exploration of the Practice of the UN Human Rights Council*, Geneva Academy, Geneva, 2016.

124 ICRC Commentary on GC III, above note 53, para. 551.

125 Jann K. Kleffner, “Human Rights in Armed Conflict”, in Dieter Fleck (ed.), *The Handbook of International Humanitarian Law*, 4th ed., Oxford University Press, Oxford, 2021, p. 451.

126 International Covenant on Economic, Social and Cultural Rights, 993 UNTS 3, 16 December 1966 (entered into force 3 January 1976) (ICESCR), Art. 12.

127 Common Article 3(2); AP II, Arts 7–8; ICRC Customary Law Study, above note 55, Rules 109–111.

128 Katharine Fortin, “The Application of Human Rights Law to Everyday Civilian Life under Rebel Control”, *Netherlands International Law Review*, Vol. 63, No. 2, 2016, p. 171.

129 ICRC, above note 4, p. 2.

130 UNEP, above note 2, pp. 48–50; ICRC Guidelines, above note 1, pp. 26–27.

131 HRC, General Comment No. 36, “Article 6: Right to Life”, UN Doc. CCPR/C/GC/36, 3 September 2019, para. 62.

obligation to protect the rights to life and to privacy, family and home against environmental degradations committed by third actors which are reasonably foreseeable, and leaves open the possibility that environmental degradation may amount to torture or to cruel, inhuman or degrading treatment.<sup>132</sup>

The second approach adopted by the United Nations (UN) Special Rapporteur on Human Rights and the Environment is to argue in favour of a broader right to a “safe, clean, healthy and sustainable environment”.<sup>133</sup> The related obligations are developed in the Framework Principles on Human Rights and the Environment.<sup>134</sup> The 16 principles are considered to represent “a reflection of actual or emerging [IHRL]”,<sup>135</sup> and refer to human rights obligations globally. For example, Principle 1 provides that “States should ensure a safe, clean, healthy and sustainable environment in order to respect, protect and fulfil human rights”.<sup>136</sup> This entails

refrain[ing] from violating human rights through causing or allowing environmental harm; protect[ing] against harmful environmental interference from other sources ...[;] and tak[ing] effective steps to ensure the conservation and sustainable use of the ecosystems and biological diversity on which the full enjoyment of human rights depends.<sup>137</sup>

The next step is to determine the scope of environmental responsibilities of NSAGs under IHRL. A pragmatic approach would not consider that all NSAGs should respect, protect and fulfil the entire scope of human rights. Rather, it is increasingly accepted that the scope should vary according to a “sliding scale”, based on an NSAG’s territorial control and related capacity.<sup>138</sup> As a starting point for this assessment, a distinction can be made between the negative obligation to respect human rights and the positive obligations to protect and fulfil human rights.<sup>139</sup> On the one hand, the obligation to respect consists of refraining “from interfering with or curtailing the enjoyment of human rights”,<sup>140</sup>

132 HRC, *Portillo Cáceres v. Paraguay*, Communication No. 2751/2016, UN Doc. CCPR/C/126/D/2751/2016, 20 September 2019.

133 John H. Knox, *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc. A/HRC/37/59, 24 January 2018.

134 *Ibid.*, “Framework Principles on Human Rights and the Environment”.

135 *Ibid.*, p. 3.

136 *Ibid.*, Framework Principle 1.

137 *Ibid.*, commentary on Framework Principles 1 and 2, pp. 7–8.

138 Tilman Rodenhäuser, *Organizing Rebellion: Non-State Armed Groups under International Humanitarian Law, Human Rights Law, and International Criminal Law*, Oxford University Press, Oxford, 2018, pp. 146–209; A. Bellal, above note 123; Geneva Call, *Positive Obligations of Armed non-State Actors: Legal and Policy Issues*, Geneva, 2015.

139 This approach has notably been adopted by Milanovic as regards the extraterritorial application of human rights treaties. Marko Milanovic, *Extraterritorial Application of Human Rights Treaties: Law, Principles, and Policy*, Oxford University Press, Oxford, 2011, pp. 209–219. The ICRC has also made a distinction between negative and positive obligations for the application of the law of occupation. ICRC Commentary on GC III, above note 53, para. 356.

