The Prohibition of Environmental Damage during the Conduct of Hostilities in Non-International Armed Conflict

Smith, Tara

2013-05-09

http://hdl.handle.net/10379/3523
The Prohibition of Environmental Damage during the Conduct of Hostilities in Non-International Armed Conflict

PhD in Human Rights

Tara Smith, BCL, LL.M, Attorney-at-Law

Supervised by Prof. Ray Murphy

May 2013
# Table of Contents

**Declaration of Originality** 7 
**Acknowledgements** 9 
**Table of Abbreviations** 11 

## Chapter 1 – Introduction
1. Introduction 13  
2. Research Questions and Themes 16  
3. Methodology 18  
4. Literature review 18  
5. Key Definitions 22  
   a. Non-International Armed Conflict 23  
   b. The Environment 26  
   c. Environmental Damage / Environmental Harm 26  
   d. Environmental Protection, Prevention of Environmental Harm and the Prohibition on Environmental Damage 27  
   e. The Rule of Law and the Principle of Legality in International Law 27  
6. Outline of Thesis 31 

## Chapter 2 – History of the Environmental Laws and Consequences of Non-International Armed Conflict
1. Introduction 33  
2. The Development of ‘Environmental’ Laws of Armed Conflict 33  
   a. Environmental Protection in Pre-1939 Laws of Armed Conflict 34  
   b. Environmental Protection in the Post-World War II Nuremberg Prosecutions 38  
   c. Environmental Protection Post-1949 in the Modern Laws of Armed Conflict 40  
3. Examples of Environmental Damage in Non-International Armed Conflict 46  
   a. Damage caused by States 46  
   b. Damage caused by Non-State Armed Groups 48  
   c. Natural Resources and Armed Conflict 50  
4. Conclusion 52
Chapter 3 – Treaty-based Laws of Non-International Armed Conflict and Environmental Protection

1. Introduction 53
2. Common Article 3 54
3. Additional Protocol II 58
   a. Environmental Protection through the Protection of Property 59
   b. Environmental Protection through the Protection of Persons 73
   c. Conclusions on Additional Protocol II 77
4. Limitations on Methods and Means of Warfare in Non-International Armed Conflict 77
5. Conclusion 83

Chapter 4 – Customary Laws of Armed Conflict that Prohibit Environmental Damage in Non-International Armed Conflict

1. Introduction 87
2. Distinction / Discrimination 87
   a. Classification of the Environment under the Principle of Distinction 88
   b. Indiscriminate Attacks 92
3. Proportionality 92
   a. The Environment and the Principle of Proportionality 94
   b. Calculating Proportionality in Attack 96
   c. Valuing the Natural Environment in Proportionality Assessments 97
4. Military Necessity 98
   a. Military Necessity as an Exception to the Laws of Armed Conflict 99
   b. Military Necessity and Environmental Damage 101
5. Humanity / Unnecessary Suffering 104
   a. The Principle of Humanity 104
   b. Inhumane Environmental Damage in Non-International Armed Conflict 105
6. Precautions in Attack / Against the Effect of Attack 106
   a. Precautions Against Environmental Damage 107
   b. ICRC Customary Rule 44 – Due Regard for the Environment in Military Operations 109
7. ICRC Customary Law Study
   a. Customary Rule 43 – General Principles on the Conduct of Hostilities 112
   b. Customary Rule 45 – Causing Serious Damage to the Natural Environment 113
   c. Customary Rule 76 – Herbicides 114

8. Conclusion 115

Chapter 5 – The Martens Clause and the Prohibition of Environmental Damage in Non-International Armed Conflict

1. Introduction 119

2. The Origins of the Martens Clause 120
   a. The Martens Clause and Non-International Armed Conflict 122

3. The Creation and Status of Martens Clause Norms in International Law 125
   a. Support for the Existence of Environmental Martens Clause Norms 128

4. The Source and Impact of Environmental Martens Clause Norms 131
   a. The Relationship Between the Environment, the Principles of Humanity and the Dictates of the Public Conscience 132
   b. Deriving the Content of Environmental Martens Clause Norms 135
   c. The Practical Impact of Environmental Martens Clause Norms 137

5. The Case Against Environmental Martens Clause Norms 139
   a. Challenging the Norm-Creating Process 139
   b. Challenging the Content of Environmental Martens Clause Norms 141
   c. Challenging the Enforcement of Environmental Martens Clause Norms 143

6. Dangers in Relying on the Martens Clause for Environmental Protection 143

7. Conclusion 145

Chapter 6 – Means of Preventing States from Causing Environmental Damage in Non-International Armed Conflict

1. Introduction 147

2. Environmental Human Rights in Non-International Armed Conflict 149
   a. Environmental Protection through Human Rights 150
   b. Evaluating a Rights-Based Approach to Environmental Protection in Non-International Armed Conflict 157

3. Protection through Peacetime Environmental Laws and Concepts 158
a. Multi-lateral Environmental Agreements 160
b. Customary Environmental Principles and Soft Law Instruments 161
c. Sustainable Development 163

4. International Compensation Mechanisms 166
   a. United Nations Compensation Commission 167
   b. Critical Factors for the Success of Compensation Mechanisms 170

5. Conclusion 173

Chapter 7 – Means of Preventing Both Non-State and State Actors from Causing Environmental Damage in Non-International Armed Conflict

1. Introduction 175
2. Individual Criminal Responsibility for Environmental Damage at the ICC 176
   a. Genocide 181
   b. Crimes Against Humanity 185
   c. War Crimes 189
d. Aggression 196
3. Safe Areas as Special Areas of Environmental Protection 197
   a. Safe Areas: A Mixed Record of Success 199
   b. Safe Areas and Environmental Protection 200
c. Conditions Necessary for Safe Environmental Zones to Succeed 201
4. Conclusion 203

Chapter 8 – Conclusion

1. Introduction 205
   a. Context 205
2. Research Question and Hypotheses 205
   a. Assessment of the Research Hypotheses 206
   b. Discussion on the Conclusions of the Research Hypotheses 208
c. Conclusions on Research Hypotheses and Proof of the Research Statement 210
3. Implications for Future Research 210
4. Concluding Remarks 211

Bibliography 215
I, Tara Smith, do hereby declare that this work that is submitted for examination is my own and that due credit has been given to all sources of information contained herein. With this declaration, I certify that I have not obtained a degree at National University of Ireland Galway or elsewhere on the basis of this work. I acknowledge that I have read and understood the Code of Practice dealing with Plagiarism and the University Code of Conduct of the National University of Ireland Galway and that I am bound by them.

Signature

Date
Acknowledgements

In a doctoral thesis, all sources providing a foundation for the research are conscientiously and meticulously recognised in the footnotes on each page. The invisible footnote at the end of this entire thesis should credit my family for their constant love, encouragement, brilliant sense of humour to put things in perspective and steadfast belief in me and my ability to see this through. Not a word of this thesis would exist without the support of Mam, Dad, Ali, Hazel, Grandad and Roly: I cannot express how lucky I am to have had each of you there with me every step of the way.

I wish to convey my deepest gratitude to Prof. Ray Murphy, without whose experience, guidance and critical eye this research would have been all the poorer. I also wish to thank Prof. Siobhán Wills and Dr. Noelle Higgins for their robust and considered examination of this thesis.

Many friends have buoyed my spirits and given me substantial food for thought in carrying out this research. In particular, I would like to thank Yvonne McDermott, Dr. Andrea Breslin, Dr. Michelle Farrell, Dr. Eadaoin O’ Brien, Shannonbrooke Murphy, Dr. Niall Morris, Joseph Burke, Michael McManus, Dr. Luke Redmond, Kathryn Kenealy and Tara Raftery: it’s the little things you’ve done that have made the biggest difference to the overall perspective I have taken in this thesis.

Finally, I would like to acknowledge the funding support that I received from the College of Arts, Social Sciences and Celtic Studies at NUI Galway in the form of a Connect Doctoral Research Fellowship from 2008-2010.
# Table of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRC/RUF</td>
<td>Armed Forces Revolutionary Council / Revolutionary United Front</td>
</tr>
<tr>
<td>CCW</td>
<td>Convention on Conventional Weapons</td>
</tr>
<tr>
<td>CWC</td>
<td>Chemical Weapons Convention</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
</tr>
<tr>
<td>ECHR</td>
<td>European Convention on Human Rights</td>
</tr>
<tr>
<td>ENMOD</td>
<td>Environmental Modification Convention</td>
</tr>
<tr>
<td>IAC</td>
<td>International Armed Conflict</td>
</tr>
<tr>
<td>ICC</td>
<td>International Criminal Court</td>
</tr>
<tr>
<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
</tr>
<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
</tr>
<tr>
<td>ICJ</td>
<td>International Court of Justice</td>
</tr>
<tr>
<td>ICRC</td>
<td>International Committee of the Red Cross</td>
</tr>
<tr>
<td>ICTR</td>
<td>International Criminal Tribunal for Rwanda</td>
</tr>
<tr>
<td>ICTY</td>
<td>International Criminal Tribunal for the former Yugoslavia</td>
</tr>
<tr>
<td>IEL</td>
<td>International Environmental Law</td>
</tr>
<tr>
<td>IHL</td>
<td>International Humanitarian Law</td>
</tr>
<tr>
<td>IMT</td>
<td>International Military Tribunal</td>
</tr>
<tr>
<td>LOAC</td>
<td>Law of Armed Conflict</td>
</tr>
<tr>
<td>MEA</td>
<td>Multi-lateral Environmental Agreements</td>
</tr>
<tr>
<td>NIAC</td>
<td>Non-International Armed Conflict</td>
</tr>
<tr>
<td>SCSL</td>
<td>Special Court for Sierra Leone</td>
</tr>
<tr>
<td>UNCC</td>
<td>United Nations Compensation Commission</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>UNITA</td>
<td>National Union for the Total Independence of Angola</td>
</tr>
<tr>
<td>UPDF</td>
<td>Uganda People’s Defence Force</td>
</tr>
</tbody>
</table>
Chapter 1
Introduction

1. Introduction

Legal protection for the environment in non-international armed conflict is underdeveloped and inadequate. On balance, scholarship in this field has focused largely on situations of international armed conflict. There have been frequent calls for a more detailed analysis of the extent to which the environment is protected by international law in non-international armed conflict, but only a small amount of research has emerged to date. This thesis aims to address the balance in scholarship between international and non-international armed conflict by identifying and discussing in detail the international law provisions most relevant to the direct or indirect protection of the environment during non-international armed conflict.

There is a deliberate emphasis on the laws of armed conflict in this thesis because the parameters of the examination have been drawn around circumstances to which the laws of non-international armed conflict apply. In other words, not all environmental damage in conflict situations will be sufficiently linked to the armed conflict underway. The subject matter of this thesis focuses only on environmental damage that is sufficiently linked to a non-international armed conflict such that the relevant laws of armed conflict are applicable. If there is no armed conflict nexus, then the environmental damage in question falls outside the scope of this study. These parameters allow for detailed analysis of the adequacy of the laws of armed conflict, which is the primary aim of this thesis.

Non-international armed conflicts have eclipsed international armed conflict in number since the end of World War II.1 Of non-international armed conflict, low-intensity conflicts between non-state armed groups are more frequent than major

---

1 Kenneth Watkin and Andrew J. Norris (eds), *Non-International Armed Conflict in the Twenty-first Century* (Naval War College 2012), xiii
civil wars involving highly organised armed groups and state forces. As such, the majority of contemporary armed conflicts taking place in the world today are still governed only by Common Article 3 to the 1949 Geneva Conventions and relevant customary provisions. Yet ‘no evidence demonstrates that internal armed conflicts are per se less environmentally destructive than international armed conflicts’. The environment is of value to humanity, whether an international or non-international armed conflict is taking place, and that value should be reflected in prohibitions on damage in the laws of armed conflict.

Both the laws of armed conflict and environmental protection have essentially developed in a state-centric way. It remains an awkward exercise, even in the present day, to clearly state why and how international law in both areas should apply to and be upheld by non-state actors and individuals. For Additional Protocol II to have jurisdiction over an armed conflict, armed non-state groups must in essence display state-like characteristics such as territorial control, a command structure and the ability to implement the Protocol (which is, it will be recalled, an instrument that is part of the corpus of public international law). Similarly, present-day conflicts often transition between international and non-international status, depending on the

---

4 Identified and discussed in Chapter 4 of this thesis
8 See discussion in chapter 1 below at page 24 for further discussion on this point.
parties to the conflict at any given time. Indeed ‘[c]hanges in the legal characterization of a war have profound implications for...protection’\(^\text{10}\) as there are direct prohibitions on environmental damage in international armed conflict and none in non-international armed conflict. Without question, the legal framework that applies to non-international armed conflict ‘is [becoming] increasingly distant from the reality of contemporary armed groups and the conflicts in which they engage’\(^\text{11}\): state-centred conflict is no longer the norm.

The paradigm of armed conflict has radically shifted since the end of World War II yet the shape of the laws of armed conflict which were devised then remain largely the same today.\(^\text{12}\) Part of the paradigm of contemporary non-international armed conflict is the close link that many conflicts have to the environment, in particular to the exploitation of high value natural resources\(^\text{13}\) and the part these resources play in financing the conflict effort.\(^\text{14}\) This was not a feature of the public conscience during the drafting of the Geneva Conventions in 1949. While environmental damage in armed conflict was very much part of the public conscience during the Diplomatic Conference which drafted the Additional Protocols\(^\text{15}\), the new laws of non-international armed conflict were not given an explicit environmental dimension at that time.\(^\text{16}\)

\(^{10}\) Siobhan Wills, ‘The Legal Characterization of the Armed Conflicts in Afghanistan and Iraq: Implications for Protection’ (2011) 58 Netherlands International Law Review 173, 174

\(^{11}\) Krause and Milliken, ‘The Challenge of Non-State Armed Groups’, 202; Wills ‘The Legal Characterization of the Armed Conflicts in Afghanistan and Iraq: Implications for Protection’, 180

\(^{12}\) United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law (UNEP Post-Conflict and Disaster Management Branch 2009) 10- ‘while IHL was largely developed in an era of interstate conflicts, the overwhelming majority of conflicts today are internal.’

\(^{13}\) Krause and Milliken, ‘The Challenge of Non-State Armed Groups’, 212- ‘Significant attention has been given to how diamonds, oil, timber, and other resources have fuelled violence in states such as Angola, Sierra Leone, and the Democratic Republic of Congo. Natural resources such as ‘conflict diamonds’, however, are only one of the means by which armed groups can finance their operations’

\(^{14}\) ibid 212

\(^{15}\) As the diplomatic conference took place immediately after the Vietnam War in which the US army used environmental modification techniques and extremely harmful chemical defoliants as means and methods of warfare. This is discussed further in chapter 2 at page 33

\(^{16}\) United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law 10- ‘Many laws [of armed conflict] are therefore inapplicable, or much less restrictive when applied to internal conflicts. Yet internal conflicts are the most strongly
Chapter 1

The research in this thesis makes a long-overdue and crucial first step towards addressing the inadequacy of environmental protection in non-international armed conflict by conducting the first dedicated examination of the extent to which international law at present protects the environment in non-international armed conflict. The original contribution to the literature made by this thesis will be the identification, examination, and discussion of relevant existing international law provisions in order to establish a foundation upon which an informed discourse can begin; a discourse which, it is hoped, will ultimately find an adequate means of protecting the environment in non-international armed conflict.

2. Research Questions and Themes

There is one main research question driving this thesis: are legal prohibitions on environmental damage in non-international armed conflict adequate in light of the nature of contemporary non-international conflict? The research statement to be proved is that legal prohibitions on environmental damage in non-international armed conflict are not adequate. In constructing an answer to the research question and proving the research statement, five main hypotheses will be posed.

**Hypothesis 1 – The environment is damaged in non-international armed conflict**

The environmental consequences of non-international armed conflict are underreported. To determine the adequacy of existing laws to prohibit environmental damage, it should be shown that environmental damage is caused by belligerent parties to an armed conflict.

**Hypothesis 2 – Both state and non-state actors cause environmental damage in non-international armed conflict**

International law, by its very nature, is focused on the conduct of states. However, in non-international armed conflict, at least one belligerent party will be a non-state actor. It should be demonstrated that both states and non-state actors cause environmental damage in non-international armed conflict as the adequacy of linked to the environment, with recent research suggesting that at least forty percent of all intrastate conflicts over the last sixty years have a link to natural resources.
existing laws and approaches will depend on the extent to which they apply to the conduct of both states and non-state actors.

