



# INTERNATIONAL HUMANITARIAN LAW AND THE CHALLENGES OF CONTEMPORARY ARMED CONFLICTS

RECOMMITTING TO PROTECTION IN ARMED CONFLICT  
ON THE 70<sup>TH</sup> ANNIVERSARY OF THE GENEVA CONVENTIONS

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**CHAPTER 6**

**CLIMATE, ARMED CONFLICT,  
AND THE NATURAL  
ENVIRONMENT**

Climate change and environmental degradation affect populations across the globe, threatening lives and exacerbating existing vulnerabilities, inequalities, and social fragility. People, communities, and countries affected by armed conflict tend to be especially vulnerable to the consequences of climate change because conflicts limit their capacity to adapt and protect themselves. This is in part because conflicts – and especially protracted ones – harm assets required to facilitate adaptation to climate change, such as infrastructure, markets, institutions, social capital, and livelihood. Within those countries, vulnerable populations are disproportionately affected by food insecurity, loss of livelihood opportunities, health impacts and displacement, which are compounded by environmental degradation and climate change. People will keep trying to cope with and adapt to a degraded environment, growing risks of floods, droughts, extreme heat and poverty by searching for new livelihood strategies, changing their way of life or leaving their homes.

To bolster the sustainability of its humanitarian response, the ICRC has committed itself, in its institutional strategy for 2019–2022, to helping conflict-affected communities reduce their vulnerability by reinforcing their ability to adapt to the combined consequences of conflict and climate shocks. The strategy reaffirms a long-standing commitment to mitigating the impact of environmental degradation and climate change on people and to enhancing the ICRC's own environmental policies. As part of this commitment, the ICRC is also revising its 1994 Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict<sup>87</sup> to promote greater respect for existing IHL rules protecting the natural environment from the effects of armed conflict.

### **Effects of armed conflict on climate and the environment**

Over 80% of all major armed conflicts between 1950 and 2000 took place directly in biodiversity hotspots that sustain around half the world's plants and many rare species of animals.<sup>88</sup> Armed conflicts have always been a threat to the environment, and environmental degradation in turn affects the well-being or even the survival of people. They can lead to environmental degradation and destruction, including by contaminating land and soil, with effects frequently extending over large areas, including to coastal and marine zones, and to water sources. These consequences of conflict can remain in place for years or decades after a war.

The environment is at risk from direct attacks or from the use of certain means or methods of warfare. It is also at risk from damage and destruction to the built environment – including industrial complexes, combustible storage and processing facilities, factories and plants, agricultural facilities, and solid- and hazardous-waste sites – across urban and rural areas. Attacks against, or incidental damage to, extractive mines and chemical facilities can lead to water, soil and land contamination, or release pollutants into the air. Explosive remnants of war can also severely affect the environment by contaminating the soil and water sources, and harming wildlife. In certain circumstances, the environmental consequences of armed conflict can also contribute to climate change. For instance, the destruction of large areas of forest can have detrimental climatic consequences. Damage to infrastructure, such as oil installations and big industrial facilities, can force large volumes of greenhouse gases and other air-borne pollution into the atmosphere.

In addition to the effects resulting from the acts of parties to armed conflicts, certain indirect effects of armed conflict are also important. These include the collapse of governance; the diminution or erosion of institutional capacities in environmental management and of the coping mechanisms employed by the civilian population; and the deterioration of entire infrastructure service systems owing to lack of proper operation and maintenance over prolonged periods of time. Furthermore, when local populations are forced to avoid or abandon certain areas, including because of environmental damage, it can lead to the unsustainable exploitation of other areas, putting the environment under even greater stress. Another important contributor to environmental damage is the exploitation of natural resources to sustain war economies or for personal gain.

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87 The Guidelines were annexed to the *Report of the Secretary-General on the United Nations Decade of International Law* (UN Doc. A/49/323, 1994); UN General Assembly Resolution 49/50 (1994) invited all States to give due consideration to the possibility of incorporating the Guidelines in their military manuals and other instructions for military personnel.

88 Thor Hanson *et al.*, "Warfare in Biodiversity Hotspots", *Conservation Biology*, 23 (3), 2009, pp. 578–587.

### **The revised ICRC Guidelines for the Protection of the Natural Environment in Situations of Armed Conflict**

The environment is frequently one of the casualties of war – but the damage is often not visible and environmental damage tends not to be the priority of warring parties. A certain amount of environmental harm is inherent in armed conflict, but it cannot be unlimited. IHL does not address all environmental consequences of armed conflict, but it does contain rules that provide protection to the natural environment and that seek to limit the damage caused to it.

The revision of the 1994 Guidelines seeks to reflect current treaty and customary IHL. The revised Guidelines represent a selection of existing IHL rules and seek to provide clarification on the interpretation of these rules and their sources. Although the focus is on IHL, the Guidelines recall that other rules of international treaty and customary law protecting the natural environment may continue to apply in armed conflicts. The Guidelines aim to act as a reference tool that parties to conflicts can use to protect the natural environment – a tool that can help them to adopt concrete measures to promote, implement, and apply IHL rules.