140 UN Human Rights, “International Human Rights Law”, available at: [www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx](http://www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx).

which requires a group only to exercise control over the conduct of its members.<sup>141</sup> On the other hand, the obligation to protect entails “protect[ing] individuals and groups against human rights abuses”<sup>142</sup> and the obligation to fulfil necessitates taking “positive action to facilitate the enjoyment of basic human rights”.<sup>143</sup> These positive obligations require “a far greater degree of control over the area in question”.<sup>144</sup>

The distinction between positive and negative human rights obligations can be applied to two categories of NSAGs. The first category includes NSAGs acting as State-like entities, which means that they “exercise territorial control and fulfil government-like functions”.<sup>145</sup> The second category is residual and includes NSAGs that do not exercise territorial control, or those that exercise territorial control but only to a limited extent that does not allow them to fulfil government-like functions. While establishing intermediate categories is tempting from a theoretical point of view, it would be difficult to determine the scope of human rights responsibilities of NSAGs exercising varying degrees of territorial control.<sup>146</sup>

The first category of NSAGs acting as State-like entities should have human rights responsibilities akin to the human rights obligations of the territorial State.<sup>147</sup> For example, they should take specific measures to protect the right to health of the persons living under their control, and particularly of vulnerable groups. This requires “taking into consideration the dangers and risks of environmental pollution” for children’s health,<sup>148</sup> as well as protecting “[t]he vital medicinal plants, animals and minerals necessary to the full enjoyment of health of indigenous peoples”.<sup>149</sup> Pursuant to the general approach to environmental protection under IHRL, NSAGs acting as State-like entities should conduct a prior assessment of the environmental impact of their activities on the enjoyment of human rights<sup>150</sup> and provide effective remedies for human rights violations resulting from environmental harm.<sup>151</sup>

141 M. Milanovic, above note 139, p. 210.

142 UN Human Rights, above note 140.

143 *Ibid.*

144 M. Milanovic, above note 139, p. 210.

145 ICRC Commentary on GC III, above note 53, para. 551.

146 Rodenhäuser suggests three categories of NSAGs: “groups exercising quasi-governmental authority in defined territory; groups exercising de facto control over territory and population; [and] groups not exercising control over territory and population”. T. Rodenhäuser, above note 138, p. 148. See also Geneva Call, above note 138.

147 See T. Rodenhäuser, above note 138, p. 178. In addition to NSAGs exercising government-like functions, some have even argued that “armed non-State actors exercising ... *de facto* control over territory and population must respect and protect the human rights of individuals and groups”. See UN Human Rights, above note 123.

148 Convention on the Rights of the Child, 1577 UNTS 3, 20 November 1989 (entered into force 2 September 1990), Art. 24(2)(c).

149 Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 14, “Article 12: Right to the Highest Attainable Standard of Health”, UN Doc. E/C.12/2000/4, 11 August 2000, para. 27.

150 J. H. Knox, above note 133, Framework Principle 8.

151 *Ibid.*, Framework Principle 10.

Reasoning by analogy to States' obligations implies that the environmental responsibilities of such NSAGs deriving from economic, social and cultural rights should be subject to a progressive realization, taking into account the maximum of their available resources.<sup>152</sup> Likewise, NSAGs should be able to limit qualified civil and political rights provided that the limitation is justified. However, it is difficult to see how NSAGs could derogate from the provisions enshrined in human rights treaties and comply with the procedural obligation to notify the derogation,<sup>153</sup> as they cannot become parties to these instruments.

NSAGs that do not exercise territorial control, or that exercise territorial control but only to a limited extent that does not allow them to protect and fulfil human rights, should at least respect human rights. They should thus "refrain from violating human rights through causing or allowing environmental harm".<sup>154</sup> Respecting the right to health notably requires that parties "refrain from unlawfully polluting air, water and soil, ... [and] from using or testing nuclear, biological or chemical weapons if such testing results in the release of substances harmful to human health".<sup>155</sup> As noted above, the right to health under IHRL complements the IHL rules applicable in NIACs by extending to persons who are not wounded or sick. It can also be argued that this specific obligation is complementary to the IHL prohibition against using such weapons during the conduct of hostilities<sup>156</sup> and the prohibition against violence to life and person of those not or no longer directly participating in hostilities.<sup>157</sup> The complementarity approach between IHL and IHRL improves the protection of the environment in NIACs.