**Hypothesis 3 – Certain laws of armed conflict have the potential to prohibit environmental damage in non-international armed conflict**

A key element in determining the adequacy of international laws and approaches to prohibit environmental damage in non-international armed conflict is the existence of laws that have the potential to prohibit this kind of damage. As the focus of the thesis is primarily on the laws of armed conflict, it is important to show that these laws have, at least, the potential to prohibit environmental damage in non-international armed conflict.

**Hypothesis 4 – Other branches of international law and other approaches to environmental protection fill the gaps in the prohibitions contained in the laws of armed conflict**

There is growing openness to filling the prescriptive gaps in the laws of armed conflict with appropriate rules from other areas where possible and where appropriate. As such, the adequacy of existing laws and approaches will depend on the extent to which other branches of law and other approaches can fill the gaps in environmental protection within the laws of non-international armed conflict. In this regard, three alternative branches of law and two alternative approaches will be examined.

**Hypothesis 5 – The interpretations of international law in furtherance of hypotheses 3 and 4 are in conformity with the rule of international law and the principle of legality.**

Where legal provisions do not have an obvious environmental dimension, then inferring indirect environmental protection is only legally valid if it does not conflict with the principle of legality and its three constituent elements: legal certainty, foreseeability, and no crime or punishment without law. This particular principle will ultimately determine whether interpretations of the law in hypotheses 3 and 4 are just and lawful. Interpretations of international law which seem theoretically plausible but which potentially violate the principle of legality if applied have a direct bearing on the extent to which existing laws and approaches are adequate.
Ultimately the research statement above will be proved because all together, the laws discussed in the thesis amount to little more than a honeycomb of protection for the environment: some prohibition on environmental damage is indeed discernible, but it is piecemeal and dependent on too many circumstantial factors to be predictable, reliable and just law. The answer to the research question will be that legal prohibitions on environmental damage in non-international armed conflict are not adequate in light of the nature of contemporary armed conflict.

3. Methodology

The thesis relies predominantly upon an examination of primary legal texts, including treaties, statutes, state documents such as military manuals, travaux préparatoires, international agreements and judgments of international courts and tribunals. The analysis of these primary texts is drawn from a wide variety of secondary legal sources, including commentaries to treaties, reviews and reports by international organisations, books, journal articles and newspaper reports. The methodology through which the legal analysis in this thesis has been conducted is primarily doctrinal legal analysis in nature. The study also involves a comparative analysis of several branches of international law and practice.

There is a minor empirical element to this study also, where practical examples are used to identify both the environmental damage and the perpetrators of the damage. These examples are by necessity drawn from secondary sources such as academic journal articles and reports of international organisations. Some of the more contemporary examples of environmental damage in non-international armed conflict are drawn from recent newspaper articles since extensive and independent research on these situations takes time to conduct and promulgate. The risks and limitations of using these latter sources as reliable and objective sources of information are acknowledged.

4. Literature Review

The most striking feature of the literature on the protection of the environment in armed conflict is the absence of dedicated, detailed consideration on non-international armed conflict. After the environmental consequences of the 1990-91
Gulf War\textsuperscript{17}, Plant organised a conference and subsequently produced an edited volume substantiating a call for a Fifth Geneva Convention specifically on the protection of the environment in armed conflict.\textsuperscript{18} In defining the scope of such a convention, Plant argued that it should apply equally to all armed conflicts, both international and non-international.\textsuperscript{19} There have been numerous contributions to the literature in the broad field of environmental protection in armed conflict since then – too many to list here - but the overwhelming majority have focused exclusively on international armed conflict. The present author, in earlier work\textsuperscript{20}, is guilty of contributing to this heavy emphasis on international armed conflict. The imbalance in the literature can perhaps be attributed to the abundance of literature on the environment in international armed conflict prompting further reflection and scholarship on this issue. This thesis attempts to address the imbalance in the scholarship by laying the foundations for further research and reflection to take place on the environmental dimension of the laws of non-international armed conflict.

Scholars that do attempt to highlight or discuss non-international armed conflict have done so in passing or as a short point of contrast to a longer discussion on international armed conflict. For example, one key contribution to the literature – a volume from the year 2000 edited by Austin and Bruch\textsuperscript{21} - does not contain a specific chapter on non-international armed conflict. While the editors recognise that environmental protection in non-international armed conflict affects assessments on the adequacy of existing norms\textsuperscript{22}, the issue is not addressed in any great depth by other authors throughout the volume.\textsuperscript{23} Nonetheless, Bruch has subsequently

\begin{itemize}
\item \textsuperscript{17} Discussed further in chapter 2
\item \textsuperscript{19} ibid 43
\item \textsuperscript{20} Tara Smith, ‘Criminal Accountability or Civil Liability: Which Approach Most Effectively Redresses the Negative Environmental Consequences of Armed Conflict’ in Noelle Quénivet and Shilan Shah-Davis (eds), \textit{International Law and Armed Conflict: Challenges in the 21st Century} (T.M.C. Asser Press 2010)
\item \textsuperscript{21} Jay E. Austin and Carl E. Bruch (eds), \textit{The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives} (Cambridge University Press 2000)
\item \textsuperscript{22} ibid 43
\item \textsuperscript{23} See, for example, Adam Roberts, ‘The Law of War and Environmental Damage’ in Jay E. Austin and Carl E. Bruch (eds), \textit{The Environmental Consequences of War: Legal, Economic and Scientific Perspectives} (Cambridge University Press 2000), 75-77; Arthur H. Westing, ‘In Furtherance of Environmental
contributed to the literature on the environment in non-international armed conflict through a discussion of international criminal law on this issue.\textsuperscript{24} It is also one of only four contributions to the literature focused solely on environmental protection in non-international armed conflict.

Two further contributions to the literature on the environment and the laws of non-international armed conflict come from Lopez\textsuperscript{25} and Schwabach.\textsuperscript{26} Like Bruch’s contribution\textsuperscript{27} mentioned above, these two articles focus on the prohibition of environmental harm in non-international armed conflict through international criminal law. The role of international criminal law in armed conflict seems to be rapidly overtaking the laws of armed conflict in terms of relevance and international criminal laws apply to and are enforceable more readily against both state and non-state actors. As such, it is no surprise that the focus of the dedicated literature in this field is on international criminal law. This thesis recognises the value of international criminal law in the protection of the environment in non-international armed conflict and this is discussed in depth in Chapter 7. However, there is an equal value in analysing the laws of armed conflict and other fields of international law in order to probe their true potential in protecting the environment in non-international armed conflict, and for this reason the thesis does not focus exclusively on international criminal provisions.

Guidelines for Armed Forces During Peace and War’ in Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000), 175, 178-179, 181;

\textsuperscript{24} Carl E. Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’ (2000-2001) 25 Vermont Law Review 695


\textsuperscript{26} Aaron Schwabach, ‘Ecocide and Genocide in Iraq: International Law, the Marsh Arabs, and Environmental Damage in Non-International Conflicts’ (2004) 15 Colorado Journal of International Environmental Law and Policy 1

\textsuperscript{27} Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’
The final dedicated source focused on the environment and the laws of non-international armed conflict is a contribution by Meron\textsuperscript{28} to a volume produced by the Naval War College in 1996 and edited by Grunawalt, King and McClain.\textsuperscript{29} This volume devoted an entire section to the protection of the environment in non-international armed conflict. However, the other authors of this section equated non-international armed conflict with military operations other than war.\textsuperscript{30} As such, the chapters contributed by Harlow and McGregor\textsuperscript{31} and Burger\textsuperscript{32} do not focus on non-international armed conflict \textit{per se}, but rather on military activities before and after war, such as preparation for conflict and peacekeeping operations. Although worthwhile discussions in their own regard, they do not address the core issue of environmental protection in non-international armed conflict and as such they do not make notable contributions to the literature on this specific point. Meron’s contribution\textsuperscript{33} however is focused fully on non-international armed conflict and is discussed at relevant points throughout the thesis.

One further contribution to the literature merits attention at this point. In 2009, the United Nations Environment Programme (UNEP) convened a group of experts on the protection of the environment in armed conflict and in so doing, produced a detailed report on international law protecting the environment.\textsuperscript{34} While predominantly focused on international armed conflict, there is considerable discussion in the report on the provisions of international law that could apply to

\textsuperscript{28} Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), \textit{Protection of the Environment During Armed Conflict and Other Military Operations} (Naval War College 1996)

\textsuperscript{29} Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), \textit{Protection of the Environment During Armed Conflict and Other Military Operations} (Naval War College 1996)

\textsuperscript{30} ibid 313

\textsuperscript{31} Rear Admiral Bruce A. Harlow and Commander Michael E. McGregor, ‘International Environmental Law Considerations During Military Operations Other Than War’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), \textit{Protection of the Environment During Armed Conflict and Other Military Operations} (Naval War College 1996), 315


\textsuperscript{33} Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in

\textsuperscript{34} United Nations Environment Programme, \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law}
indirectly protect the environment in non-international armed conflict. A potential criticism of this report is that it does not go into great detail in its discussion on non-international armed conflict, but the style of the report does not really lend itself to such analysis. The report makes a number of recommendations to the international community, many of which highlight the need to address the absence of direct regulation of environmental damage in non-international armed conflict. Throughout this thesis, there is extensive discussion of UNEP's analysis and while some conclusions on indirect protection may be theoretically plausible (if somewhat questionable in terms of the principle of legality), too much weight is placed on the Martens Clause to provide a remedy to the deficiency of environmental protection in non-international armed conflict. This point is discussed in detail in Chapter 5.

This literature review is intended to give a snapshot of the most important and most relevant contributions to the literature on the prohibition of environment damage in non-international armed conflict. As mentioned above, a number of authors discuss the environment in non-international armed conflict in passing but none treat the issue in sufficient detail to be considered an important ideological basis upon which this present study is being built. Most often, the engagement of scholars on environmental protection in non-international armed conflict is limited to acknowledging the absence of direct rules and suggesting that something more should be done in this regard. The present study aims to respond to that call. Where environmental protection in non-international armed conflict has been discussed as a small part of a broader analysis, then it is referred to as a source in relevant sections of the thesis.

5. Definitions of Key Terms

To establish a base-line for the discussion throughout the thesis, the concepts of (i) non-international armed conflict; (ii) the environment; (iii) environment damage / environmental harm; (iv) the prohibition of environmental damage and; (v) the rule of international law and the principle of legality are outlined and defined.

---

35 ibid 6
36 See Chapter 5, 143
a. Non-International Armed Conflict

Non-international armed conflict was first identified as a category of armed conflict in Article 3 common to all four 1949 Geneva Conventions in response to the conduct that went unregulated by international law during the Spanish Civil War. There was no detailed explanation of what amounted to a non-international armed conflict, Common Article 3 simply stated in its chapeau that ‘In the case of armed conflict not of an international character occurring in the territory of one of the High Contracting Parties, each Party to the conflict shall be bound to apply, as a minimum, the following provisions...’ This understanding of non-international armed conflict was reinforced in Additional Protocol II - a response to the brutality of the ‘wars of liberation of the fifties and sixties against colonial rule’ - where non-international armed conflict was negatively defined as against Article 1 of Additional Protocol I.

Article 1 of Additional Protocol I states that international armed conflict includes all armed conflicts defined by Article 2 common to the four Geneva Conventions – that is, ‘all cases of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them’ – as well as ‘armed conflicts in which peoples are

37 Common Article 3 refers to Article 3 which is common to all four 1949 Geneva Conventions. See Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (First Geneva Convention), 12 August 1949, 75 UNTS 31, Art 3; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Second Geneva Convention), 12 August 1949, 75 UNTS 85, Art 3; Geneva Convention Relative to the Treatment of Prisoners of War (Third Geneva Convention), 12 August 1949, 75 UNTS 135 Art 3; Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention), 12 August 1949, 75 UNTS 287 Art 3

38 Siobhan Wills, ‘The Legal Characterization of the Armed Conflicts in Afghanistan and Iraq: Implications for Protection’, 184

39 Common Article 3 (fn. 37)

40 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 609

41 Siobhan Wills, ‘The Legal Characterization of the Armed Conflicts in Afghanistan and Iraq: Implications for Protection’, 185

42 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3, Article 1

43 Common Article 2 refers to Article 2 which is common to all four 1949 Geneva Conventions. See Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (First Geneva Convention), 12 August 1949, 75 UNTS 31, Art 2; Geneva
fighting against colonial domination and alien occupation and against racist regimes in the exercise of their right of self-determination.\(^{44}\) Non-international armed conflict must cross a certain minimum threshold, above ‘situations of internal disturbances and tensions, such as riots, isolated and sporadic acts of violence and other acts of a similar nature’.\(^{45}\)

Treaty-law provisions do not provide any detail as to what constitutes an armed conflict \textit{per se}. The first decision to emerge out of the \textit{ad hoc} International Criminal Tribunal for the former Yugoslavia (ICTY) on 2 October 1995\(^{46}\) made an important development to the laws of armed conflict by establishing criteria that could assist in identifying what constituted a situation of armed conflict. The Appeals Chamber at the ICTY stated that an ‘armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State.’\(^{47}\)

Therefore non-international armed conflict is protracted armed violence more serious than internal disturbances or riots but falling below the level of conflict between states, situations of occupation, or resistance against colonial domination, oppression or racist regimes. The factual circumstances will be assessed, as prescribed in the \textit{Tadić} Appeals Chamber Decision, according to the duration of the violence, its intensity and the level of organisation of the parties to the conflict.\(^{48}\)

However, there is more than one tier of non-international armed conflict enumerated in international law, and this creates difficulties in determining which law applies to any given situation. Both Common Article 3 and Additional Protocol II refer to

\begin{itemize}
  \item Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Second Geneva Convention), 12 August 1949, 75 UNTS 85, Art 2; Geneva Convention Relative to the Treatment of Prisoners of War (Third Geneva Convention), 12 August 1949, 75 UNTS 135 Art 2; Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention), 12 August 1949, 75 UNTS 287 Art 2
  \item Additional Protocol I, Art 1(4)
  \item Additional Protocol II
  \item \textit{Prosecutor v Tadić} ICTY Case No IT-94-1, Decision on Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995
  \item ibid para 70
  \item Anthony Cullen, \textit{The Concept of Non-International Armed Conflict in International Humanitarian Law} (Cambridge University Press 2010), 122
\end{itemize}
armed conflicts other than those between states. However, the jurisdiction of Additional Protocol II is somewhat narrower than Common Article 3 as it only applies to armed conflicts that ‘take place in the territory of a High Contracting Party between its armed forces and dissident armed forces or other organized armed groups which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations and to implement this Protocol.’ Common Article 3 has no such limitations. The difference in the material field of application between Common Article 3 and Additional Protocol II has implications for the discussion in this thesis as Additional Protocol II does not apply to the breadth of conflicts that Common Article 3 applies to, but it has greater potential to indirectly protect the environment in non-international armed conflict.

There are divergent views as to whether the description of non-international armed conflict in the Rome Statute of the International Criminal Court creates a third category of non-international armed conflict. The difference between Additional Protocol II and the Rome Statute is that the latter does not contain qualifying criteria on the degree to which the non-state armed group is organised, the extent to which they control territory or the capacity of the group to enforce the Rome Statute or the laws of armed conflict in general. Nonetheless, the Rome State does specify that armed groups should have some degree of organisation, which Common Article 3 does not. In some ways, this sets the Rome Statute threshold somewhat higher than the Common Article 3 threshold and somewhat lower than the Additional Protocol II threshold.