Under IHL, there is no agreed definition of the term “natural environment”. According to the Commentary on Article 55 of Additional Protocol I, the notion of the natural environment includes everything that exists or occurs naturally and is therefore not man-made, such as the general hydrosphere, biosphere, geosphere, and atmosphere (including fauna, flora, oceans and other bodies of water, soil, and rocks). In addition, the natural environment includes natural elements that are or may be the product of human intervention, such as foodstuffs, agricultural areas, drinking water, and livestock. It is of particular significance that this interpretation does not refer exclusively to organisms and inanimate objects in isolation; rather, the term “natural environment” also refers more broadly to the *system* of inextricable interrelationships between living organisms and their inanimate environment. Considering the above, and as also noted in the Commentary of Article 55, the term “natural environment” should be understood in the widest sense possible, in line with the meaning States have given this term in the context of IHL. This approach takes into account the fact that the notion of the “natural environment” may evolve over time, as a result of increased knowledge but also as the environment itself is subject to constant change.

IHL contains a family of rules that protect the natural environment during armed conflict. The first type of protection that IHL offers is contained in the rules that specifically protect the natural environment as such. These include the prohibitions against using means or methods of warfare that are intended, or may be expected, to cause long-term, widespread and severe damage to the natural environment. As mentioned in the ICRC’s report on strengthening IHL in 2011, the meaning of “widespread, long-term and severe” is subject to debate.<sup>89</sup> Therefore, the revised Guidelines seek to clarify these terms, while recognizing that further refinement remains necessary. IHL also explicitly prohibits attacking the natural environment in reprisal. These rules, which were adopted in 1977, were among the first to explicitly protect the natural environment in times of armed conflict, following the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques. The recognition among the drafters of Additional Protocol I of the need to protect the natural environment, particularly at a time when this was still quite a novel idea, was a significant step towards affirming the importance of this protection.

The second type of protection is contained in general IHL rules that protect the natural environment, without this being their primary purpose. Importantly, it is generally recognized today that, by default, the natural environment is civilian in character. On this basis, all parts or elements of the natural environment are civilian objects, unless parts of it become military objectives. Its various parts therefore benefit from the corresponding protection under IHL, in particular the general principles and rules on the conduct of hostilities, i.e. the principles of distinction, proportionality, and precautions. The applicability of these principles to the natural environment is widely recognized but challenges can arise in practice.

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89 ICRC, “Strengthening legal protection for victims of armed conflicts”, 31IC/11/5.1.1, 2011; available at <https://www.icrc.org/en/doc/assets/files/red-cross-crescent-movement/31st-international-conference/31-int-conference-strengthening-legal-protection-11-5-1-1-en.pdf>.

An attack cannot be directed against parts of the natural environment unless it is directed against a specific element of the natural environment that has become a military objective. This may be the case if, by its nature, location, purpose or use, a distinct part of the natural environment makes an effective contribution to military action, and if its total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage. As the intrinsic character of the natural environment is civilian, it can never by its “nature” make an effective contribution to military action, but it may make an effective contribution to military action by its location, purpose, or use. For example, a hill may contribute effectively to the military action of enemy forces if it provides them with a vantage point over their adversary’s camp. The foliage in a specific forested area may also contribute effectively to military action by providing cover for a troop manoeuvre. However, the concept of an “area” must not be interpreted so broadly that a large expanse of forest is deemed a military objective simply because combatants are located in a small portion of it. Furthermore, the contribution to military action must be “effective” and made to the actual war-fighting capabilities of the adversary and not merely towards its war-sustaining capabilities.<sup>90</sup> For instance, an area of the natural environment where the mining of high-value natural resources takes place does not make an effective contribution to military action even though it may generate significant revenue for the war effort.

Based on its civilian character, the natural environment is also protected against “incidental damage; it is prohibited to launch an attack against a military objective which may be expected to cause damage to parts of the natural environment constituting civilian objects which would be excessive in relation to the military advantage anticipated. Bearing in mind that an assessment of whether damage would be “excessive” must be made in each individual case, taking into account the circumstances ruling at the time, an example of disproportionate incidental damage would be to cause an entire forest to burn when attacking a single, small enemy campsite of minor importance. It is the ICRC’s position that the foreseeable indirect, or reverberating, incidental effects of an attack must also be considered in the proportionality assessment. This is of particular importance for the protection of the natural environment, which is often affected indirectly rather than directly by hostilities. Whether an effect is reasonably foreseeable will depend on the facts of each case; however, the assessment should be informed by past practices and empirical data. Finally, in the conduct of military operations, including during troop movements or the establishment of military bases, constant care must be taken to spare civilian objects, including parts of the natural environment. Lack of scientific certainty regarding the effects on the natural environment of certain military operations does not absolve a party to conflict from taking precautions.

The natural environment is also protected by other IHL rules that seek to prevent or limit damage. These include rules on specially protected objects, such as works and installations containing dangerous forces and objects indispensable to the survival of the civilian population, as well as rules on enemy property and pillage. Moreover, protection is also granted to the natural environment through the rules on the use of certain weapons, including the prohibition against using herbicides as a method of warfare; rules on incendiary weapons; the prohibitions against using poison or poisoned weapons, biological weapons and chemical weapons; rules on landmines; and rules to minimize the impact of explosive remnants of war.

It is not enough that there are important IHL rules protecting the natural environment during armed conflict; they must be better disseminated, implemented and enforced, as well as reaffirmed and clarified. Ultimately, respect for IHL can limit the impact that armed conflict can have on the natural environment and on climate change.

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90 For more on the ICRC’s position, see Laurent Gisel, “The relevance of revenue-generating objects in relation to the notion of military objective”, in *Proceedings of the Bruges Colloquium: The Additional Protocols at 40: Achievements and Challenges*, 2017, pp. 139–151.