## Environmental responsibilities under international environmental law

In contrast to IHL and IHRL, IEL lays down obligations protecting the environment as such.<sup>158</sup> It is therefore important to raise the question of whether NSAGs should comply with this branch of law in order to enhance environmental protection in NIACs.

It is generally accepted that IEL, except for the treaties expressly providing otherwise, continues to apply in armed conflicts.<sup>159</sup> Whether it is binding upon NSAGs remains unexplored, however. Several arguments suggest that NSAGs could have IEL obligations. First, the World Charter for Nature, although not

152 ICESCR, Art. 2(1).

153 International Covenant on Civil and Political Rights (ICCPR), 999 UNTS 171, 16 December 1966 (entered into force 23 March 1976), Art. 4(3).

154 J. H. Knox, above note 133, commentary on Framework Principle 1, p. 6.

155 CESCR, above note 149, para. 34.

156 As discussed above. The Treaty on the Prohibition of Nuclear Weapons, 7 July 2017 (entered into force 22 January 2021), prohibits the use of nuclear weapons by States parties to the Treaty.

157 Common Article 3(1)(a).

158 Although it initially developed as an anthropocentric body of law. See, for example, the 1900 Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa which are Useful to Man or Inoffensive, or the 1902 Convention for the Protection of Birds Useful to Agriculture.

159 UNEP, above note 2, p. 52; ICRC Guidelines, above note 1, pp. 23–26.

legally binding, holds: “States and, to the extent they are able, other public authorities, international organizations, individuals, groups and corporations shall: [...] implement the applicable international legal provisions for the conservation of nature and the protection of the environment.”<sup>160</sup> Second, the legal theories explaining how IHL and IHRL bind NSAGs could be applied to IEL. Pursuant to the doctrine of legislative jurisdiction, an NSAG would be bound by the IEL obligations in force for the territorial State, because of the latter’s “competence to legislate for all natural and legal persons under its jurisdiction”.<sup>161</sup> For NSAGs acting as State-like entities, the same IEL obligations could devolve with “the exercise of *de facto* governmental functions”.<sup>162</sup> Finally, NSAGs could be bound by customary IEL should they possess the required international legal personality.<sup>163</sup>

This debate deserves a more detailed discussion than the length of this article allows. It is suggested that while NSAGs do not have obligations under IEL as a matter of law, the need to enhance environmental protection in NIACs means that NSAGs should have certain responsibilities under IEL as a matter of policy. This is not unrealistic, as some NSAGs have already included IEL principles in their doctrines. As mentioned above, the doctrines of the ONLF, the SPLM/A and the LRA provide for the protection of the environment with the aim of preserving it for future generations. This commitment relates to the IEL principle of intergenerational equity. According to this principle, “[the] present [generation] cannot leave the environment in a worse condition than it had for itself. [The principle] requires taking into consideration impacts of current activities on future generations ... to avoid irreversible environmental damage.”<sup>164</sup>

Similarly to what was submitted in the section on IHRL above, an approach based on negative and positive IEL obligations should apply to the two defined categories of NSAGs. This aligns with the IEL principle of common but differentiated responsibility, which establishes that although all States must participate in the protection of the environment, their obligations depend “on the level of their economic development, circumstances and capabilities”.<sup>165</sup>

For the first category of NSAGs acting as State-like entities, the scope of their IEL responsibilities would be comparable to the IEL obligations of the territorial State. If the latter is party to the Convention Concerning the Protection of the World Cultural and Natural Heritage, the NSAG should “set up within its territories, where such services do not exist, one or more services for the

160 UN General Assembly, World Charter for Nature, UN Doc. A/RES/37/7, 28 October 1982, para. 21(c).

161 Regarding IHRL, see T. Rodenhäuser, above note 138, p. 171. Regarding IHL, see Jann K. Kleffner, “The Applicability of International Humanitarian Law to Organized Armed Groups”, *International Review of the Red Cross*, Vol. 93, No. 882, 2011, pp. 445–449.