The classification of non-international armed conflict has implications for the discussion in this thesis. For instance, provisions discussed in the context of Additional Protocol II only apply to the conflicts governed by this Protocol. Equally provisions discussed in the context of the International Criminal Court only apply in the particular circumstances described by Article 8(2)(f) of the Rome Statute. Customary law provisions, unless otherwise stated as part of their customary law

49 Additional Protocol II, Article 1(1)

50 Cullen, The Concept of Non-International Armed Conflict in International Humanitarian Law 159-185

51 Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Article 8(2)(f)
status, are taken to apply to all non-international armed conflicts governed by Common Article 3, as are the provisions discussed in Chapter 6 on the international law applicable to states and Chapter 7 on the relevance of ‘environmental safe zones’.

b. The Environment

There is no single or accepted definition of what constitutes ‘the environment’ and this thesis does not purport to propose a definition. Indeed, many environmental law treaties themselves do not contain a definition of the environment\(^{52}\), but rather define the specific element of the environment over which they have jurisdiction. A preliminary working description of the constituent elements of the environment for the purposes of assessing damage to same in times of armed conflict can be found in the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques\(^{53}\) (ENMOD Convention). Article II of the ENMOD Convention describes ‘the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere’ as well as ‘natural processes’ as being constituent elements of the environment. It is to this specific description of the environment that the discussion throughout this thesis confirms.

c. Environmental Damage / Environmental Harm

Hulme has carried out a detailed and extensive examination of the concepts of environmental damage and environmental harm in the context of armed conflict.\(^{54}\) She maintains that ‘the concept of environmental damage is a complex one\(^{55}\) involving multiple multi-faceted considerations including the specific element of the environment that is in question, whether ‘damage’ has a certain minimum threshold and whether the damage is something that is natural or manmade or both. She explains that environmental damage is different depending on whether the situation is viewed from a scientific point of view or from a legal perspective. In any case, the

\(^{52}\) Karen Hulme, *War Torn Environment: Interpreting the Legal Threshold* (Martinus Nijhoff Publishers 2004), 12

\(^{53}\) Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976, 1108 UNTS 151

\(^{54}\) Hulme, *War Torn Environment: Interpreting the Legal Threshold*, 17-70

\(^{55}\) ibid 17
level of environmental damage required from a legal perspective will always be higher than from a scientific perspective. Hulme has developed and discussed in detail a complex set of criteria for assessing environmental damage in situations of armed conflict. The discussion that follows in this thesis largely supports the analysis carried out by Hulme in this regard. Essentially, environmental damage should be assessed on a case by case basis, taking all of the circumstances of the situation into account.

d. Environmental Protection, Prevention of Environmental Harm and the Prohibition on Environmental Damage

Throughout the thesis, the phrases ‘protection of the environment’, the ‘prevention of environmental harm’ and ‘prohibition on environmental damage’ are used somewhat interchangeably. There are nuances and distinctions to be drawn between the three phrases. Protection connotes some degree of positive action to be taken to shield the environment from harm. Prevention and prohibition indicate limitations on the ability to carry out actions that would otherwise damage the environment. In general environmental discourse, the notion of environmental ‘protection’ tends to be an umbrella notion for the wide range of environmentally beneficial obligations that states must undertake. As such, the thesis does not concentrate on the nuances of protection versus prevention versus prohibition, but uses these terms to mean limitations on conduct that aim to prevent environmental harm.

e. The Rule of Law and the Principle of Legality in International Law

The laws of armed conflict are a very particular branch of international law. In general, the subjects of international law are states and this law is binding upon states only. The object of international law need not necessarily be the state: individuals, the environment, and so on can be objects of international law. However, the laws

56 ibid 17
57 ibid 23-40
58 Hulme, “Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?”, 68
59 Ian Brownlie, Principles of Public International Law (7th edn, Oxford University Press 2008), 57-68
60 ibid , 57-68
of armed conflict, particularly non-international armed conflict, remain part of the corpus of international law but depart from it somewhat by also governing the conduct of non-state entities and individuals engaged in armed conflict. International criminal law is another branch of international law designed to reach the level of the individual. The rule of law is an important part of justice at the international level and it ‘brings to mind a particular set of values and principles associated with the idea of legality.’

Given the peculiar nature of the laws of armed conflict within international law and their effect on the conduct of individuals, the rule of law and the principle of legality have an impact on the degree to which interpretations of existing laws can be considered lawful.

The principle of legality inherent in the rule of international law requires any international law governing an individual’s conduct to be clear and unambiguous so that the individual knows what the parameters of the law are. Individuals are not required to presume to its most logical or illogical conclusion what an unclear law might require of them. In this regard, individuals are required to

‘obey the law where it does exist, but [the individual] has no particular obligation where it does not. It is not up to individual citizens or businessmen to do the lawmakers’ job for them. For example, they have no duty to extend the scope of the law’s constraint (in accordance with common sense, morality, the spirit of the law, social purposes, or anything else), if the sources of law do not disclose an unambiguous enactment to that effect.’

Lex certa – legal certainty – is a constituent element of the principle of legality and, though mostly discussed in the context of the criminal law, it is submitted that it applies equally to international law governing the conduct of individuals. Lex certa requires that ‘an offense be sufficiently specific - to avoid any perception of

62 ibid 16-17
63 International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 52, UN Doc. A/6316 (1966); 999 UNTS 171; 6 ILM 368 (1967), Article 15; and Convention for the Protection of Human Rights and Fundamental Freedoms, ETS 5; 213 UNTS 221, 4 November 1950, Art 7
arbitrariness⁶⁴ and to enable individuals to foresee in concrete terms what conduct is in compliance with and in violation of the legal norm in question. Forseeability is a crucial element in determining legal certainty.⁶⁵ Ultimately, the rule of law mandates that where ‘the law is unclear, individuals are entitled to the benefit of that uncertainty.’⁶⁶ This has implications for the laws of armed conflict: to what extent can provisions which do not have an immediate connection to the environment be lawfully interpreted to require restraint in causing environmental damage during non-international armed conflict?

The application of unclear international law to the individual runs the risk of violating the principle of *nullum crimen nulla poena sine lege* – no crime or punishment without law. Though this principle is linked to the effects of penal law, it is submitted that the principle is also an important element of the rule of non-criminal international law as applied to individuals. Essentially, it means that international law cannot be breached by an individual in the absence of a clear and unambiguous rule which gives the individual an opportunity in advance to shape his or her conduct accordingly.

Waldron argues that the entitlement of individuals to the benefit of any ambiguity in the law is not applicable to states. He maintains that for the individual,

‘absence of regulation represents an opportunity for individual freedom. But absence of regulation represents a very different case for the state. It means that official discretion is left unregulated; it means that power exists without a process to channel and discipline its exercise.’⁶⁷

In this regard, Waldron feels that, where there is an absence or lack of clarity in a regulation at the international level, a ‘government committed to legality should feel

---


⁶⁶ Waldron, ‘The Rule of International Law’ 17

⁶⁷ ibid 18
pressed to remedy this situation by facilitating and taking responsibility for the emergence of new law to fill the gap.\footnote{ibid 18} This position would seem to imply that where ambiguity or a gap exists in the laws of armed conflict, states should be open to emerging norms on the protection of the environment regardless of uncertain or ambiguous content.

This strict construal of state obligations under ambiguous international law is premised on Waldron’s argument that states are trustees under international law for the people – the individuals – under their care.\footnote{ibid 24} States are required to act lawfully in the fullest possible extent to further the aims of international law in creating a peaceful, secure and ordered world for the benefit of individuals – not sovereign states - inhabiting the earth.\footnote{ibid 24} In this regard, 'states are not the bearers of ultimate value. They exist for the sake of human individuals.'\footnote{ibid 24} State sovereignty is therefore ‘made, not assumed, and it is made for the benefit of [individuals].’\footnote{ibid 21} There is a strong argument to be made for interpreting the laws of armed conflict in as expansive a manner as possible to restrain the state engaged in non-international armed conflict from damaging the environment.

However, this means that ambiguous international law applies very differently as between individuals and states. As non-international armed conflict may involve at least one state party, and at least one non-state armed group – though the conflict could indeed be between non-state armed groups only – two different levels of applications of indirect environmental protection seem to result. For individuals to be bound by existing international law, the interpretation of the law must comply with the rule of law through the principle of legality and its constituent elements: legal certainty, foreseeability, and no crime or punishment without law. In short, individuals are entitled to the benefit of any ambiguity in the law. For States on the other hand, gaps and ambiguities in the law – as there clearly are in the case of the prohibition on environmental damage in non-international armed conflict – should

\begin{itemize}
  \item \footnote{ibid 18}
  \item \footnote{ibid 24}
  \item \footnote{ibid 24}
  \item \footnote{ibid 24}
  \item \footnote{ibid 21}
\end{itemize}
not throw a spanner in the works: expansive interpretations of existing law, both
customary and treaty-based, are to be favoured to restrain the exercise of state power
for the benefit of the individual. This approach may therefore result in states being
bound in one way and individuals in another in accordance with the very same
principle of international law. It is a highly undesirable situation but only further
strengthens the conclusion that the law on this issue is currently unsatisfactory.

6. Outline of the Thesis

This thesis is divided into eight chapters. Chapter 1 introduced the mechanics of the
thesis. It set out the rationale for this study, identified the research question to be
answered and outlined five main hypotheses by which the answer to the research
question would take shape. It also described the methodology by which this study
was carried out and briefly discussed the most important scholarly works by way of a
review of the literature in this field. The introduction also outlined and defined three
key phrases that frame this thesis. Chapter 2 also serves an introductory function of
sorts. It chronicles the development of the laws of armed conflict and the evolution
of environmental protection in armed conflict. In this way, Chapter 2 provides a
context for the detailed discussion of specific provisions of the laws of armed
conflict in subsequent chapters. Chapter 2 also highlights examples of the
environmental effects of non-international armed conflict, divided according to
damage caused by state and non-state parties.

Chapter 3 is the first of three chapters that focus exclusively on the laws of armed
conflict. Chapter 3 discusses treaty-based laws of armed conflict and the extent to
which they can lawfully prohibit environmental damage in non-international armed
conflict. Chapters 4 and 5 discuss customary international law. Chapter 4 discusses
the extent to which the customary laws of armed conflict prohibit environmental
damage in non-international armed conflict. Chapter 5 examines a particularly
important element of the customary laws of armed conflict: the Martens Clause. A
great deal of emphasis is placed on the Martens Clause to protect the environment in
non-international armed conflict in the absence of any other direct regulation. A
thorough interrogation of the Clause is conducted in Chapter 5 to determine if this
interpretation is both apposite and lawful.
Chapters 6 and 7 depart from the discussion on the laws of armed conflict and analyse other means of prohibiting environmental damage in non-international armed conflict. Chapter 6 focuses on laws that apply exclusively to states. Although there are convincing arguments to suggest that non-state actors now have human rights obligations, the human rights discussion is included in the chapter discussing state obligations – Chapter 6 – as it is submitted that environmental protection through human rights is not sufficiently developed at present to apply to non-state actors. Specifically, Chapter 6 assesses the potential of international human rights law, international environmental law and international compensation mechanisms to prevent states from causing environmental damage in non-international armed conflict. Chapter 7 examines the extent to which international criminal law and ‘environmental safe zones’ have the potential to deter individuals, non-state armed groups and states from causing environmental damage in non-international armed conflict.

Chapter 8 is the conclusion and summarises the main arguments. It assesses each of the hypotheses outlined in this chapter above to deductively show that legal prohibitions of environmental damage in non-international armed conflict are not adequate in light of the nature of contemporary armed conflict.
Chapter 2

History of the Environmental Laws and Consequences of Non-International Armed Conflict

1. Introduction

This chapter will firstly trace the development of the laws of armed conflict to determine how the laws of non-international armed conflict have developed without a specific and direct prohibition on environmental damage. This chapter will also sketch out some of the environmental consequences of non-international armed conflict, as caused by states, non-state armed groups and in the context of natural resource exploitation.

2. The Development of ‘Environmental’ Laws of Armed Conflict

Explicit environmental protection in the laws of armed conflict has only existed since 1977\(^1\). Prior to that, no direct limitations on the nature and extent of the environmental damage that could be caused during armed conflict were present in international law. The decision to ‘green’ the laws of armed conflict most likely began in the mid-1960s, buoyed by strong public reaction to environmental damage in the Vietnam War. The laws of armed conflict that resulted from this public reaction are a feature of Additional Protocol I, and they have been reproduced in several key instruments since then including the 1998 Statute of the International Criminal Court\(^2\). No environmental provision was included in Additional Protocol II and so

---

\(^1\) At which time prohibitions on environmental damage were included in Additional Protocol I in articles 35(3) and 55. Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3

\(^2\) Article 8(2)(b)(iv), Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90
the laws of armed conflict that are applicable in non-international armed conflict do not directly prohibit environmental damage. UNEP have recognised this as an inadequacy that poses ‘a significant challenge to the applicability and enforcement of IHL for environmental protection.’

The following section will briefly chronicle the development of the environmental laws of armed conflict in three major time periods – (i) the period prior to the start of World War II in 1939; (ii) the period of post-World War II prosecutions in Nuremberg prior to the adoption of the 1949 Geneva Conventions and; (iii) the post-1949 period in which the modern laws of armed conflict took shape. The aim of the discussion in this section is to contextualise both the absence of direct environmental protection in the laws of non-international armed conflict and the justification for indirect protection through the laws identified in Chapters 3-7 that follow.

a. Environmental Protection in Pre-1939 Laws of Armed Conflict

Prior to World War II, a number of legal instruments had the potential to indirectly prohibit deliberate damage to the environment in armed conflict. However, prior to the adoption of the four Geneva Conventions in 1949, there was no distinction between international and non-international armed conflict and so the majority of international treaties regulated conduct between two or more state parties. Yet as far back as the fourth century B.C., the environment was recognised as something that ought to be shielded from harm in non-international armed conflict. Hughes recalls that

‘one of the earliest calls for restraint was recorded by a scribe serving the Greek admiral, Nearkhos, exploring India in the fourth century B.C., who noted that “if there is an internal war among the Indians, it is not lawful for them to touch these land workers, nor even devastate the land itself”’

3 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law (UNEP Post-Conflict and Disaster Management Branch 2009) 10

The first attempted codification of the laws of armed conflict was the Instructions for the Government of Armies of the United States in the Field 1863, more commonly referred to as the Lieber Code. The Lieber Code was drafted to apply to Union forces during the American Civil War, a conflict which could potentially be classified as an 'armed conflict not of an international character' according to contemporary classifications of armed conflict. The Lieber Code prohibited in Article 16, 'the use of poison in any way' and 'the wanton devastation of a district'. Environmental damage could foreseeably breach Article 16. Another relevant limitation is contained in Article 44 of the Lieber Code, which states that 'all destruction of property not commanded by the authorized officer, all robbery, all pillage or sacking, even after taking a place by main force...are prohibited...’ Pillage, as discussed in Chapters 3 and 7, may be a strong means of protecting certain types of environmental damage in conflict, particularly the exploitation of natural resources. Despite these prohibitions, Union troops nonetheless carried out serious destruction of the environment in their efforts to subordinate Confederate forces, with, it seems, general impunity. From the very first codification of the modern laws of armed conflict, therefore, indirect protection did not result in a manifest decrease in damage to the natural environment.

---

5 US War Department, Instructions for the Government of Armies of the United States in the Field, General Orders No 100 (Apr. 24, 1863)


7 Ibid Art 16

8 Ibid Art 44

9 Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 695-697
Shortly after the adoption of the Lieber Code in the United States, the 1868 St. Petersburg Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grams Weight\(^{10}\) produced two foundational concepts within the laws of armed conflict. The preambular clauses of the Declaration call upon states to recognise and consider that

\[\text{‘the progress of civilization should have the effect of alleviating as much as possible the calamities of war,’}\] \(^{11}\) and

\[\text{‘That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy.’}\] \(^{12}\)

It may be argued that civilisation now recognises the importance of environmental protection in terms of the effects that it can have on the human population to the extent that alleviating the calamities of war may now include an obligation preventing excessive environmental damage. The second clause indicating that the sole purpose of hostilities in armed conflict is the weakening of the enemy’s military force is a powerful statement that limits the degree and type of damage that may be caused on the battlefield, including environmental damage. This is a phrase that has attained customary status applying, arguably, to both international and non-international armed conflict.

The Hague Conventions on the Laws and Customs of War 1899\(^{13}\) and 1907,\(^{14}\) legally binding on states at the time of their adoption, are now considered to form an important part of the customary laws of armed conflict. Both instruments contain versions of the Martens Clause\(^{15}\) and other provisions that have implications for environmental protection in contemporary armed conflict, including non-

---

\(^{10}\) Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grams Weight, 11 December 1868, 18 Martens Nouveau Recueil (ser. 1) 474

\(^{11}\) ibid

\(^{12}\) ibid

\(^{13}\) Hague Convention (II) with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 29 July 1899

\(^{14}\) 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. The Hague, 18 October 1907

\(^{15}\) Discussed in detail in Chapter 2
international armed conflict. Article 22 common to both Hague Conventions states one of the most significant principles in the laws of armed conflict: that ‘[t]he right of belligerents to adopt means of injuring the enemy is not unlimited.’\textsuperscript{16} Article 23(g) also common to both Hague Conventions prohibits attempts ‘to destroy or seize the enemy’s property, unless such destruction or seizure is imperatively demanded by the necessities of war.’\textsuperscript{17} Article 25 common to both Hague Conventions states that “The attack or bombardment, by whatever means, of towns, villages, dwellings, or buildings which are undefended is prohibited.”\textsuperscript{18} Article 28 of both Hague Conventions contains an absolute prohibition against pillage: “[t]he pillage of a town or place, even when taken by assault, is prohibited.”\textsuperscript{19} As such, the 1899 and 1907 Hague Conventions contain important foundations for indirect environmental protection in contemporary non-international armed conflict. However, they have never been enforced against belligerent parties in this way.

