Protecting the Environment During Wartime

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Throughout human history, the environment has been one of war’s many victims. Thucydides records the scorched earth tactics used by the Greeks during the Peloponnesian Wars. The Romans salted the soils of Carthage after winning the Punic Wars. The Dutch breached their dykes in 1792 to prevent a French invasion. More recently, during the Vietnam War, the United States destroyed 14 percent of Vietnam’s forests, including 54 percent of its mangrove forests, through chemical defoliants, bulldozers and bombings. Near the end of the Gulf War, Iraq burned hundreds of oil wells and dumped massive amounts of oil into the Persian Gulf. And the ongoing civil war in the Congo has decimated the country’s wildlife, killing thousands of elephants, gorillas and okapis.
Some of the earliest rules of warfare had an environmental component and, today, military practices common in the past, such as the destruction of agricultural lands, are outlawed by the laws of war. Nevertheless, contemporary international law contains few rules specifically addressing the environmental consequences of war. Instead, the environment continues to rely primarily on the basic principles of international humanitarian law – in particular, the principles of necessity, distinction and proportionality – which indirectly protect the environment by helping to limit war’s destructiveness.

Two developments over the past several decades have given greater prominence to the problem of environmental protection during wartime: (1) the development of international environmental law, which reflects the growing importance of environmental values internationally, and (2) the vastly more destructive potential of modern warfare. These developments raise the questions:

- Is international law sufficiently protective of the environment during wartime? Does it draw the appropriate balance between environmental and military concerns? Are its norms sufficiently precise to guide people acting in good faith? Are they enforced sufficiently to deter potential lawbreakers?

- To the extent existing law is inadequate, can it be improved? Can we reasonably attempt to do more and, if so, what?

In considering these questions, realism requires us to recognize at the outset the extraordinary difficulties involved. To begin with, there is the familiar problem of applying any legal rules during time of war. Hersh Lauterpacht’s famous quip – “If international law is, in some ways, at the vanishing point of law, the law of war is, perhaps even more conspicuously, at the vanishing point of international law” – may be hackneyed, but nonetheless has more than a grain of truth. Environmental critics of the law of war need to remember that, as poorly as the environment may have fared during wartime, humans have fared even worse.

Protection of the environment during wartime poses a particularly intractable problem because of the differing time horizons involved: while environmental problems tend to be relatively long term, short-term exigencies dominate in wartime. Thus, although we can attempt to elaborate detailed norms, in the heat of battle, immediate military needs will almost always trump longer-term environmental considerations.

This is not simply a practical problem, it is an ethical one as well. For it is by no means clear what the appropriate tradeoff should be between military and environmental values. Wanton damage is, of course, always wrong, since it has no military justification. That is what made the environmental destruction by Iraq during the Gulf War such an easy case. But other types of damage raise the problem: How much importance should we place on winning, or minimizing casualties, versus protecting the environment? Leaving aside the issue of what is practicable, there is the issue: what is the “optimal” level of environmental protection?

The law of war, in general, contains few absolutes. It does not attempt to prevent all damage – an impossible task given warfare’s intrinsic destructiveness – but to strike a balance between military and humanitarian imperatives. Thus, it accepts some civilian casualties, so long as they are unintended and not disproportionate to the expected military benefit. If the law of war accepts the possibility of civilian deaths, then it is difficult to contend that it should not accept some level of environmental damage as well. Indeed, the balancing approach reflected in the law of war appears particularly appropriate for environmental norms, which usually are not stated in absolute terms, but incorporate some kind of balancing test themselves.

What is the appropriate balance between environmental and military objectives? How do we compare the two? If an enemy force is located in a tropical forest, for example, and we are considering whether to defoliate the
A belligerent injures its own environment –
environmental damage caused? People will answer
this question very differently, depending on
their values. One cannot simply assume
more environmental protection is always
better and military objections to stronger
standards are always invalid. The challenge is
not simply to provide more environmental protection, but to determine how much
environmental protection is appropriate.