162 J. K. Kleffner, above note 161, pp. 451–454; T. Rodenhäuser, above note 138, pp. 172–176.

163 T. Rodenhäuser, above note 138, pp. 176–177; J. K. Kleffner, above note 161, pp. 454–456.

164 Svitlana Kravchenko, Tareq M. R. Chowdhury and Jahid Hossain Bhuiyan, “Principles of International Environmental Law”, in Shawkat Alam, Jahid Hossain Bhuiyan, Tareq M. R. Chowdhury and Erika J. Techera (eds), *Routledge Handbook of International Environmental Law*, Routledge, London, 2014, p. 57.

165 *Ibid.*, p. 54.

protection, conservation and presentation of the cultural and natural heritage with an appropriate staff and possessing the means to discharge their functions”.<sup>166</sup> It could also comply with customary IEL rules, such as the principle of prevention<sup>167</sup> and the emerging precautionary principle.<sup>168</sup> The former requires the NSAG to exercise due diligence – that is, to adopt appropriate measures when implementing activities in its own territory to prevent significant environmental damage, particularly when such damage is of a transboundary nature.<sup>169</sup> This obligation can generally be fulfilled by conducting an environmental impact assessment,<sup>170</sup> a tool that is not unknown to NSAGs. In the Agreement Concerning National Reconciliation, Human Rights and the Environment, the CNF agreed that “environmental impacts assessments shall be conducted in regards to all development projects in Chin State. To facilitate such a process, it is agreed that an independent committee shall be formed made up of independent experts.”<sup>171</sup>

The precautionary principle requires that “[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”.<sup>172</sup> The appropriate measures to take depend on the capabilities of their author.<sup>173</sup> For the second category of NSAGs, they should comply with the negative obligations under IEL. For example, an NSAG operating on the territory of a State party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora should refrain from trading endangered species in violation thereof.<sup>174</sup> Pursuant to the “no harm” rule,<sup>175</sup> an NSAG exercising

166 Convention for the Protection of the World Cultural and Natural Heritage, 1037 UNTS 151, 16 November 1972 (entered into force 17 December 1975), Art. 5(b).

167 International Court of Justice (ICJ), *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, *ICJ Reports 2010*, para. 101.

168 According to Michael Bothe, the principle of precaution is a “fundamental rule of modern customary environmental law”. Michael Bothe, “Protection of the Environment in Relation to Armed Conflicts”, in Dieter Fleck (ed.), above note 125, p. 343. However, the customary nature of the precautionary principle remains contested. See Meinhard Schröder, “Precautionary Approach/Principle”, in *Max Planck Encyclopedia of Public International Law*, 2014, paras 16–21.

169 ILC, *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities*, 2001, Art. 3; Permanent Court of Arbitration, *Arbitration regarding the Iron Rhine (“Ijzeren Rijn”) Railway (Belgium v. The Netherlands)*, 2005, paras 59, 222; ICJ, *Pulp Mills*, above note 167, para. 101.

170 Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26, 12 August 1992 (Rio Declaration), Principle 17.

171 Unofficial Translation of CNF–Government Agreements at Union-Level Peace Talks, 9 December 2012 (CNF Agreements), para. 6, available at: [www.peaceagreements.org/viewmasterdocument/1321](http://www.peaceagreements.org/viewmasterdocument/1321).

172 Rio Declaration, above note 170, Principle 15. The precautionary principle applies in armed conflict and entails that “the lack of scientific certainty may not be invoked to justify not taking preventive measures to protect the environment during an attack”: ICRC Customary Law Study, above note 55, Rule 44. See also ICRC Guidelines, above note 1, p. 58, para. 124.

173 *Rio Declaration*, above note 170, Principle 15.

174 Convention on International Trade in Endangered Species of Wild Fauna and Flora, 993 UNTS 243, 3 March 1973 (entered into force 1 July 1975).