At the turn of the 20\textsuperscript{th} century, two further instruments contributed to the body of pre-1939 indirect environmental protection in armed conflict. Both limit the use of gases and other noxious substances that can adversely affect wildlife, plants and human beings. First, the Treaty relating to the Use of Submarines and Noxious Gases in Warfare 1922\textsuperscript{20} prohibited in Article 5 ‘the use in war of asphyxiating,
poisonous or other gases’. Second the 1925 Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare\(^\text{22}\) (Gas Protocol) recalled Article 5 above and agreed ‘to extend this prohibition to the use of bacteriological methods of warfare.’\(^\text{23}\)

In summary, prior to 1939, the prohibition of environmental damage in armed conflict was indirect and piecemeal, though such protection was clearly not an explicit aim of any instrument. The majority of instruments – all except the Lieber Code – applied definitively to conflicts between state parties rather than to conflicts that resembled contemporary non-international armed conflict. However, some of the provisions discussed above have entered the realm of customary international law that applies to both international and non-international conflict. Nonetheless, the pre-1939 laws are important to note as they provided the legal regime for the regulation of armed conflict during World War II, and gave rise to the only prosecutions for environmental damage in armed conflict that have been taken to date.

b. Environmental Protection in the Post-World War II Nuremberg Prosecutions

During the Nuremberg Trials that followed World War II, three significant prosecutions pursued instances of environmental damage through the laws discussed above. The conflict in question was undoubtedly international in character. However, these prosecutions remain the only enforcement of the laws of armed conflict for environmental damage and as such they establish important jurisprudential precedents that inform the discussion throughout this thesis, particularly on the use of military necessity as a defence.

First, charges were brought against General Lothar Rendulic pursuant to Article 23(g) of the 1907 Hague Regulations\(^\text{24}\) for the implementation of a scorched earth

\(^{21}\) ibid Art 5

\(^{22}\) Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, 94 L.N.T.S. 65, entered into force Feb. 8, 1928

\(^{23}\) ibid

\(^{24}\) 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. The Hague, 18 October 1907
policy in the German retreat from the Norwegian province of Finnmark.\textsuperscript{25} The scorched earth policy was ordered by General Rendulic as a counter-measure to perceived advancements upon German troops by a superior Russian side. Objectively, this belief was unfounded as the Russian Army did not pursue the German Army as expected. However, the Court decided that the military necessity for the scorched earth tactics had to be judged against the information held by the commander at the time. It was held that General Rendulic’s sincere but mistaken beliefs represented an error in judgement but not a criminal act.\textsuperscript{26} General Rendulic therefore acted within the parameters of military necessity and was found not guilty on that portion of the charge.\textsuperscript{27} He was, however, found guilty on all other charges and sentenced to 20 years imprisonment.\textsuperscript{28}

Second, German General Alfred Jodl was found guilty of implementing a scorched earth policy during the retreat in Norway in 1941, again pursuant to the 1907 Hague Convention\textsuperscript{29}. General Jodl entered a defence of superior orders, which was prohibited by the Statute of the Tribunal and so he was found guilty of this charge.\textsuperscript{30} On account of the cumulative result of all guilty counts, he was sentenced to death by hanging.\textsuperscript{31} Third, natural resource exploitation during World War II was also pursued in post-War prosecutions. In Polish Forestry Case No. 7150, the United Nations War Crimes Commission ‘determined that nine of ten German civil administrators could be considered war criminals for cutting down Polish timber.’\textsuperscript{32}

Each of these cases creates a precedent for the interpretation of the laws of armed conflict to indirectly prohibit environmental damage in armed conflict. However,

\textsuperscript{25} Wilhelm List and Others (The Hostages Trial) (1949) Law Reports of Trials of War Criminals Selected and Prepared by the United Nations War Crimes Committee Vol VIII 34, 45
\textsuperscript{26} ibid 69
\textsuperscript{27} ibid 67-69
\textsuperscript{28} ibid 76
\textsuperscript{29} Trial of Alfred Jodl (1948) Trial of the Major War Criminals before The International Military Tribunal "Blue Series" Vol XXII , 463
\textsuperscript{30} ibid, 571
\textsuperscript{31} ibid 570-571
these precedents have not been capitalised upon as ‘no tribunal since Nuremberg has prosecuted individuals for war-related environmental damage.’

Perhaps a simple explanation could be that the environmental dimension of these prosecutions was not stressed or publicised at the time. Indeed, there is no mention of the environmental dimensions to the Nuremberg Tribunals in scholarship until the early 1990s, following the oil fires that were caused by Iraq during the Persian Gulf War.

c. Environmental Protection Post-1949 in the Modern Laws of Armed Conflict

Despite the serious environmental damage that was caused during World War II – in particular as a result of widespread aerial bombing and from the use of nuclear weapons in Japan – and despite prosecutions for environmental damage in Nuremberg, no prohibition against environmental damage was included in the codification of the laws of armed conflict that took place immediately after the War. Until Common Article 3 was included in the four Geneva Conventions of 1949, the laws of armed conflict did not seem to apply to any conflict other than those between States. The Spanish Civil War prompted the international community to trade ‘a timid breach in national sovereignties’ for necessary civilian protection in the context of internal conflict. Nonetheless, neither Common Article 3 nor the four 1949 Geneva Conventions as a whole contain any reference to the protection of the environment.

It took almost another three decades for the international community to agree limitations on environmental damage in international armed conflict. The Vietnam War is widely regarded as being the major trigger for the inclusion of articles on environmental protection in Additional Protocol I. In Vietnam, US forces were condemned for their widespread use of chemical defoliants, such as Agent Orange,

---

33 ibid


and cloud seeding techniques which caused excessive rainfall. The environmental
effects of these methods and means of warfare influenced drafters at the Diplomatic
Conference 1974-1977 to include for the first time environment-specific provisions
in the codified laws of armed conflict in Articles 35(3) and 55 of Additional
Protocol I. As these provisions are contained in Additional Protocol I, they only
apply to international armed conflict. It should be noted that states did not want to
limit their ability to exercise military force on foot of purely environmental
considerations and so the content of Articles 35(3) and 55(1) of Additional Protocol
I were deliberately drafted with thresholds of harm so high that they would in reality
impose no environmental limitation on state parties engaging in hostilities.

Article 35 of Additional Protocol I concerns ‘basic rules’ of armed conflict. It
reiterates Article 22 of the 1899 and 1907 Hague Conventions in stating that means
and methods of warfare are not unlimited and that means and methods of warfare
that cause superfluous injury are prohibited. Article 35 also prohibits widespread,
long-term and severe environmental damage. As such, Additional Protocol I
considers the protection of the environment to be a basic rule within the laws of
armed conflict. Article 35(3) states that:

‘It is prohibited to employ methods or means of warfare which are
intended, or may be expected, to cause widespread, long-term and severe
damage to the natural environment.’

The second provision protecting the environment is contained in Article 55. The
chapeau of Article 55 identifies it as the provision specifically designed for the
‘Protection of the Natural Environment’. Article 55 states that:

Denver Journal of International Law and Policy 265, 268; John Alan Cohan, ‘Modes of Warfare and
Evolving Standards of Environmental Protection Under the International Law of War’ (2002-2003) 15
Florida Journal of International Law 481, 487
37 Additional Protocol I Art 35(3)
38 ibid Art 55
39 Prof. Michael Schmitt, ‘Keynote address: Armed Conflict, the Environment and International Law –
Concern for Future Generations during Armed Conflict?’, Conference on the Protection of the
Environment in Armed Conflict, TMC Asser Instituut, The Hague, 7 November 2011
40 Additional Protocol I Art 35(3)
41 ibid
‘Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.”

The specific terms of Articles 35(3) and 55 are extremely problematic. The thresholds of harm in both provisions are the same – widespread, long-term, and severe – and these have been condemned as inherently ambiguous and too wide in scope to be of any practical relevance. Meron observes that because of the high thresholds of harm, ‘their usefulness for international armed conflicts is limited.”

From a non-international point of view, prohibitions on environmental damage were proposed for Additional Protocol II. The proposal, by Australia it seems, was contained in draft Additional Protocol II as article 28 bis. It was felt in negotiations that ‘destruction of the environment should be prohibited not only in international but also in internal conflicts.” However, some delegations were against the inclusion of a provision on environmental protection for non-international armed conflict. For instance, the Canadian and United Kingdom delegations considered that including environmental protection in an instrument to apply to non-international armed conflict would decrease civilian protection because rebel groups would then have too many provisions to adhere to, or unreachable standards of conduct to conform to, and might ultimately disregard Additional Protocol II in its entirety as a result. They further felt that ‘authorities in power

42 ibid Art 55
43 Karen Hulme, War Torn Environment: Interpreting the Legal Threshold (Martinus Nijhoff Publishers 2004)
44 Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996), 356
46 ibid, 413 para 55
47 ibid, 411 para 48
might use the inability of the insurgents to carry out the detailed provisions of the Protocol as an excuse for not complying with the Protocol.\textsuperscript{48} These divergent views on the inclusion of a provision to protect the environment in non-international armed conflict formed part of a wider argument over the agreed scope of Additional Protocol II.

Support for draft Additional Protocol II as a whole appeared to be floundering at the eleventh hour over concerns that it contained too much detail to be easily implemented and in light of concern over ‘foreign interference in internal affairs under cover of humanitarian concern.’\textsuperscript{49} States at the time were extremely reluctant to concede any modicum of interference in what they perceived to be their internal, domestic and sovereign affairs.\textsuperscript{50} The obvious trade-off under the circumstances was a pared down version of Additional Protocol II that was acceptable to all parties or, most likely, an indefinite shelving of Additional Protocol II in its entirety at that point. To avoid a situation where no Additional Protocol II was adopted, the Pakistani Delegate to the Diplomatic Conference proposed a simplified version of Additional Protocol II with twenty-eight articles replacing the contentious forty-seven.\textsuperscript{51}

As happens at the negotiation of international instruments, certain provisions can be used as pawns in the bigger political chess game at play. Perhaps the reason that the environmental provision did not make the cut in Pakistan’s proposal was because it was one of those articles over which there had been a steadfast and entrenched dispute. Had Additional Protocol II not been adopted in 1977, it is possible that there would be no codification of non-international laws of armed conflict today beyond Common Article 3, as no further revisions of the Geneva Conventions or their Additional Protocols have taken place since then, despite a seismic shift in the nature of armed conflict over the past three decades. However, the consequence of

\textsuperscript{48} ibid, 411 para 48

\textsuperscript{49} Junod, ‘Additional Protocol II: Scope and History’, 34

\textsuperscript{50} Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’, 353 - ‘[t]he sovereignty of States and their traditional insistence on maintaining maximum discretion in dealing with those who threaten their sovereign authority have combined to limit the reach of the law of war to non-international armed conflict.’

\textsuperscript{51} Junod, ‘Additional Protocol II: Scope and History’, 33

43
adopting a compromise text is that the laws of non-international armed conflict remain without a direct provision on environmental protection as a result of discussions that took place in the context of a very different environmental reality during the 1970s.

Around the same time as the Additional Protocols were being negotiated, States agreed to the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques\(^\text{52}\), commonly referred to as the ENMOD Convention. This short international treaty was designed specifically to prevent the environmental modification techniques that were used in the Vietnam War. The first operative paragraph includes similar limitations on environmental damage to those in Additional Protocol I. There is but one crucial difference: the Protocol I requirements of long-term, widespread and severe damage are conjunctive, that is, all three criteria must be satisfied. In the ENMOD Convention, the phrase is disjunctive – the thresholds are long-lasting, widespread or severe\(^\text{53}\) - so environmental damage amounting to one of the three criteria will be enough to breach the Convention.

Despite the lower threshold of harm, ENMOD does not actually result in increased environmental protection in armed conflict as it only prohibits environmental modification techniques not environmental damage in general. Indeed ‘it is not always easy to see how these environmental modification techniques could actually be used as weapons of warfare and most of them have a high science-fiction calibre.’\(^\text{54}\) For example, the product of ENMOD-prohibited techniques might be ‘cloud-seeding to produce rainfall and floods, as attempted by US forces in Vietnam, and exploding a nuclear device in the oceans to direct a tsunami at the enemy.’ Yet, while the environment is inherently implicated in these actions as weapons, it ‘would not necessarily be harmed, or destroyed, by the use of such techniques’.\(^\text{55}\)

\(^{52}\) Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976, 1108 UNTS 151

\(^{53}\) ibid Art 1

\(^{54}\) Erik Koppe, *The Use of Nuclear Weapons and the Protection of the Environment during International Armed Conflict*, vol 18 (Hart Publishing 2008), 263

\(^{55}\) Karen Hulme, ‘Natural Environment’ in Elizabeth Wilmshurst and Susan Breau (eds), *Perspectives on the ICRC Study on Customary International Humanitarian Law* (Cambridge University Press 2007), 235
In addition, the ENMOD Convention indicates that it binds state parties only. It does not explicitly apply to non-international armed conflict as a whole. The extent to which the ENMOD Convention applies in non-international armed conflict is discussed further in Chapter 3.\(^56\)

In 1994 the ICRC published guidelines on the protection of the environment in armed conflict.\(^57\) However, four significant commentators on this subject, Bothe, Bruch, Diamond and Jensen, argue that ‘these Guidelines...did not constitute any significant progress for better protection of the environment during armed conflict, and even this modest document received a somewhat hostile reception at the UN. The UN General Assembly politely buried it in 1994.’\(^58\)

Despite the environmental provisions in Additional Protocol I and the ENMOD Convention, significant environmental damage has been caused in armed conflicts since 1977. The most recent addition to international law protecting the environment in armed conflict is the inclusion of an environmental war crime in the Statute of the International Criminal Court.\(^59\) The Rome Statute, as it is often referred to, was agreed in 1998 and came into force in 2002. However, the environmental war crime in question, Article 8(2)(b)(iv),\(^60\) uses an almost identical provision to the problematic Article 35(3) of Additional Protocol I. At any rate, it also only applies to international armed conflict. There is no environmental war crime in the Statute for non-international armed conflict. There was an option to insert a provision on environmental protection into Article 8(2)(e),\(^61\) but delegates failed to agree on this.

---

\(^{56}\) See Chapter, 79


\(^{58}\) Michael Bothe and others, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 International Review of the Red Cross 569, 573 footnotes omitted

\(^{59}\) Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90

\(^{60}\) ibid Art 8(2)(b)(iv)

issue at the Diplomatic Conference of Plenipotentiaries in Rome in 1998 and so the option was dropped.

In conclusion, while the environment is almost always damaged in some way during armed conflict, this has not been reflected in prohibitions on damage in the over 200 years of developments in the laws of armed conflict. In particular, the issue of prohibiting environmental damage in non-international armed conflict has been fraught with political concerns and considerations. While proposals for direct prohibitions on environmental damage in non-international armed conflict have been on the table at one time or another, states have shown a marked reluctance to adopt such measures.

3. Examples of Environmental Damage in Non-International Armed Conflict

This section highlights examples of environmental damage in non-international armed conflict, with specific reference to the belligerent party responsible for the damage. Examples from international armed conflict have become the paradigm for the environmental consequences of conflict: the oil well fires in the Persian Gulf during the 1990-91 Gulf War have been the subject of significant discussion to date. Examples of environmental damage as a result of the conduct of hostilities in non-international armed conflict have been less frequently highlighted. The discussion that follows is divided as far as possible according to whether the damage is caused by states or non-state armed groups. It is not an exhaustive account, but it aims to elaborate on the issue at the core of the legal discussions that take place in the following chapters.

a. Damage caused by States

Environmental damage caused by States in non-international armed conflict was the centrepiece of the contentious case between the Democratic Republic of the Congo

---

and Uganda, which was decided by the International Court of Justice in 2005. Furthermore, in Sudan, the Janjaweed were responsible for implementing a government-sanctioned scorched earth policy; burning fields and villages, contaminating water supplies and destroying the natural environment in Darfur. An additional example, depending on how the conflict is classified, is the 2006 armed conflict between Hezbollah and Israel which caused a significant amount of well-documented environmental damage in Lebanon. Iraq, in 1998, also used chemical weapons to repress Kurdish insurgents in Northern Iraq which resulted in environmental damage. There are also reports emerging from the ongoing non-international armed conflict in Yemen of environmental damage being caused by Yemeni, Saudi Arabian and US bombings, as well as a military operation code-named ‘Operation Scorched Earth’.