Another preliminary question needing attention is: what types of wartime environmental
damage are of international concern? Despite claims about the intrinsic value of
the environment or about individuals as holders of environmental rights, internation-
al environmental law – at least in its present stage of development – still primarily con-
cerns relationships between countries. It does not address environmental protection gen-
erally, including a country’s treatment of its own environment. Instead, it addresses envi-
romental protection only when the inter-
ests of other countries are involved, either
directly (as in the case of transboundary environmental harm) or more generally,
when an action affects the interests of the
international community as a whole (for example, because a resource is found in the
global commons, e.g., the high seas). In this
respect, international environmental law dif-
ers from human rights law, which applies to
a country’s treatment of its own citizens.

Given the limited scope of international environmental law generally, what types of
environmental damage during wartime
should international law address? Consider the following cases:

• A belligerent injures its own environment –
Often a country may injure its own envi-
ronment in the conduct of warfare. It may
over-exploit natural resources to generate
revenue or burn its fields when retreat-
ing to deprive the enemy of food. Since purely
local pollution is not usually addressed by
international law even in peacetime, it is
difficult to see why this is an appropriate
subject of international regulation during
wartime.

• A belligerent injures the environment of a
neutral country or a resource or area of
common international concern – This is
also an easy case, but for the opposite rea-
son. When a country injures the environ-
ment of a neutral country or an area of
common international concern, then the
interests of other nations are clearly impli-
cated. The problem arises in defining
which environmental resources are of inter-
national concern. Specific sites designated
under an international convention such as
the World Heritage Convention or the
Wetlands Convention would seem to qual-
ify, as would resources such as Antarctica
and the high seas, which are beyond
national jurisdiction, and global resources
acknowledged to be of common concern
such as biodiversity, the ozone layer and cli-
mate. But destruction of a forest or a coral
reef that has not been internationally listed
could be considered a domestic matter, and
might not fit within this category.

• A belligerent injures the environment of the
enemy – This is both the most typical and
the hardest case. Although transboundary
environmental harm is the paradigmatic
subject of international environmental law,
the essence of warfare is to gain a military
advantage by injuring the enemy. So, it is
not obvious why – and under what circum-
stances – the belligerents themselves should
be entitled to legal protection against envi-
rmental injury by the other side, except to
the extent that the injury is wanton and
serves no military purpose. One could argue
the environment as such is the injured party
– it has an interest in not being harmed. But
this position is difficult to maintain given
that, at present, international environmental law
does not generally recognize the envi-
rronment as having interests or rights of its
own even in peacetime. This leaves the indi-
vidual as the interested party, as in other
areas of international humanitarian law,
where individuals are the primary object of
protection. On this view, a belligerent
should be limited in the environmental
damage it inflicts on the enemy, based on
the effects this damage will have on individ-
uals (and, in particular, civilians).

The issue of environmental protection dur-
ing wartime has received only sporadic atten-
tion by the international community, usual-
ly in response to particular events. The wide-
spread environmental destruction during the
Vietnam War, as well as the use of weather
modification techniques by the United
States, led to the inclusion of specific envi-
ronmental provisions in the 1977 Geneva
Protocols and to the adoption of a separate
treaty prohibiting the use of environmental
modification techniques. In the early 1980s,
the hypothesis that the widespread use of
nuclear weapons would trigger a nuclear
winter spawned significant concern, but no
new legal norms. Concern about the envi-
ronmental consequences of war re-emerged
in the early 1990s as a result of the massive
oil spills and fires caused by Iraq during the
Gulf War. But, despite numerous confer-
ences and proposals, and despite the political
boost given to environmental issues generally
during the run-up to the 1992 United
Nations Conference on Environment and
Development (UNCED), proposals for new
and stronger legal rules withered on the vine.

Military law experts successfully argued that
existing legal norms were adequate and sim-
ply needed better implementation and
enforcement. After the early 1990s, the sub-
ject of environmental protection during
wartime moved out of the limelight again,
only occasionally reemerging – for example,
during the 1999 Kosovo conflict, in reaction
to the use of depleted uranium and the
bombing of petrochemical facilities by the
North Atlantic Treaty Organisation.