175 *Trail Smelter Case (United States v. Canada)*, 16 April 1938 and 11 March 1941, *Reports of International Arbitral Awards*, Vol. 3, 2006, p. 1965. The “no harm” principle was subsequently crystallized in the Declaration of the United Nations Conference on the Human Environment, UN Doc. A/CONF.48/14/Rev.1, 16 June 1972, Principle 21, and the Rio Declaration, above note 170, Principle 2.

limited territorial control should not implement an activity that would cause environmental harm outside its territory, particularly if the environmental damage is caused to the territory of a non-belligerent State.<sup>176</sup>

In addition to the model of environmental responsibilities suggested above, IEL rules could also inform the IHL obligations of NSAGs. The ILC Draft Principles on Protection of the Environment in Relation to Armed Conflicts interpret the obligations of an Occupying Power in light of the IEL framework.<sup>177</sup> This could be applied to the select issue of exploitation of natural resources by NSAGs based on the application of Article 55 of the Hague Regulations by analogy. Therefore, an NSAG would only be permitted to exploit natural resources “for the benefit of the population [under its control] and for other lawful purposes under [IHL] ... in a way that ensures their sustainable use and minimizes environmental harm”.<sup>178</sup> In the Agreement Concerning National Reconciliation, Human Rights and the Environment, the CNF also agreed “that in extracting natural resources from above and underground within Chin State, the principles of Free Prior and Informed Consent shall be observed in accordance with the desire of the Chin people”.<sup>179</sup>

In conclusion, all NSAGs have environmental obligations under IHL. As a matter of policy, NSAGs that do not exercise territorial control or exercise it only to a limited extent should comply with the negative obligations under IHRL and IEL, while NSAGs acting as State-like entities should additionally comply with the positive obligations provided under these bodies of law. The doctrine and practice of some NSAGs confirm that this model can be considered realistic.

## Engaging non-State armed groups on the protection of the environment

Bangerter has held that “the mere existence of a body of law is not enough to ensure that it is applied; it would be naïve to hope that [NSAGs] could be won over by the mere existence of international law”.<sup>180</sup> In addition, the first section of this article highlighted the potential discrepancy between the doctrine and actual practice of NSAGs regarding environmental protection. Therefore, it is crucial to identify effective methods and actors of engagement to improve the compliance of NSAGs with the legal and policy framework detailed above.

176 In situations of international armed conflict, some authors have argued that “[t]he Trail Smelter principle may afford protection to non-belligerent, neutral territories by establishing state responsibility for environmental damage caused outside the state where the acts or events entailing such damage occur”. Michael Bothe, Carl Bruch, Jordan Diamond and David Jensen, “International Law Protecting the Environment during Armed Conflict: Gaps and Opportunities”, *International Review of the Red Cross*, Vol. 92, No. 879, 2010, p. 585.

177 ILC, *Report of the International Law Commission, Seventy-First Session*, UN Doc. A/74/10, 2019, pp. 276–278.

178 *Ibid.* For a similar view, see D. Dam-de Jong, above note 108.

179 CNF Agreements, above note 171.

180 Olivier Bangerter, “Reasons Why Armed Groups Choose to Respect International Humanitarian Law or Not”, *International Review of the Red Cross*, Vol. 93, No. 882, 2011, p. 357.

## Methods and actors of engagement to improve non-State armed groups' compliance with the legal and policy framework protecting the natural environment

Certain methods for improving compliance with humanitarian norms by NSAGs have been recommended.<sup>181</sup> In terms of legal tools, the UN Secretary-General has affirmed that the

development of codes of conduct, unilateral declarations and special agreements, as envisaged under [IHL], through which groups expressly commit to comply with their obligations or undertake commitments that may go beyond what are required by the law, can play a key role and should be encouraged.<sup>182</sup>

As they cannot become parties to IHL, IHRL or IEL treaties, NSAGs “may feel they lack ‘ownership’ over international norms”.<sup>183</sup> Compliance can be improved by enabling NSAGs to issue their own commitments to respect environmental norms, as this would “increase their sense of ownership over” the latter.<sup>184</sup> For instance, a unilateral declaration provides the opportunity for NSAGs to express a specific commitment to abide by environmental norms in the form of a public statement. Unilateral declarations do not require the consent of the adverse party to the conflict and are thus particularly valuable where a special agreement cannot be concluded.<sup>185</sup> This may offer a significant advantage in practice, because “States are often reluctant to enter into special agreements with [NSAGs], in order to avoid supporting the groups’ efforts to gain political legitimacy”.<sup>186</sup> The process of issuing a unilateral declaration may be initiated by the NSAG itself or may result from negotiations with humanitarian organizations or other relevant actors.<sup>187</sup>