States engaged in non-international armed conflict often have superior force and access to more powerful weapons than non-state actors. As such, state parties to a non-international armed conflict can cause a large portion of environmental damage

---

63 Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda), Judgment, ICJ Reports 2005, p 168
68 Hulme, War Torn Environment: Interpreting the Legal Threshold, 205
intentionally or otherwise. In efforts to undermine the actions of armed non-state groups, 'many acts by states do impact adversely on the environment.' Therefore, legal limitations on a state’s ability to cause environmental damage in non-international armed conflict are an important element in determining the adequacy of existing international law on this issue.

b. Damage caused by Non-State Armed Groups

In the context of the ongoing non-international armed conflict in Colombia, ‘rebels have waged war against the government by destroying oil pipelines in order to spill millions of barrels of oil into rivers - spills that, not surprisingly, killed vast numbers of fish and destroyed large areas of the ecosystem, in addition to poisoning human water supplies.’ It has been calculated that by ‘1998, the affected areas were estimated to include 2,600km of watercourses, 1,600ha of wetlands, and 6,000ha of agricultural land.’ In addition, ‘guerrilla groups operate out of remote forest and jungle regions; some have their bases in designated national protected areas, and the numerous mines planted by army and guerrilla troops have devastating impacts on forest wildlife and people.’

De Jong, Donovan and Abe have observed that

‘Recent events in Rwanda and the former Yugoslavia underscore that the environment will suffer even in the event of a civil war. Insurgency and counter-insurgency guerrilla civil wars have a particularly devastating effect on local environments. Insurgents often use tropical forests as home bases and hiding grounds; counter-insurgency forces often

72 Steven Freeland, ‘Crimes Against the Environment - A Role for the International Criminal Court?’ (2005) 5 Revue Juridique Polynésienne 335, 351-352
75 ibid 164
respond by slashing and burning forests and by polluting rivers, viewing both as legitimate theatres of operations.\textsuperscript{76}

In order to prevent the Sudanese government from using oil revenues to purchase more weapons, large oil installations were targeted by armed Sudanese rebels.\textsuperscript{77} The environmental damage caused during the Rwandan Civil War in the early 1990s ‘left national parks polluted with landmines and bodies, and agricultural land stripped to force movements of people.’\textsuperscript{78} In Somalia, ‘practices of deforestation and assaults on water purity’\textsuperscript{79} are ‘commonplace in the conflict.’\textsuperscript{80} Forests are frequently targeted in armed conflict\textsuperscript{81} as they provide natural cover and camouflage for non-state armed groups in addition to ‘food, water, fuel, and medicine.’\textsuperscript{82} To date, ‘[t]hree-quarters of Asian forests, two-thirds of African forests and one-third of Latin American forests have been affected by violent conflict.’\textsuperscript{83}

Wildlife and animals are an integral part of the natural environment that often face danger in the context of non-international armed conflict at the hands of non-state armed groups.\textsuperscript{84} In the Rwandan Civil War, land mines were placed extensively throughout national parks, which then killed a significant number of endangered mountain gorillas.\textsuperscript{85} There are issues with the poaching and killing of gorillas in the

\textsuperscript{76} De Jong, Donovan and Abe (eds), \textit{Extreme Conflict and Tropical Forests} ; see also Mark A. Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’ in Jay E. Austin and Carl E. Bruch (eds), \textit{The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives} (Cambridge University Press 2000), 631

\textsuperscript{77} Austin and Bruch, ‘Legal Mechanisms for Addressing Wartime Damage to Tropical Forests’, 166

\textsuperscript{78} Weinstein, ‘Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?’, 700

\textsuperscript{79} Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’, 644

\textsuperscript{80} ibid

\textsuperscript{81} De Jong, Donovan and Abe (eds), \textit{Extreme Conflict and Tropical Forests} ; see also Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’, 631

\textsuperscript{82} Austin and Bruch, ‘Legal Mechanisms for Addressing Wartime Damage to Tropical Forests’, 162-163

\textsuperscript{83} De Jong, Donovan and Abe (eds), \textit{Extreme Conflict and Tropical Forests}, 1

\textsuperscript{84} Joseph P. Dudley and others, ‘Effects of War and Civil Strife on Wildlife and Wildlife Habitats’ (2002) 16 Conservation Biology 319

Virunga National Park in the Democratic Republic of the Congo by rebel groups, including M23, hiding in the Park. Indeed ‘[g]reat apes are particularly vulnerable in wartime...more than two-thirds of the 23 protected areas with great apes have been disturbed by military conflicts during the past 10 years.’

It is evident that both state and non-state actors are responsible for causing environmental damage in non-international armed conflict. The adequacy of international law to prohibit environmental damage in non-international armed conflict will therefore depend on the extent to which relevant laws and regulations apply to both state and non-state armed forces. However, it is not unheard of for non-state armed groups to be sympathetic to the environment and to play some part in its protection throughout the conflict.

c. Natural Resources and Armed Conflict

The exploitation of natural resources is often linked to armed conflict. Both state and non-state actors have been involved in this activity to a greater or lesser degree.

---


Natural resources have caused or financed a significant number of contemporary non-international armed conflicts to date. For example, trade in timber has been linked to conflicts in the DRC, Sierra Leone, Liberia, Cambodia and the Philippines.\textsuperscript{90} In addition, ‘[a]mong the longest continuous conflicts are those found in the remote hinterlands of Myanmar...[t]hese conflict regions are rich in natural resources, including rubies, jade, petroleum, and timber, as well as opium poppy.’\textsuperscript{91} In fact, ‘[t]here is no shortage of long-lived resource-funded insurgencies around: examples include Afghanistan (opium), Colombia (cocaine), Myanmar (timber, opium, gems), and Cambodia (timber and gemstones).’\textsuperscript{92} Recent empirical research suggests that

‘lootable gemstones were available in 26 percent of all intrastate conflicts and 38 percent of all conflict years since 1946. Similarly, 15 percent of the conflicts and 21 percent of all conflict years occurred in areas with significant narcotics cultivation. For petroleum, the figures are 44 and 52 percent, respectively. The fact that a larger share of the observations (conflict years) than the conflicts include these resources tentatively indicates a positive association between local resource wealth and conflict duration.’\textsuperscript{93}

In fact, the exploitation of natural resources is probably the biggest environmental link to non-international armed conflict. However, resource exploitation \textit{per se} is not something that the laws of armed conflict were created for. Though these laws do apply awkwardly to some situations, it does not always result in environmental protection. For example, opportunistic looting and exploitation of resources in the context of an armed conflict – whether carried out by a belligerent group or not – may be covered by the prohibition against pillage. However, if a specific diamond

\textsuperscript{90} De Jong, Donovan and Abe (eds), \textit{Extreme Conflict and Tropical Forests}, 2
\textsuperscript{91} Halvard Buhaug, Scott Gates and Päivi Lujala, ‘Geography, Rebel Capability, and the Duration of Civil Conflict’ (2009) 53 Journal of Conflict Resolution 544, 544
\textsuperscript{92} ibid 555
\textsuperscript{93} ibid 558
mine, for instance, is clearly linked to the funding of a non-state armed group, then that diamond mine may be a military objective. As such, the laws of armed conflict would permit the targeting of that mine, but would also regulate the amount of force that could be used, the extent of the damage that would be permitted and so on.

4. Conclusion

This chapter traced the development of the environmental laws of armed conflict from the fourth century BC to the 1998 Statute of the International Criminal Court. In so doing, the non-existence of direct environmental protection in the laws of non-international armed conflict has been accounted for and a context for the legal discussions to follow has been outlined.

This chapter also briefly sketched out a picture of environmental damage in non-international armed conflict. In so doing, it was established that both state and non-state actors are responsible for causing environmental damage in non-international armed conflict. Laws to prohibit environmental damage in non-international armed conflict should therefore apply to both state and non-state actors equally, particularly as many non-international armed conflicts take place between non-state armed groups only.
Chapter 3
Treaty-based Laws of Non-International Armed Conflict and Environmental Protection

1. Introduction

Though no direct provisions protect the environment in non-international armed conflict, treaty-based laws of armed conflict still indirectly prohibit environmental damage to some degree. Common Article 3, certain provisions of Additional Protocol II, and various limitations on methods and means of warfare that apply in non-international armed conflict are frequently raised as potentially protecting the environment in the absence of specific rules on environmental damage.\(^1\) Nonetheless, the protection that results is piecemeal. Equally, it seems insufficient that a treaty-based system to regulate conduct in non-international armed conflict should exist in the present day without formal provisions regulating the extent to which the environment can be damaged. In this Chapter, specific provisions of treaty-based laws of non-international armed conflict will be identified and examined to determine if, and to what extent, each relevant provision contributes to the enhancement of environmental protection in non-international armed conflict.

Firstly, Common Article 3\(^2\) will be examined. Since it applies to all classifications of non-international armed conflict, it is quite frequently cited as providing a modicum of environmental protection in non-international armed conflict. However, it is submitted that even reading a minor degree of environmental protection into

---

\(^1\) United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP Post-Conflict and Disaster Management Branch 2009), 10

\(^2\) Common Article 3 refers to Article 3 which is common to all four 1949 Geneva Conventions. See Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (First Geneva Convention), 12 August 1949, 75 UNTS 31, Art 3; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Second Geneva Convention), 12 August 1949, 75 UNTS 85, Art 3; Geneva Convention Relative to the Treatment of Prisoners of War (Third Geneva Convention), 12 August 1949, 75 UNTS 135 Art 3; Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention), 12 August 1949, 75 UNTS 287 Art 3
Chapter 3

Common Article 3 would seriously test the bounds of this provision. Following that, the articles within Additional Protocol II that have the potential to indirectly prohibit environmental damage will be identified and examined. For ease of analysis, the Additional Protocol II provisions have been divided into those protections that have as their primary aim the protection of property and those that primarily exist to protect civilians. The most promising provision, in terms of its scope to apply to natural resource exploitation is the prohibition on pillage. The discussion will then turn to treaties that regulate methods and means of warfare. If applicable in non-international armed conflict, these treaties could provide additional indirect environment protection. The subsequent chapter, chapter 4, will deal with the interpretation of customary law in the same manner.

2. Common Article 3

Common Article 3 has been suggested as a means of indirectly prohibiting environmental damage in non-international armed conflict. However, Common Article 3 is neither the strongest nor the most convincing provision in this regard. Common Article 3 to the four Geneva Conventions 1949 was the first provision in the laws of armed conflict to identify non-international armed conflict as a category of armed conflict in its own right. As discussed in Chapter 1, Common Article 3 applies to all armed conflicts that are not covered by Common Article 2 of the four Geneva Conventions 1949. Jean Pictet called Common Article 3 ‘an almost unhoped for extension of Article 2’, as it applies to all armed conflicts that are not between states.


5 See Chapter 1, 23

6 Jean S. Pictet (ed) Commentary on Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, vol I (International Committee of the Red Cross 1952), 38
Common Article 3 contains 'a set of minimum standards of humane treatment to be adhered to in all circumstances.' It is focused on the bodily integrity, and therefore the protection, of civilians and persons hors de combat. As such, it contains prohibitions on the physical treatment of persons in armed conflict. It may be possible to interpret environmental damage as being, for instance, an outrage on personal dignity, or amounting to cruel and inhuman treatment. However, it would be stretching these concepts too far to determine that they had any foreseeable effect on the prohibition of environmental damage in non-international armed conflict.

There are many important prohibitions and protections not included in Common Article 3 that may nowadays be considered minimum standards of humanity, such as freedom of movement, prohibitions on rape and the regulation of methods and means of warfare. If the environment were to benefit from any indirect protection as a result of the application the minimum standards of humanity contained in Common Article 3, it would have to depend on the extent to which civilians and persons hors de combat were directly jeopardised as result of specific environmental damage. In this regard, Bruch has observed that

‘certain instances of environmental warfare - for example, poison gas, landmines, and scorched earth practices - may cause “violence to life and person.” This arguably would violate Article 3(l)(a), but only to the extent that the anthropomorphic standards applied, since Article 3 does not speak to general environmental damage’

As Common Article 3 was drafted three decades before the Additional Protocols and in advance of any discernible global environmental movement, the degree to which

---

7 Anthony Cullen, The Concept of Non-International Armed Conflict in International Humanitarian Law (Cambridge University Press 2010), 59


10 As the drafters of the Commentary to the Additional Protocols maintain in 1987, ‘Respect for the environment, even in peacetime, has only recently become a matter of concern’ – Yves Sandoz and others, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949
the environment was damaged in armed conflict may not have been of immediate concern around the drafting table (in spite of the level of environmental damage that resulted from World War II). It was quite a milestone in itself to have international legal regulation of those conflicts which were regarded at the time as being part of the domestic affairs of the state. Therefore, that Common Article 3 does not contain any reference, direct or indirect, to environmental protection is not surprising.

It has been suggested by Moir that the ‘open texture of common Article 3’ should be seen as ‘a strength rather than as a weakness’. Common Article 3 prohibits inhumane treatment, a concept which, it has been observed, ‘will not always be an objective one, and might vary according to circumstances such as the climate and the level of treatment practically feasible.’ As such the provisions in Common Article 3 on violence to life, cruel treatment and torture, outrages on personal dignity, and degrading treatment could be interpreted to have some kind of environmental dimension, just as their human rights law counterparts have been in recent times.

Nonetheless, it is difficult to purposively interpret the contents of Common Article 3, in light of the rule of international law, in favour of any degree of foreseeable environmental protection. Certainly, the requirement to treat civilians or persons hors de combat humanely could be interpreted as prohibiting the infliction of severe environmental conditions intended to affect the physical and mental integrity of the human person: the drafters of the Geneva Conventions were reluctant to enumerate

(Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 662

\[11\] Lindsay Moir, *The Law of Internal Armed Conflict* (Cambridge University Press 2002), 32

\[12\] Ibid.

\[13\] Common Article 3(1)

\[14\] Lindsay Moir, *The Law of Internal Armed Conflict* (Cambridge University Press 2008), 61

\[15\] Common Article 3(1)(a)

\[16\] Common Article 3(1)(a)

\[17\] Common Article 3(1)(c)

\[18\] Common Article 3(1)(c)

\[19\] For further discussion on human rights see Chapter 6 from 149
what they considered to be humane treatment – or its converse – for fear that such a list would be more restrictive in the long-run.\textsuperscript{20} As Pictet observed,

\begin{quote}
‘it is always dangerous to go into too much detail – especially in this domain. However great the care taken in drawing up a list of all the various forms of infliction, it would never be possible to catch up with the imagination of future torturers who wished to satisfy their beastial instincts; and the more specific and complete a list tries to be, the more restrictive it becomes.’\textsuperscript{21}
\end{quote}

However, it is by no means clear that environmental protection is a straightforward aim of any of Common Article 3’s mere 271 words. It is generally troubling that the only rules applying to a large number of armed conflicts in the present day are those contained in Common Article 3. In light of the argument above, a large proportion of contemporary armed conflicts do not even have indirect prohibitions on environmental damage in the applicable laws of armed conflict.

From another perspective, applying Common Article 3 in its plain sense to protect civilians and persons hors de combat from direct harm has proven to be challenging at times and impossible at others.\textsuperscript{22} As environmental protection is not immediately evident from a plain reading of Common Article 3, to assert that this indirect or hidden meaning exists and should be adhered to by parties to a Common Article 3 armed conflict may conflict with the principle of legal certainty. It may also result in parties to a conflict abandoning Common Article 3 in total as a result of not being able to readily foresee what their obligations truly are – a consequence of over-regulating non-international armed conflict that was feared by drafters of the Additional Protocols.\textsuperscript{23} In short, while Common Article 3 may in theory indirectly

\textsuperscript{20} Elder, ‘The Historical Background of Common Article 3 of the Geneva Convention of 1949’, 60

\textsuperscript{21} Jean S. Pictet (ed) Commentary on Geneva Convention III Relative to the Treatment of Prisoners of War, vol III (International Committee of the Red Cross 1960), 39

\textsuperscript{22} Moir, \textit{The Law of Internal Armed Conflict} , 74; Moir observes that ‘The conflict in Yemen is one example. There are many others – the civil war fought in El Salvador in the 1980s was characterised by an almost total disregard for humanitarian protection...[and]...more recent conflicts, such as those in Angola, Rwanda, Afghanistan, Chechnya, Bosnia-Herzegovina and Sri Lanka, illustrate that the humanitarian laws of war, and Article 3 in particular, are still readily discarded’

\textsuperscript{23} Discussed in Chapter 2 in relation to the drafting of Additional Protocol II, 42
prohibit environmental damage, in practice, this prohibition would be weak and potentially unlawful, in particular as applied to non-state actors.