Recently, the issue has gained renewed
prominence as a result of the proposal by the
executive director of the United Nations
Environment Program (UNEP), Dr. Klaus
Topfer, to develop a “green Geneva
Convention.”
What might be done to provide greater protection for the environment during wartime? The following are some possibilities:

1. **Attempt to develop greater legal consensus among military decision makers through discussion of environmental case studies.**

   Given the generality of principles such as necessity, distinction and proportionality, there is considerable room for discretion and disagreement about their implications in concrete cases. Moreover, since these principles do not explicitly mention the environment, there is a danger that environmental considerations will not even factor into the decision-making process. Both problems could be addressed by meetings of experts to consider how international humanitarian principles apply to specific types of cases involving potential environmental damage (e.g., bombing a petrochemical plant or an oil tanker). Discussion of concrete cases could help sensitize military officials to environmental factors and to the trade-offs involved between military and environmental values.

2. **Undertake a comprehensive review of the environmental effects of warfare.**

   Although commentators often refer to the devastating effects of warfare on the environment, most of the evidence has been anecdotal. Few studies have attempted to assess systematically the magnitude of war’s impacts, as compared to other environmentally-destructive practices. A comprehensive scientific review could help: (a) give the issue greater prominence and help generate political will and (b) provide better information about which types of military activities pose the greatest environmental threat and therefore should be the highest priorities for action. As one commentator notes, “Without a reliable base of knowledge, it is simply not possible to develop and implement appropriate environmental mitigation measures in a timely, cost-effective manner.”

3. **Work to incorporate environmental provisions into national military manuals.**

   There is widespread agreement on the need for better implementation of existing legal rules that help protect the environment during wartime. Revision of military manuals to reflect current thinking about the environment would be a first step in that direction. Military manuals play a key role in the process by which the law of war is disseminated and internalized by commanders and soldiers.

4. **Incorporate environmental rules into NATO’s Combined Rules of Engagement, and seek to include them in U.N. Security Council decisions authorizing the use of force.**

   Although rules of engagement generally reflect existing legal norms rather than create new ones, they can also reflect policy considerations that go beyond the existing law. Thus, they present an opportunity to articulate rules that countries might not be willing to acknowledge as legal obligations. For example, the rules of engagement for NATO or United Nations forces might contain a requirement to consider environmental effects as part of targeting analysis and to refrain from actions that would cause significant environmental damage unless absolutely necessary.

5. **Negotiate a convention to prohibit military actions in environmentally-sensitive areas such as coral reefs and wetlands.**

   The law of war provides special protections for certain types of potential targets, including churches, schools, hospitals and cultural objects. Some have proposed negotiating a new treaty to prohibit military activities in environmentally-sensitive areas that have received international protection. Thus far, proposals along these lines have enjoyed considerable support and little clear opposition.

6. **Require countries to assess and justify the environmental effects of their military actions.**

   The purpose of these procedural requirements would not be to dictate what decisions countries may make, but rather to help ensure that nations have a satisfactory decision-making process – that decisions are based on adequate information and are made for the right sorts of reasons. Consider, for example, the NATO bombing of the Pancevo petrochemical facility in Yugoslavia during the 1999 Kosovo campaign. In the absence of any explanation by NATO forces, it was difficult to ascertain how the principles of distinction and proportionality were applied or even whether they were applied at all. Because procedural requirements would not limit the military’s freedom of action, they would be likely to raise fewer concerns than substantive limitations on the methods and means of warfare.

7. **Work to change the cultural and social milieu.**

   Although legal reform is needed and should be pursued, we should do so without illusions. From the standpoint of political and military acceptability, no significant reform stands a high probability of success. A more promising avenue may be to focus on changing the cultural and social milieu within which law operates – and, in particular, public opinion as to what harms are acceptable and unacceptable. In recent years, the biggest changes in the conduct of warfare have arguably resulted from such cultural developments. Although the law of war has stayed more or less the same over the last 25 years, the conduct of warfare has changed dramatically, with a much greater emphasis on the avoidance of civilian casualties. In seeking better protection of the environment during wartime, we need to appreciate not only the role of international law, but also its limits.

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1 The principle of necessity provides that a belligerent may inflict harm on the enemy only when necessary to secure a military advantage. The principle of distinction requires that belligerents distinguish between military and civilian objects. The principle of proportionality provides that collateral civilian damage must not be disproportionate to the military advantage anticipated.