181 See, for example, ICRC, *The Roots of Restraint in War*, Geneva, 2018; Sandesh Sivakumaran, “Implementing Humanitarian Norms through Non-State Armed Groups”, in Heike Krieger (ed.), *Inducing Compliance with International Humanitarian Law*, Cambridge University Press, Cambridge, 2015; Annysa Bellal and Stuart Casey-Maslen, *Rules of Engagement: Protecting Civilians through Dialogue with Armed Non-State Actors*, Geneva Academy, Geneva, 2011; Marco Sassòli, “Taking Armed Groups Seriously: Ways to Improve their Compliance with International Humanitarian Law”, *Journal of International Humanitarian Legal Studies*, Vol. 1, No. 1, 2010; ICRC, *Increasing Respect for International Humanitarian Law in Non-International Armed Conflicts*, Geneva, 2008.

182 UN Secretary-General, *Protection of Civilians in Armed Conflict: Report of the Secretary-General*, UN Doc. S/2018/462, 14 May 2018, para. 62.

183 A. Bellal and S. Casey-Maslen, above note 181, p. 6.

184 M. Sassòli, above note 181, p. 29. See also S. Sivakumaran, above note 181, pp. 130–131.

185 Where they can be achieved, special agreements constitute valuable means of commitment, as explained in Ezequiel Heffes and Marcos D. Kotlik, “Special Agreements as a Means of Enhancing Compliance with IHL in Non-International Armed Conflicts: An Inquiry into the Governing Legal Regime”, *International Review of the Red Cross*, Vol. 96, No. 895–896, 2015, pp. 1198–1200.

186 Nils Melzer, *International Humanitarian Law: A Comprehensive Introduction*, ICRC, Geneva, 2016, p. 307.

187 ICRC, *Increasing Respect*, above note 181, p. 19.

This article proposes a model unilateral declaration for the protection of the natural environment in armed conflict as a potential way forward. As noted by the UN Secretary-General, a unilateral declaration allows NSAGs to express a commitment that may go beyond their legal obligations. Based on the legal and policy framework discussed above, the model unilateral declaration suggested includes a preamble and ten key environmental norms, consisting of IHL obligations as well as responsibilities under IHRL and IEL providing protection to the environment.

As illustrated above, a commitment to respect environmental norms expressed by an NSAG is not in itself sufficient to guarantee compliance. Following its issuance, the model unilateral declaration should be implemented in the internal regulations of the NSAG, such as in a code of conduct.<sup>188</sup> This means that environmental norms contained in the declaration should be translated into a language that is understandable for the fighters and adapted to the characteristics of each NSAG on a case-by-case basis, such as whether the NSAG exercises territorial control or not.<sup>189</sup> In addition, the adoption of the model unilateral declaration—or other means of commitment providing protection to the environment—should be complemented by certain policy measures in order to be effective. First, ensuring that fighters know and understand the environmental norms included in the declaration requires that those norms be widely disseminated in their translated form. Second, the NSAG should provide training to its fighters in accordance with such norms. Third, breaches thereof should be addressed by a working system of disciplinary sanctions established by the NSAG.<sup>190</sup>

Enhancing NSAGs' compliance with environmental norms requires sustained engagement, in particular by humanitarian actors.<sup>191</sup> In order for actors engaging with NSAGs to resort to “strategic argumentation”,<sup>192</sup> it is vital to identify the reasons for NSAGs to comply with them or not. As the consequences of environmental harm may only appear in the long term, there is a potential discrepancy based on whether an NSAG reasons in short- or long-term outcomes,<sup>193</sup> or whether it focuses on “the conflict itself” rather than its “ultimate objective”.<sup>194</sup> Compliance by NSAGs claiming to fight on behalf of a community can be improved because it is only if the environment is safeguarded during the conflict that the community can envisage a sustainable future. For example, the

188 According to the ICRC, “[i]f an armed group has made a unilateral declaration, the development of a code of conduct that includes IHL can be suggested as a logical ‘next step.’” See *ibid.*, p. 22.