3. **Additional Protocol II**

This section will examine indirect protection for the environment through Additional Protocol II\(^\text{24}\). Additional Protocol II is generally regarded to be ‘a considerable improvement on common article 3’\(^\text{25}\) because its provisions are more detailed and more specific. However, in comparison to the treaties that apply to international armed conflict, Additional Protocol II is ‘still quite basic.’\(^\text{26}\) Nonetheless Meron has clearly stated that certain provisions of Additional Protocol II could be broadly interpreted to provide indirect protection to the environment in non-international armed conflict.\(^\text{27}\)

As discussed in Chapter 1,\(^\text{28}\) Additional Protocol II’s material field of application is quite narrow. For Additional Protocol II to apply, the armed conflict must firstly take place on the territory of a state that is party to the Protocol unless the provision in question has become part of the *corpus of customary international law*. One party to the armed conflict must be a state. The other party must be a non-state armed group that is highly organised, with evidence of a command structure that has the ability to implement the Protocol and have control over a certain amount of territory. Therefore, conflicts between two non-state armed groups are not covered by the provisions in Additional Protocol II. While this Protocol has greater potential than Common Article 3 to prohibit environmental damage in non-international armed

\(^\text{24}\) Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 609


\(^\text{26}\) ibid para 77

\(^\text{27}\) Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), *Protection of the Environment During Armed Conflict and Other Military Operations* (Naval War College 1996), 357

\(^\text{28}\) See Chapter 1 from 23
conflict, it does not apply to all non-international armed conflicts and as such any environmental benefit accruing from its provisions are a qualified improvement.

The discussion in this section will divide the provisions of Additional Protocol II into two general themes: provisions that protect property and provisions on civilian protection.

a. Environmental Protection through the Protection of Property

The degree to which the environment as a whole can be classified as property is debatable.\(^{29}\) While some parts of the environment can be classified as private property or public property, ownership is not always easily assigned. In that regard, ‘[t]o include components of the environment, such as the atmosphere or ecological concepts such as ecosystems or biological diversity, may indeed unreasonably overstretch the notion of ‘property’ as it is used in the [law of armed conflict].’\(^{30}\) Nonetheless, indirect prohibitions on environmental damage may be ascertained by considering elements of the environment to be protected property.

UNEP have asserted that protecting the environment as property could result in greater protection than that achieved by the direct environmental protection provisions in Additional Protocol I.\(^ {31}\) In the context of the Additional Protocols, it has been observed that “[a]lthough the term ‘property’ is defined in neither of the conventions, it may be presumed to cover natural resources.”\(^ {32}\) The following discussion will consider in turn provisions in Additional Protocol II prohibiting pillage, protecting objects indispensable to the survival of the civilian population, protecting works and installations containing dangerous forces, and protecting cultural objects and places of worship.

\(^{29}\) Daniella Dam-de Jong, ‘International Law and Resource Plunder: The Protection of Natural Resources during Armed Conflict’ (2008) 19 Yearbook of International Environmental Law 27, footnote 113


\(^{31}\) United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 16

\(^{32}\) Dam-de Jong, ‘International Law and Resource Plunder: The Protection of Natural Resources during Armed Conflict’
Pillage – Additional Protocol II, Art 4(2)(g)

Pillage is one of the oldest prohibitions within the laws of armed conflict. It first appeared in weak form in the Lieber Code during the American Civil War but was given more legal weight by its inclusion in the Hague Regulations on the Laws and Customs of War on Land 1907. It has, since this time, been associated with plunder, spoliation or looting. Pillage was included as a prohibition in the Geneva Conventions in the context of international armed conflict. It was also included in Article 4(2)(g) of Additional Protocol II ensuring its continued application in non-international armed conflict. The Appeals Chamber at the ICTY has affirmed the customary nature of the prohibition against pillage and this is supported by the evidence presented in the ICRC’s Customary Law Study. As such, pillage can be argued to apply to all non-international armed conflicts as a matter of custom, as opposed to it being limited to those conflicts just within Additional Protocol II’s material field of application.

There are no elements elaborating on what exactly is prohibited as pillage in the laws of armed conflict. The ICRC’s Customary Law Study cites Black’s Law Dictionary to conclude that the prohibition on pillage is ‘a specific application of the general..."
principle of law prohibiting theft." The prohibition against pillage in its most basic form is now considered to cover isolated, widespread, organised or ad hoc appropriations of both public and private property. There is no guidance in Additional Protocol II to indicate what pillage consists of in detail, though the prohibition in Article 4(2)(g) is undoubtedly absolute. Developments at international criminal courts and tribunals have been and will continue to become instructive in this regard. They are discussed further in Chapter 7.

Pillage is one of the strongest provisions for the protection of the environment in non-international armed conflict because it can apply to certain instances of natural resource exploitation – a growing feature of contemporary non-international armed conflicts. As Sandoz et al observe, pillage under Additional Protocol II covers ‘both organized pillage and pillage resulting from isolated acts of indiscipline’. The International Court of Justice created a specific precedent for natural resource exploitation to be considered as pillage in the 2005 Democratic Republic of the Congo v Uganda case, which is discussed in more detail below. The issue of conflict resource exploitation pervades contemporary scholarship on the relationship between the environment and non-international armed conflict, yet it does not naturally fall within the scope of protection envisaged by the laws of armed conflict in general. By recognising natural resource exploitation as a property-based act of armed conflict, it can be forbidden by the prohibition on pillage in certain circumstances.

Additional Protocol II appears to limit the scope of the prohibition to property owned by ‘persons who do not take a direct part or who have ceased to take part in

---

41 Stewart, Corporate War Crimes: Prosecuting the Pillage of Natural Resources, 133 footnote 5
42 See Chapter 7 from 176-196
43 Yves Sandoz and others, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949 (Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 1376
44 Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda) Judgment, ICJ Reports 2005 168
hostilities’.\footnote{Additional Protocol II Art 4(2)(g)} Stewart feels that this qualification in practice has not limited the scope of the prohibition.\footnote{Stewart, Corporate War Crimes: Prosecuting the Pillage of Natural Resources, 11 para 2} However, this point of view fails to take account of environmental elements which may be considered to be \textit{enemy property} – property that is owned by a party to the conflict as opposed to a neutral third party. This distinction, if read strictly into article 4(2)(g), seems to create an anomaly as far as state-owned environment-based property is concerned. As the state must be a party to the conflict to trigger the jurisdiction of Additional Protocol II, and the appropriation of enemy property is not prohibited by Additional Protocol II, then any state-owned natural resources which are appropriated by non-state actors during a non-international armed conflict would not be prohibited by the article 4(2)(g) prohibition as the property in question would be classified as \textit{enemy property}. This circumstance would place a severe limitation on the prohibition on environmental damage originally anticipated by the pillage provisions.

\textit{Pillage in the ICJ’s DRC v Uganda Case}

The pillage of natural resources was raised explicitly at the International Court of Justice in the case of Armed Activities on the Territory of the Congo between the Democratic Republic of the Congo and Uganda. In this contentious case, the Democratic Republic of the Congo alleged that Uganda was responsible for the pillage of natural resources in the Democratic Republic of the Congo in the context of the ongoing non-international armed conflict there.\footnote{Phoebe N. Okawa, ‘Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)’ (2006) 55 International & Comparative Law Quarterly 742, 743} The ICJ noted that the laws of armed conflict prohibit pillage and in that regard ‘whenever members of the UPDF were involved in the looting, plundering and exploitation of natural resources in the territory of the DRC, they acted in violation of the \textit{jus in bello}...’\footnote{Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda) para 245} This case is important in setting a precedent for the association of pillage with the exploitation of natural resources, thereby making this a foreseeable element of the prohibition on pillage in the laws of armed conflict from now on.

\footnote{Additional Protocol II Art 4(2)(g)}

\footnote{Stewart, Corporate War Crimes: Prosecuting the Pillage of Natural Resources, 11 para 2}

\footnote{Phoebe N. Okawa, ‘Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)’ (2006) 55 International & Comparative Law Quarterly 742, 743}

\footnote{Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda) para 245}
Treaty Based Laws

The ICJ concluded that Ugandan troops

‘including the most high-ranking officers, were involved in the looting, plundering and exploitation of the DRC’s natural resources and that the military authorities did not take any measures to put an end to these acts.’

As such, the ICJ held that Uganda was responsible for these acts. In this regard, a State may not ‘permit - or fail to prevent, or turn a blind eye to - the exploitation of resources by its armed forces for personal benefit.’ It should be noted, however, that the property in question was not exactly enemy property and so the precise implication of the qualification in Additional Protocol II discussed above remains unclear.

To the extent that Uganda was considered to be an occupying power in the Ituri district, it was held to be responsible for the actions of non-state actors for the exploitation of natural resources there. The approach taken by the ICJ has been criticised as being ‘lopsided’ as ‘it did not consider the extensive role played by all the parties to the Congolese conflict in the illegal exploitation of its resources.’ Okowa observes that

‘Although the formal complaint in the case was only directed against Uganda, there was plenty of evidence before the Court and elsewhere that the allegations of exploitation had been carried out by all the parties to the conflict. The Congolese rebel movement, the Allied Democratic Forces led by Laurent Kabila, which formed the government of the DRC after the overthrow of Mobutu in 1994, had taken the view that it was entitled to issue mineral exploitation contracts in the areas under its

50 ibid para 242
51 ibid para 246
52 Arguments of Professor Sands in Armed Activities on the Territory of the Congo (DRC v Uganda), CR 2005/9, 18 para 8
53 Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda) para 248
55 ibid 752
control. The Congolese rebel groups MLC and RCD had also issued permits to foreign corporations, and levied taxes on corporations operating in areas under their control. The Congolese government under Laurent Kabila had also reportedly paid his SADC allies in the form of mineral exploration contracts.\footnote{56 Phoebe N. Okowa, ‘Natural Resources in Situations of Armed Conflict: Is There a Coherent Framework for Protection?’ (2007) 9 International Community Law Review 237, 254}

As a Court for settling contentious issues between states, it is understandable why the ICJ did not focus on the obligations and responsibilities of non-state actors. However in the majority of non-international armed conflicts, the exploitation of natural resources amounting to pillage may more often be committed by non-state actors.\footnote{57 Larissa J. Herik and Daniella Dam-de Jong, ‘Revitalising the Antique War Crime of Pillage: The Potential and Pitfalls of Using International Criminal Law to Address Illegal Resource Exploitation During Armed Conflict’ (2011) 22 Criminal Law Forum 237, 254} Indeed the exploitation of natural resources in the Democratic Republic of the Congo pervades the whole conflict and it is to be regretted that a more thorough examination of the responsibilities and duties of each party to this conflict could not have taken place on this occasion.

Nonetheless, ‘the prohibition of pillage...offers a powerful mechanism to hold non-state armed groups accountable for the exploitation and plunder of natural resources during armed conflict.’\footnote{58 Dam-de Jong, ‘International Law and Resource Plunder: The Protection of Natural Resources during Armed Conflict’} While pillage may be a relatively strong means of prohibiting environmental damage in non-international armed conflict it has its weaknesses too and it remains ‘important not to overly and exclusively focus on pillage as the new promise on the horizon and to be aware of its inherent limits.’\footnote{59 Herik and Dam-de Jong, ‘Revitalising the Antique War Crime of Pillage: The Potential and Pitfalls of Using International Criminal Law to Address Illegal Resource Exploitation During Armed Conflict’, 273}
**Objects Indispensable to the Survival of the Civilian Population – Additional Protocol II, Article 14**

The aim of the prohibition in Article 14 of Additional Protocol II is to explicitly prevent starvation as a method of warfare. Article 14 specifically identifies foodstuffs, agricultural areas that produce foodstuffs, crops, livestock, drinking water installations and irrigation works as objects which are indispensible to the survival of the civilian population. This list of indispensible objects in Article 14 is not exhaustive: the enumerated objects are preceded by the phrase ‘such as’, which indicates that there is scope for including other similar objects under the protection of this article. Additionally, the protection in Article 14 prohibits destroying, removing or rendering useless the enumerated objects at any point during the conduct of hostilities.

However, Article 14 prohibits the destruction of the objects mentioned above only to the extent that doing so would result in the starvation of the civilian population. The prohibition on targeting agricultural areas – an integral part of the natural environment – may be the closest one can get to direct environmental protection in the laws of non-international armed conflict. Equally the protection of crops and livestock amount to direct protection of elements of the environment in non-international armed conflict. Sandoz *et al.* observe that the ‘verbs "attack", "destroy", "remove" and "render useless" are used to cover all eventualities, including pollution of water supplies by chemical agents or the destruction of a harvest by defoliants.’

But these actions are prohibited to the extent that the civilian population would starve as a result. Interestingly, water sources themselves are not protected. Rather man-made installations that facilitate access to and use of water by the civilian population are protected – presumably because without them, the civilian population

---

60 Additional Protocol II, Art 14 ‘Starvation of civilians as a method of combat is prohibited. It is therefore prohibited to attack, destroy, remove or render 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’

would not have any drinking water, domestic water, or water to use for agricultural purposes.

Other elements of the natural environment which, if destroyed, would result in the starvation of the civilian population may also benefit from the protection contained in Article 14 since the list contained therein is not exhaustive. Where the human population is dependent on, for example, fish in a lake or a river, then it would be against the spirit of Article 14 to damage that lake or river to the extent that the food supply is depleted so severely that the civilian population would starve as a result. It has also been argued that an expansive reading of the Article 14 could include the protection of underground aquifers. Examples of state-caused environmental damage within the scope of Article 14 are evident in Darfur ‘which has seen the poisoning of vital water wells and drinking water installations as part of a deliberate government-supported strategy by the Arab Janjaweed militia to eliminate or displace the ethnic black Africans living in that region.

During the discussions at the Diplomatic Conference from 1974-77, the Hungarian delegate observed that ‘[t]he natural environment should have the same protection as the objects indispensable to the survival of the civilian population’. Nonetheless, Baker has commented that Article 14 contains very limited protection for the environment in non-international armed conflict. Additional Protocol II links the protection of certain environmental elements to the ultimate result of starving the civilian population. It is submitted that this is Article 14’s major limitation. The drafters of the Commentaries to the Additional Protocols indicated that the ‘concept of the natural environment should be understood in the widest sense to cover the biological environment in which a population is living. It


64 Steven Freeland, ‘Crimes Against the Environment - A Role for the International Criminal Court?’ (2005) 5 Revue Juridique Polynésienne 335, 336


does not consist merely of the objects indispensable to survival.\textsuperscript{67} Its counterpart in Additional Protocol I does not require the destruction of objects indispensable to the survival of the civilian population to be exclusively linked to starvation.\textsuperscript{68} The environment could be considered to be an object indispensable to the survival of the civilian population, but objects are only protected in Article 14 to the extent that their destruction is intended to cause a particular result: starvation. In addition, it has been asserted that while the protection of ‘crops and livestock in war necessarily provides some limited collateral protection of flora and fauna’\textsuperscript{69} an ‘assertion that a healthy environment generally is indispensable to the population’s survival...is probably insufficient because it lacks specificity and is not supported by the drafting history’\textsuperscript{70} of the Additional Protocols.

A further limitation on the scope of Article 14 to prohibit environmental damage is that if an object enumerated within the article is classified as a military objective, then it may be targeted. It has been observed that ‘an irrigation canal used as part of a defensive position, a water tower used as an observation post, or a cornfield used as cover for the infiltration of an attacking force’ may be targeted despite being indispensable for the survival of the civilian population. However, a dual-use object which is particularly indispensable in ensuring that the civilian population do not starve, despite its military use, should be protected fully under Article 14. For instance, if a herd of cattle upon which a nomadic tribe depended for sustenance is requisitioned or commandeered by advancing troops to cater for their food needs, then that action would probably be prohibited by Article 14.

\textsuperscript{67} Yves Sandoz and others, \textit{Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949} (Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 662

\textsuperscript{68} Article 54, Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3

\textsuperscript{69} Baker, ‘Legal Protections for the Environment in Times of Armed Conflict’, 371

\textsuperscript{70} ibid 371
Protection of Works and Installations Containing Dangerous Forces – Additional Protocol II Art 15

Article 15 of Additional Protocol II\(^\text{71}\) prohibits attacks on works and installations containing dangerous forces in non-international armed conflict. It reads as follows:

‘Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population.’\(^\text{72}\)

Interestingly, there are several exceptions in Article 56 of Additional Protocol I which permit the targeting of these installations,\(^\text{73}\) but there are no such exceptions in Additional Protocol II. This suggests, quite surprisingly, that there is more absolute protection for these installations in non-international armed conflict and therefore greater protection for the environment as an indirect result. The targeting of these installations is prohibited even when they amount to military objectives because of the damage that would be caused as a result.