189 See S. Sivakumaran, above note 181, pp. 133–137; M. Sassòli, above note 181, p. 25.

190 For more details on dissemination, training and sanctions measures, see O. Bangerter, above note 43, pp. 28–32.

191 Engagement by other actors is also important. The World Wide Fund for Nature and UNESCO have notably attempted to protect the environment in certain contexts. See K. Walker, above note 64.

192 ICRC, *Increasing Respect*, above note 181, pp. 30–31.

193 This consideration impacts respect for IHL rules, according to O. Bangerter, above note 180, p. 384.

194 *Ibid.*

SPLM/A claimed to fight “for a peaceful homeland”, which prompted its decision to ban anti-personnel landmines.<sup>195</sup> When necessary, additional sources of influence such as “local customs, beliefs and traditions” can also complement the message.<sup>196</sup> The overlap between Islamic law and IHL rules protecting the natural environment has notably been addressed by other authors.<sup>197</sup>

Actors engaging with NSAGs on the protection of the environment could use the model unilateral declaration “to strengthen their dialogue with [NSAGs] through the negotiation process preceding such declarations”.<sup>198</sup> Sustained engagement should also continue after the unilateral declaration has been issued, in order to monitor whether the NSAG complies with its commitments and to discuss environmental protection more generally.<sup>199</sup>

The ICRC has a longstanding practice of humanitarian engagement with NSAGs in order to ensure humanitarian assistance and protection for persons affected by NIACs.<sup>200</sup> The legal basis for this engagement derives from common Article 3, according to which the ICRC has a right to offer its services to parties to a NIAC. In contexts where protecting the environment is “a matter of humanitarian necessity”,<sup>201</sup> the ICRC could disseminate the ICRC Guidelines to promote the adoption of rules protecting the natural environment in the doctrines of NSAGs. As mentioned above, the ICRC also recommends that parties to the conflict should conclude special agreements establishing demilitarized zones in order to protect “areas of major environmental importance”.<sup>202</sup>

The non-governmental organization Geneva Call engages NSAGs and aims to improve their compliance with humanitarian norms through the implementation of standardized unilateral declarations called Deeds of Commitment.<sup>203</sup> A new Deed of Commitment for the protection of the environment may represent a suitable avenue for securing greater compliance by NSAGs with the legal and policy framework identified. It would combine the advantages of issuing a unilateral declaration with the guarantee that Geneva Call will assist and monitor its implementation.

195 See ICRC, “Sudan/South Sudan, Commitment of Non-State Armed Groups against Anti-Personnel Landmines and South Sudan’s Ratification of the Ottawa Convention”, *IHL in Action: Respect for the Law on the Battlefield*, available at: <https://ihl-in-action.icrc.org/case-study/sudansouth-sudan-commitment-non-state-armed-groups-against-anti-personnel-landmines-and>.

196 ICRC, above note 4, p. 9.

197 Ahmed Al-Dawoody and Sarah Gale, “Protecting the Environment during Armed Conflict: IHL and Islamic Law”, *Humanitarian Law and Policy Blog*, 3 June 2021, available at: <https://blogs.icrc.org/law-and-policy/2021/06/03/protecting-environment-armed-conflict-ihl-islamic-law/>.

198 ICRC, *Toolbox: Safeguarding the Provision of Health Care*, Geneva, February 2016, p. 21, available at: <https://shop.icrc.org/toolbox-safeguarding-the-provision-of-health-care-operational-practices-and-relevant-internationalhumanitarian-law-concerning-armed-groups-pdf-en>.

199 See *ibid.*

200 See ICRC, above note 4.

201 *Ibid.*, p. 2.

202 ICRC Guidelines, above note 1, Recommendation 17, pp. 82–83.

203 For further information, see the Geneva Call website, available at: [www.genevacall.org/](http://www.genevacall.org/).

## Model unilateral declaration for the protection of the natural environment in armed conflict<sup>204</sup>

We acknowledge the danger for the environment inherent to situations of armed conflict;

We are concerned with the immediate and long-term impact that environmental damage has on the right of everyone to enjoy their fundamental human rights;

We recognize the importance of respecting and protecting the environment for present and future generations;

We affirm our determination to respect and protect the environment from the effects or dangers of military action;

We reaffirm our obligation to respect the rules on the conduct of hostilities as applicable to the environment;

We reject the notion that any cause, for whatever reason, may justify attacking the environment by way of reprisal as well as unlawful damage, pillaging or unnecessary destruction of the environment;

We recognize that this declaration is no substitute for existing legal rules, including Article 3 common to the Geneva Conventions, customary international humanitarian law and, where applicable, Additional Protocol II to the Geneva Conventions.