As an example of the human and environmental catastrophe that can result from the targeting of dams, dykes and nuclear electrical generating stations, the effects of the attack on the Huayuankow Dyke in China are certainly illustrative. With the qualification that this attack took place in the context of what would be classified as an international armed conflict, Caggiano describes the attack on the Huayuankow Dyke as follows:

‘The classic example of such environmental warfare occurred during the Second Sino-Japanese War, when the Chinese dynamited the Huayuankow dike of the Yellow River in an attempt to halt the marching Japanese forces. This military tactic succeeded in drowning several thousand Japanese soldiers and halting their advance into China along this front. The resulting flooding, however, ravaged three provinces and

\(^{71}\) Additional Protocol II, Art 15

\(^{72}\) ibid, Art 15

\(^{73}\) Additional Protocol I, Art 56
inundated several million hectares of farmland. The human costs were staggering: eleven cities and 4,000 villages were flooded, killing at least several hundred thousand civilians and leaving several million homeless. This little known act of environmental warfare, performed by a defending army, is perhaps the single most devastating act in all human history in terms of the number of lives claimed.74

The ICRC has recognised this provision as being customary for both international and non-international armed conflicts.75 However, in making such an assessment, the ICRC identifies several reservations entered by states party to the Additional Protocols in addition to hesitations issued on the part of states not bound by the Additional Protocols, such as the United States. The reserving states express concern that they cannot guarantee that such installations will always be spared, because it is felt that in some situations these installations may have an extremely high military value. Instead, the reserving states commit to targeting the enumerated installations within the parameters of a strict application of the customary principle of proportionality. Therefore the customary law status of this rule may be questionable.

The environmental effects that would result from targeting a nuclear electrical generating station are not difficult to imagine, particularly when one considers the devastating and long-term effects of the peace-time explosion and fire in the nuclear power plant in Chernobyl in 1986, and the earthquake-induced damage to the Fukushima Nuclear Power Plant in Japan in 2011. The drafters of the Commentaries to the Additional Protocols raised the concern that if ‘peacetime activities can unleash such [disasters], we should fear them all the more during wartime.’77

74 Mark J.T. Caggiano, ‘The Legitimacy of Environmental Destruction in Modern Warfare: Customary Substance over Conventional Form’ 20 Boston College Environmental Affairs Law Review 479, 489 footnote 73

75 Henckaerts andDoswald-Beck, Customary International Humanitarian Law Volume I: Rules, Rule 42


77 Yves Sandoz and others, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949 (Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 412
dykes and nuclear electrical generating stations may not be the object of attack under any circumstances and this does indeed greatly contribute to environmental protection in non-international armed conflict, since the targeting of such installations would without doubt cause extensive environmental damage.

The list of works and installations containing dangerous forces in Article 15 is fully enumerated and there is no scope for additional structures to be added; the prohibition on damage is strictly limited to dams, dykes and nuclear electrical generating stations. Although other facilities, such as oil rigs and facilities that store crude oil were discussed at the 1974-77 Diplomatic Conference, no consensus could be reached on their inclusion in Article 15. This has been criticised as ‘it was well established that oil spills from tankers could result in massive environmental damage, [and] it is perhaps surprising that the draftsmen of the Protocol, when referring to works and installations containing dangerous forces, made no reference to the danger potential in the destruction of oilfields or wells.’ The extent of the damage that can be caused from targeting petrochemical plants is also evident from recent conflicts in Kosovo and Lebanon, yet it has even been suggested that petrochemical plants have ‘been intentionally excluded’ from the absolute prohibition contained in Article 15 for strategic reasons.

Conflicts over natural resources such as oil and gas may be more frequent than over dams or dykes in the coming decades. As such, Article 15 may not move dynamically with the times. The prohibition on targeting nuclear electrical generating stations should not be undermined, however, and in this regard environmental damage is an easily foreseeable element of the protection envisaged by Article 15.

---

78 ibid 1462


82 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 18
Protection of Cultural Objects and of Places of Worship – Additional Protocol II, Article 16

Though it does not describe the environment per se, the protection of cultural objects\(^{83}\) in Article 16 is frequently considered to prohibit some environmental damage in non-international armed conflict.\(^{84}\) However, just like many aspects of indirect environmental protection, cultural property protection has ‘rarely been effectively implemented or enforced’\(^{85}\) and so the extent to which actual environmental protection can result is unclear. Article 16, reads as follows:

‘Without prejudice to the provisions of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954, it is prohibited to commit any acts of hostility directed against historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples, and to use them in support of the military effort.’\(^{86}\)

The protection is not all-encompassing: the environment is only protected to the extent that it is or forms part of a cultural or historic place. Neither the 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict\(^{87}\) nor its two additional protocols of 1954\(^{88}\) and 1999\(^{89}\) make provision for the environment as a cultural object in itself. The whole purpose of protecting cultural objects is rationalised as follows:

---

\(^{83}\) See generally David Keane, ‘The Failure to Protect Cultural Property in Wartime’ (2004) 14 DePaul-LCA Journal of Art and Entertainment Law 1

\(^{84}\) United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law 18

\(^{85}\) ibid 51

\(^{86}\) Additional Protocol II, Article 16


‘In the same way that rape became an instrument to destroy the adversary’s identity, cultural aggression, i.e., the destruction and pillage of the adversary’s non-renewable cultural resources, became a tool to erase the manifestation of the adversary’s identity. Both rape and damage to cultural property represented forms of “ethnic cleansing”.’

Therefore, if a mountain, lake, forest or other delimited area held an important spiritual or historical significance, then the environment in that place may not be damaged. For example, the Mesopotamian Marshes have formed an integral part of the cultural heritage and way of life of the Marsh Arabs in Southern Iraq, who lived in and off the marshes for hundreds of years. The Mesopotamian Marshes could easily have been considered an aspect of their culture, thereby qualifying for protection under the laws of armed conflict. By contrast, the natural environment benefits from little additional protection when manmade cultural objects are targeted. For instance, a mosque, church or art gallery are not elements of the natural environment and their destruction in isolation may have little lasting effect on the integrity of the surrounding ecosystem.

Of assistance in identifying cultural places that could result in environmental protection is UNESCO’s classification of certain sites as being of significant importance to world heritage, pursuant to the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention). There are currently 188 sites on the UNESCO World Heritage List that have been classified as being ‘natural’ as opposed to man-made, and a further 29 that are a mixture of both. In the context of armed conflict, UNESCO have compiled a list of world heritage sites that are in danger – of 28 sites on the danger list, 18 are


91 Convention Concerning the Protection of the World Cultural and Natural Heritage, 1037 UNTS 151; 27 UST 37; 11 ILM 1358 (1972)

part of the natural environment. To attempt to prohibit environmental damage in non-international armed conflict

‘UNESCO has been running a pilot project in the Democratic Republic of Congo since 2000 to try to use the Convention as an instrument to improve the conservation of World Heritage sites in regions affected by armed conflict. One conclusion of this project is that while it might not be possible to avoid damage to the ecosystem during conflict, it is possible to actively use the Convention to sensitize the warring factions and to limit the damage.

However, not all scholars see the benefits of World Heritage Sites in enhancing environmental protection in armed conflict. Bruch and Austin contend that

‘As a practical matter [...] many of the ecologically sensitive areas threatened by armed conflict in Africa, Central America, and elsewhere have already been named World Heritage Sites—but to little effect in the face of troop movements or large refugee populations. Absent a more focused attempt to extend the Convention to cover these issues or to instil its values into military operations, it appears inadequate to the task of regulating wartime environmental damage.

b. Environmental Protection through the Protection of Persons

Although the potential to prohibit environmental damage in Common Article 3 was weak at best, the protection of persons in Additional Protocol II has slightly more scope. Two provisions are of interest in this regard: Article 13 on the protection of the civilian population and Article 17 on the prohibition of forced movement of civilians. From a customary law point of view, the principle of distinction has a fundamental role to play in supporting these two articles, but that principle is

---


94 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law

discussed thoroughly in Chapter 4. In this section, the manner in which civilian protection can result in enhanced environmental protection in non-international armed conflict will be examined.

**Protection of the Civilian Population – Additional Protocol II Art 13**

Provisions protecting the civilian population have the aim of protecting civilian human beings. The extent to which environmental damage could give rise to a breach of the obligations in Articles 13(1) and 13(2) below would therefore depend very much on the circumstances at the time of the attack and the extent to which the civilian population were directly harmed by the environmental damage. Whether the attack took place in a densely populated urban area or sparsely populated rural area, for instance, would have implications for the degree to which any environmental damage caused could jeopardise civilian protection under Article 13. The relevant provisions of Article 13 are as follows:

1. The civilian population and individual civilians shall enjoy general protection against the dangers arising from military operations.
2. The civilian population as such, as well as individual civilians, shall not be the object of attack. Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited.

As to sub-section 1, it could be inferred that civilian protection prohibits belligerents from causing, deliberately or otherwise, environmental conditions that could be considered a danger to the civilian population. Where damage to the environment exposes civilians to the dangers of military operations, then belligerents could be in violation of this provision. Though it took place in the context of a conflict in occupied territory, the conflict in Gaza at the end of 2008/beginning of 2009 is illustrative of this point. The Council of Europe have highlighted environmental damage in Gaza as a result of this conflict as follows:

---

96 See Chapter 4 from 86-92
97 Additional Protocol II, Art 13
‘Air strikes have generated 600 000 tonnes of demolition debris. An estimated 17% of cultivated land, including orchards and greenhouses, has been severely affected, with adverse consequences for farmers' livelihoods and those of the population at large. Destruction of vegetation cover and compacting of soil by strikes and tank movements has degraded the land and made it vulnerable to desertification. It is possible that this land will be difficult to revegetate...There has also been soil contamination from petroleum-based substances often exceeding internationally recognised limits. These fuel spills could percolate into the groundwater.’

Other dangers arising from military operations include air pollution from exploded ordnance and fires, contaminated water supplies or unsafe areas of land. Article 13(1) has some similarities with the customary principle requiring belligerents to take precautions in and against the effect of attack. The civilian population therefore should be protected from the dangers of an attack as far as possible and this would, presumably, include any major environmental dangers that would be caused as a result.

Article 13(2) may involve a prohibition against targeting the environment in which civilians are located. The presence of civilians in a place shields the immediate surrounding environment from attack. However, as with all laws of armed conflict, the rules are only effective when adhered to and respected during the conduct of hostilities. Civilian protection, while remaining one of the core principles of the laws of armed conflict, has been subject to flagrant abuse at times, resulting in serious humanitarian casualties and environmental damage. For instance, in the non-international conflict in Sri Lanka in 2009, civilians were placed in two no fire zones. In each location, civilians were fired upon directly by the Sri Lankan army. This caused massive human fatalities and casualties and damage to the environment in both areas.

---

99 Council of Europe, Committee on the Environment, Agriculture and Local and Regional Affairs, Report on Armed Conflicts and the Environment, Doc 12774, 17 October 2011, paras 120-121

100 Discussed further in Chapter 4 from 106-110

101 The extent to which demilitarized zones or no-fire zones can be used to protect the environment will be discussed in Chapter 7 from 197-203
It could be foreseen that terror would spread amongst the civilian population by setting forest fires, killing and maiming domestic and wild animals or destroying significant parts of the environment upon which the civilian population depend. In other words, targeting the environment to terrorise the civilian population could amount to a violation of the laws of armed conflict. This indirect prohibition on environmental damage would more than likely be within the bounds of the principle of legality. However, the civilian protection provisions in Additional Protocol II have a specific function: to shield the civilian population from direct harm. As such, the focus of the harm under Article 13 is anthropocentric and justifiably so.

**Prohibition of Forced Movement of Civilians – Additional Protocol II Art 17**

Civilians may not be forcibly moved during or because of armed conflict, and this prohibition is the central focus of Article 17 of Additional Protocol II. Where the environment is destroyed with the aim of preventing civilians from living in a certain place, with the result that they are compelled to move away, then this could amount to a violation of Article 17. The actual environmental damage could take many eventual forms - tampering with water supplies and water tables, polluting rivers, targeting food supplies, spoiling agricultural land, carrying out large-scale bombardment of an area and so on.

A frequently highlighted example of environmental conditions being used to forcibly move a civilian population is the treatment by the Iraqi State of the Marsh Arabs living in the Mesopotamian Marshes in Southern Iraq, mentioned earlier in the context of Article 16 above.102 The Marsh Arabs had uniquely adapted, over hundreds of years, to the marshlands readily believed to have been the location of the Garden of Eden. Their livelihoods and culture were symbiotically influenced by and adapted to this particular environment. Yet in response to an unsuccessful rebellion by the Shi’ite Muslims against Saddam Hussein’s government in 1991 – a rebellion in which the Marsh Arabs participated on the side of the Shi’ite Muslims – the government drained the Mesopotamian Marshes to displace the Marsh Arabs and

---

102 The issue with this example is that it is somewhat questionable as to whether the laws of armed conflict continued to apply because ‘at this time, the “hostilities” were largely over. - Aaron Schwabach, ‘Ecocide and Genocide in Iraq: International Law, the Marsh Arabs, and Environmental Damage in Non-International Conflicts’ (2004) 15 Colorado Journal of International Environmental Law and Policy 1, 10
destroy their culture. In draining the marshlands, 200,000-400,000 people were displaced, and a richly biodiverse ecosystem was destroyed to the extent that only seven percent remains today. In essence, the environment upon which the people depended was targeted so that its spoilation would force the civilians living upon it to move. The act of forcibly moving civilians can have a clear environmental dimension and so the prohibition on such actions, when adhered to or enforced, can have an equally clear effect on prohibiting environmental damage in non-international armed conflict.

c. Conclusions on Additional Protocol II

Additional Protocol II contains six provisions that, to a greater or lesser degree, have the potential to prohibit environmental damage in non-international armed conflict. Four of these provisions prohibiting damage to property are perhaps the strongest options. In this regard, it is submitted that the greatest environmental protection in Additional Protocol II is achieved from (i) the prohibition against pillage; (ii) the protection of objects indispensible to the survival of the civilian population; (iii) the protection of works and installations containing dangerous forces and the; (iv) the protection of cultural objects. Protection of the environment is achieved to a much lesser extent in the civilian protection provisions. Of the two provisions listed in this sub-category, it is most foreseeable that prohibitions on the forced movement of civilians could prohibit environmental damage in non-international armed conflict.

4. Limitations on Methods and Means of Warfare in Non-International Armed Conflict

There are no regulations on means or methods of warfare in Common Article 3 or Additional Protocol II. Nonetheless, ‘many weapons have the potential to cause serious and lasting damage to the environment’. Therefore regulations on the development or use of weapons can result in indirect environmental protection, if

---

103 Ibid 1-4

104 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 13
those laws apply in non-international armed conflict.\textsuperscript{105} The subject of environmentally-friendly weapons was highlighted briefly by world media in 2006 when BAE Systems announced that they were going to manufacture green munitions, such as ‘lead-free bullets and rockets with reduced toxins’\textsuperscript{106}. It prompted headlines such as ‘Watch Out, Sarge! It’s Environmentally Friendly Fire’,\textsuperscript{107} which is somewhat indicative of the absurdity felt by the public at large in joining two apparently incompatible concepts: environmental protection and armed conflict.

The general laws of armed conflict are not frequently revised and updated – the last major instruments were the Additional Protocols adopted in 1977. However treaties controlling the development and use of weapons are negotiated quite frequently by comparison. The most recent instrument on weapons concerned cluster munitions and was adopted in Dublin in 2008.\textsuperscript{108} There is no automatic application of these treaties to non-international armed conflict, however. They are instruments of international law negotiated and ratified by states. Nonetheless, it is possible to discern a critical mass of limitations on means of warfare that may apply in non-international armed conflict, either as a matter of positive law or custom. In this way, environmental damage may be prohibited if it is caused by a weapon which itself is prohibited, or which is used outside of the bounds of the limitation placed upon it.

\textit{Gas Protocol 1925}

The 1925 Gas Protocol\textsuperscript{109} does not apply expressly to non-international armed conflict because this category of armed conflict did not exist before 1949. However, it may apply as a matter of customary international law in non-international armed conflict. Bryden has observed that there are some reservations as to whether the customary prohibition includes all use of lethal chemical and biological weapons, or

\begin{flushleft}
\end{flushleft}

\begin{flushleft}
\textsuperscript{106} Jon Unngoed-Thomas, ‘Watch out, sarge! It’s environmentally friendly fire’ The Sunday Times (London, September 17 2006) Home News
\end{flushleft}

\begin{flushleft}
\textsuperscript{107} ibid
\end{flushleft}

\begin{flushleft}
\end{flushleft}

\begin{flushleft}
\textsuperscript{109} Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, 94 L.N.T.S. 65, entered into force Feb. 8, 1928
\end{flushleft}
just the first use.\textsuperscript{110} At any rate, it has been observed that ‘in so far as the use of chemical and biological weapons may cause harm to the environment, the Protocol can be seen to provide some level of environmental protection during armed conflict.’\textsuperscript{111} However, one limitation to note is that the 1925 Gas Protocol only limits the use, not the development or stockpiling, of these weapons.