Taking due account of our legal obligations under international humanitarian law and our responsibilities under international human rights law and international environmental law to protect the environment,

We hereby commit ourselves to the following principles:

1. Respecting the natural environment as a civilian object unless and for such time as it meets all the constitutive elements of a military objective. This includes not launching indiscriminate attacks. It also includes not launching an attack against a military objective which may be expected to cause incidental damage to the natural environment which would be excessive in relation to the concrete and direct military advantage anticipated.

<sup>204</sup> Inspired by the ICRC model unilateral declaration related to the protection of health care, in ICRC, above note 198, and Geneva Call's Deeds of Commitment.

2. Not attacking works and installations containing dangerous forces, cultural objects and places of worship, objects indispensable to the survival of the civilian population, and non-defended localities or demilitarized zones.
3. Taking all feasible precautions to avoid, and in any event to minimize, incidental damage to the natural environment. This includes taking all feasible precautions in the absence of scientific certainty as to the effects on the environment of certain military operations.
4. Respecting the prohibition or restriction on the use of certain weapons inherently destructive of the natural environment, such as poisonous, biological, chemical or incendiary weapons, as well as herbicides and anti-personnel mines. Means or methods of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment must not be used.
5. Giving due regard to the protection and preservation of the natural environment in the conduct of military operations.
6. Not pillaging parts of the natural environment, including natural resources, and not destroying or seizing parts of the natural environment unless required by imperative military necessity.
7. Endeavouring to conclude additional agreements providing further protection to the environment, in particular for areas of major environmental importance.
8. Further endeavouring, in areas where we exercise authority, to:
  - i) Refrain from exploiting natural resources unless on existing sites as required by imperative military necessity or for the benefit of the population under our control, and only in a sustainable manner.
  - ii) Respect and take all feasible measures to protect and fulfil the human rights of the population under our control, which require the enjoyment of a safe, clean, healthy and sustainable environment, such as the rights to life, to the highest attainable standard of physical and mental health, to an adequate standard of living, to adequate food, to safe drinking water and sanitation, to housing, to participation in cultural life and to development. Particular care shall be given to vulnerable groups among the population.
  - iii) Conduct an environmental impact assessment for proposed activities that are likely to have a significant adverse impact on the environment.
9. Undertaking dissemination, education and training measures within our ranks to implement effectively the environmental norms contained in this declaration. In case of breach, enforcing these norms through a system of disciplinary sanctions which respects the fundamental rights of each individual in accordance with internationally recognized standards.
10. Cooperating with impartial humanitarian and other relevant organizations towards environmental protection.

## Conclusion

The protection of the environment within and outside armed conflict has become a major challenge as there can be no human sustainability absent a healthy environment. Since the awareness generated by the consequences of the Vietnam War, the nature of armed conflicts has evolved. Environmental protection during NIACs now requires further reflection. The purpose of this article was to examine this issue from the perspective of NSAGs as the main belligerent parties to such conflicts. Many IHL rules protecting the natural environment constitute legally binding obligations for NSAGs, but some of them should nevertheless be clarified, in particular the prohibitions against pillage and destruction or seizure of property in relation to NSAGs exploiting natural resources for the benefit of the population living under their control. In addition, the binding nature of IHRL and IEL on NSAGs is an unsettled legal issue. At the least, NSAGs should have environmental responsibilities under IHRL and IEL as a complement to IHL rules for better environmental protection. IHRL and IEL comprise negative and positive obligations which, as a matter of policy, could apply according to an NSAG's level of territorial control in order to guarantee a realistic model.

While a coherent legal and policy framework is needed, equally essential is an effective engagement process by humanitarian and other relevant actors. Indeed, some NSAGs may not be indifferent to environmental protection but may lack the capacity to implement environmental norms. As an entry point for engagement, the model unilateral declaration for the protection of the natural environment in armed conflict would be a convenient way forward to promote environmental protection with NSAGs.