\textit{Biological Weapons Convention 1972}

The 1972 Biological Weapons Convention\textsuperscript{112} does not apply expressly to non-international armed conflict but may do so as a matter of customary international law. By banning the development, production and stockpiling of biological weapons, the Convention ‘protect[s] the environment in armed conflict from weapons that are likely to cause significant environmental degradation, particularly to the natural environment and to fauna and flora.’\textsuperscript{113} Article II of the Biological Weapons Convention requires each state party, in implementing the Convention, to observe all necessary safety precautions to ‘protect populations and the environment.’\textsuperscript{114}

\textit{Environmental Modification Convention 1976}

The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)\textsuperscript{115} prohibits the use of environmental modification techniques as a method or means of warfare. It was drafted in response to the environmental modification techniques, such as cloud seeding and forest defoliation that were employed by the U.S. during the Vietnam

\textsuperscript{110} Alan Bryden, \textit{International Law, Politics and Inhumane Weapons: The Effectiveness of Global Lannine Regimes} (Routledge 2013)

\textsuperscript{111} United Nations Environment Programme, \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law}, 14

\textsuperscript{112} Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Biological Weapons Convention) (1972) 1015 UNTS 163

\textsuperscript{113} United Nations Environment Programme, \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law}, 15

\textsuperscript{114} Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Biological Weapons Convention) (1972) 1015 UNTS 163, Article II

\textsuperscript{115} Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976, 1108 UNTS 151
War in the 1970s. The terms of the ENMOD Convention were discussed in Chapter 2. While this Convention appears to be radically ahead of its peers in prohibiting environmental damage during armed conflict, it solely prohibits the use of environmental modification techniques, rather than environmental damage in general, in future conflicts. As such, ENMOD has been described as being ‘pregnant with limitations’ to the extent that it has ‘largely been irrelevant to most forms of environmental harm arising in the context of armed conflict’ since its adoption in 1976.

Furthermore, the ENMOD Convention does not expressly apply in non-international armed conflict and the extent to which it has become part of customary international law is questionable. Article 1(1) refers to a prohibition on states causing damage to other states by means of environmental modification in armed conflict. It may not be binding in state versus non-state armed conflict, or at least not binding on the non-state party.

Article 1(2) of the ENMOD Convention prohibits states party from inducing ‘international organizations’ to engage in environmental modification techniques in armed conflict. Such international organizations are more likely to connote multinational military alliances, such as NATO, rather than non-state actors operating trans-nationally, such as Al Qaeda, for example. An annex to the ENMOD Convention, containing clarification of key terms, is silent as to the precise nature of the types of international organization envisioned by Article 1(2) and so the extent to which this Convention applies to non-international armed conflict remains unclear.

116 See Chapter 2 from 44


119 ibid 249
**Convention on Certain Conventional Weapons 1980**

The 1980 Convention on Certain Conventional Weapons\(^{120}\) is expressly applicable to all non-international armed conflicts as a result of an amendment to Article 1 which was made in 2001.\(^{121}\) The Convention has several protocols, some of which have the potential to lawfully prohibit environmental damage caused by the use of prohibited weapons. For example, Protocol V\(^{122}\) on unexploded ordinance requires parties using weapons that fall into either category to ‘facilitate substantial restoration to prior environmental conditions’\(^{123}\) and ‘indirectly protect the environment from post-conflict threats.’\(^{124}\) The preamble in Protocol III clearly prohibits targeting the environment with incendiary weapons, unless the environment under the circumstances is a military objective.\(^{125}\) Therefore, there is a qualified prohibition on environmental damage in Protocol III to the Conventional Weapons Convention. It is unclear to what extent non-state actors can be bound by this treaty. As the Convention was only made applicable to non-international armed conflict by an amendment in 2001 it cannot yet have entered into the realm of customary international law.

Protocol II\(^{126}\) of the convention regulates the use of landmines. Landmines ‘are indiscriminate by nature and pose particularly injurious long-term risk to both

---

\(^{120}\) Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (and Protocols) (As Amended on 21 December 2001), 10 October 1980, 1342 UNTS 137

\(^{121}\) Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects. Geneva, 10 October 1980, Amendment article 2, 21 December 2001 1342 UNTS 137

\(^{122}\) Protocol on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol V), Geneva 28 November 2003, 2399 UNTS 100

\(^{123}\) United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, 15

\(^{124}\) ibid

\(^{125}\) Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), Geneva, 10 October 1980, 1342 UNTS 137, Preamble - ‘It is prohibited to make forests or other kinds of plant cover the object of attack by incendiary weapons except when such natural elements are used to cover, conceal or camouflage combatants or other military objectives or are themselves military objectives.’

humans and animals.\textsuperscript{127} Sandoz \textit{et al} have argued that landmines and ‘all delayed-action devices or those which have not exploded, for whatever reason’\textsuperscript{128} pose a ‘serious and constant threat’\textsuperscript{129} to the environment. As outlined Chapter 1, landmines pose particular threats to large animals. Rather paradoxically, however, landmines may have positive effects on the environment too by decreasing human activity in the area in which they are known to be spread, thereby facilitating the growth or regeneration of biodiversity.\textsuperscript{130}

\textbf{Chemical Weapons Convention 1993}

The 1993 Chemical Weapons Convention\textsuperscript{131} ‘prohibits destroying chemical weapons by “dumping in any body of water, land burial and open pit burning” thereby ensuring that the human and environmental costs of disposal are minimised.’\textsuperscript{132} The Chemical Weapons Convention ‘has an immediate bearing on the protection of the natural environment during armed conflict, as chemical substances may have particularly direct and severe impacts on the environment.’\textsuperscript{133} Indeed ‘chemical components of certain material war remnants can have permanent harmful effects on humans, animals, vegetation, water, land and the ecosystem as a whole’\textsuperscript{134} However, the extent to which the Convention applies in non-international armed conflict is unclear. The text of the Convention does not expressly indicate application in non-

\begin{itemize}
\item Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, Geneva 3 May 1996, 2048 UNTS 93
\item ibid 16
\item ibid, 411
\item United Nations Environment Programme, \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law}, 15
\item ibid
\item Yves Sandoz and others, \textit{Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949} (Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 411
\end{itemize}
international armed conflict, though it may apply as customary international law in these circumstances.

**Cluster Munitions**

Cluster Munitions have been identified as posing human and environmental risks both within conflict and in the post-conflict setting.\(^{135}\) The Convention on Cluster Munitions is the most recent addition to the architecture of the laws of armed conflict, having been adopted in Dublin in 2008. Article 4(6)(h) of the Cluster Munitions Convention\(^{136}\) mentions the environment. The Cluster Munitions Convention is silent as to the categories of conflict that it applies to, referring only to restrictions prohibiting states party to the convention from using cluster munitions ‘under any circumstances’\(^{137}\). This, presumably, includes state engagement in non-international armed conflict against non-state actors. However, it may not involve a reciprocal obligation on non-state armed groups. Having only been adopted in 2008, it is unlikely to have transitioned, even partially, into the realm of customary international law and therefore the extent to which it can bind non-state actors is questionable at best.

In conclusion, limitations on weapons and methods and means of warfare in non-international armed conflict can, in some instances, prohibit environmental damage in non-international armed conflict. However many of the relevant treaties are silent as to their application in non-international armed conflict and so the actual extent of any prohibition, in particular as it applies to non-state armed groups, cannot be determined with any great certainty.

5. Conclusion

This Chapter began by recognising that the treaty-based laws of non-international armed conflict do not have direct provisions prohibiting environmental damage. Nonetheless, scholarship in this area has pointed to the potential of Common Article 3, Additional Protocol II and treaties regulating the use of certain weapons as

\(^{135}\) United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* 16


\(^{137}\) ibid Art 1(1)
instruments which indirectly prohibit environmental damage in non-international armed conflict. In this regard the most relevant provisions of Common Article 3, Additional Protocol II and treaties on the limitation of weapons were identified and discussed.

While Common Article 3 is a foundational source of regulations for non-international armed conflict, it is submitted that it cannot foreseeably result in the prohibition of environmental damage outside of very specific and highly nuanced circumstances. The majority of the treaty-based prohibitions on environmental damage are contained in Additional Protocol II. However, Additional Protocol II has a narrower field of application than Common Article 3 and so applies to fewer non-international armed conflicts. The discussion on the Additional Protocol II provisions was divided into those provisions that apply to property and those that apply to the protection of persons. In this regard, the prohibition on pillage has the potential to apply to some, though not all, instances of natural resource exploitation in non-international armed conflict. Article 14, protecting objects indispensable to the survival of the civilian population can prohibit environmental damage but only when that damage is intrinsically linked to the starvation of the civilian population. Article 15 on the protection of works and installations containing dangerous forces can protect the environment somewhat; however it has major limitations in not applying to installations containing oil and other petrochemicals. Environmental damage could be prohibited if the part of the environment in question is considered to be a cultural object in line with the terms of Article 16 of Additional Protocol II. Finally, the prohibition of environmental damage though the civilian protection provisions of Additional Protocol II – articles 13 and 17 – is possible. But as with Common Article 3, such an interpretation would perhaps stretch the concept of civilian protection and violate the principle of legal certainty and the requirement of foreseeability in some circumstances.

Finally, this Chapter discussed a number of relevant treaties that place limitations on the use of certain weapons and means and methods of warfare. The major difficulty with these sources is determining their applicability in non-international armed conflict and to non-state armed groups. In that regard, while it is worthwhile placing limitations on the use of environmentally harmful weapons, the extent to which this is achieved in non-international armed conflict under the current framework of
treaties in place is questionable at best. It is recommended that any future treaty law concerning the regulation of weapons explicitly indicates that it applies throughout non-international armed conflict. It is also recommended that existing treaties follow the example set by the 2001 amendment to the 1980 Convention on Certain Conventional Weapons in adopting amendments that make their provisions applicable to non-international armed conflict.

In conclusion, there are some provisions of the treaty-based laws of non-international armed conflict that are promising in terms of the indirect prohibition on environmental damage that they may have. However, the discussion above has identified a number of serious limitations to this approach. As such, treaty-based laws should not be relied upon exclusively to provide adequate environmental protection in non-international armed conflict.
Chapter 4

Customary Laws of Armed Conflict that Prohibit Environmental Damage in Non-International Armed Conflict

1. Introduction

This Chapter will discuss in detail the value of customary law in prohibiting environmental damage in non-international armed conflict. Customary law compliments the positive, treaty-based laws of armed conflict and as such, all parties to a non-international armed conflict must respect the principles of military necessity, proportionality, distinction, and the prohibition on unnecessary suffering (often referred to as the principle of humanity). The ICRC has asserted that some of the laws of international armed conflict may now apply to enhance environmental protection in non-international armed conflict. This chapter will therefore also examine the strength of environmental customary laws of armed conflict that have been identified in the ICRC’s Study of Customary International Law.

2. Distinction / Discrimination

The principle of distinction is widely regarded as ‘the first test to be applied in warfare’. It states that only military objectives can be legitimately targeted. Civilians and civilian objects can never be deliberately targeted. While no formal

---


3 United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP Post-Conflict and Disaster Management Branch 2009), 13

combatant/civilian distinction exists in the laws of non-international armed conflict, it is ‘beyond dispute’\(^5\) that ‘parties to an armed conflict must distinguish between those who are legitimate objects of attack and those who enjoy protection’\(^6\) in non-international armed conflict. The ICTY in the Tadić case\(^7\) recognised that it was necessary to apply ‘basic humanitarian principles in all armed conflict’\(^8\) and as such they held that the principle of distinction did apply in non-international armed conflict. Furthermore, the ICRC’s Customary Law Study observes that the definition of a military objective applies as a matter of custom in both international and non-international armed conflicts.\(^9\)

a. Classification of the Environment under the Principle of Distinction

The environment benefits from protection when it is considered to be a civilian object. It loses protection under the principle of distinction when it is considered to be a military objective. There is a difficulty in assessing the degree of protection conferred by the principle of distinction in the case of dual-use objects. It is submitted that if doubt exists as to the status of the environment, the benefit of that doubt should favour a presumption of civilian object status. The discussion below will examine environmental protection under the principle of distinction where the environment is a civilian object, military objective or dual-use object.

*The Environment as a Civilian Object*

The environment only benefits from the protection of the principle of distinction insofar as it qualifies as being a civilian object. If it is a military objective, then it may

---

\(^5\) ibid 323; See also Michael N. Schmitt, ‘21st Century Conflict: Can the Law Survive’ (2007) 8 Melbourne Journal of International Law 443, 308

\(^6\) Kleffner, ‘From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities - On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years After the Second Hague Peace Conference’, 323; See also Schmitt, ‘21st Century Conflict: Can the Law Survive’, 308

\(^7\) *Prosecutor v Tadić* ICTY Case No IT-94-1, Decision on Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995, para 127


\(^9\) Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Volume I: Rules* Rule 8
be legitimately targeted. While there are no provisions in the laws of armed conflict that explicitly designate the environment as being civilian in nature, this is the prevailing view of the international community and undoubtedly the force behind the protection. The San Remo Manual on the Law of Non-International Armed Conflict indicates that it regards the natural environment to be a civilian object.

Indeed, support for this assertion is widespread, to the extent that it may be ‘universally accepted that the environment is prima facie a civilian object, although terming the environment an object has always appeared to be a little clumsy.’

The implications of civilian object status are clear: ‘[o]nce rivers, lakes, and trees are seen as prima facie civilian, they are no longer just a valueless part of the scenery in which a battle takes place.’ There is a difference between civilian objects under the principle of distinction and civilian objects as defined by Article 14 of Additional Protocol II. Civilian objects in the context of Article 14 are those objects which would cause starvation amongst the civilian population if damaged or destroyed. There is no such qualification to the designation of civilian objects under the customary principle of distinction.

**The Environment as a Military Objective**

Just as civilians who participate directly in hostilities lose their civilian protection in non-international armed conflict, the environment can lose its protection as a civilian.

---


14 ibid

15 See Chapter 3 at 64
Chapter 4

Under what rationale, therefore, does a civilian object lose its civilian protection in non-international armed conflict? Where the natural environment, by reason of its ‘nature, location, purpose or use make[s] an effective contribution to military action and whose partial or total destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage’\textsuperscript{16}, it may be considered to be a military objective and as such can be lawfully targeted during the conduct of hostilities.

In the commentary to Rule 8 of the Customary Law Study, the ICRC recognise that this rule is ‘a wide one, which includes areas of land, objects screening other military objectives and war-supporting economic facilities.’\textsuperscript{17} Indeed military objectives include objects that contribute to ‘the enemy’s war-fighting or war-sustaining capability.’\textsuperscript{18} Determining whether the environment is a military objective or civilian object is a pressing issue for non-international armed conflicts which have a particularly strong natural resources dimension.

Natural resources - valuable, precious and vulnerable as they are – may be so connected to the conflict as to render them legitimate military objectives. For example, the U.S. denied claims that the destruction of British-owned cotton fields during the Civil War was unlawful, not because the cotton fields served a direct military purpose, but because cotton was the Confederacy’s primary export at the time, the sale of which funded the purchase of Confederate supplies and weapons.\textsuperscript{19} UNEP echoes this concern about natural resources becoming military objectives and legitimate targets under the principle of distinction. It questions whether an area

\textsuperscript{16} Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3, Art 52, a rule which has become part of customary international law applicable in both international and non-international armed conflict. See also Michael Bothe, Karl J. Parthesch and Waldemar A. Solf, New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949 (Martinus Nijhoff Publishers 1982), 324

\textsuperscript{17} Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules, 31


customary laws

‘affected by the illegal exploitation of high-value natural resources (whether by rebels, government troops or foreign occupying forces)’ would be ‘considered an acceptable target, considering that revenue from this illegal trade was contributing to the war effort.’ Under the definition of military objectives cited above, it seems that natural resources which are exploited to support an armed conflict can easily be regarded as military objectives.

Under the principle of precaution in attack, parties to an armed conflict must do their utmost to determine that an object is indeed a military objective before attacking. When in doubt as to civilian or military objective status, parties to the conflict must err on the side of caution and a presumption of civilian protection must prevail. As a military objective, it is up to the principles of necessity, proportionality and humanity, as well as treaty-based laws of armed conflict, to prohibit environmental damage in non-international armed conflict.

The Environment as a Dual-Use Object

Given that the natural environment will most often serve both military and civilian uses, it may be argued that ‘the strict separation of military and civilian assets envisioned by Distinction simply does not exist in the real world.’ These so-called dual-use objects create problems for the application of the principle of distinction. Where there is a presumption in favour of classifying objects as civilian, then there may be a tendency amongst belligerents to use these objects much in the same way as

20 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 13

21 ibid


23 Kleffner, ‘From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities - On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years After the Second Hague Peace Conference’, 335


25 ibid, 750
human shields are used. This could result in military targets being located in areas of high environmental value, such as special areas of protection or conservation. Nonetheless, there should be a presumption in favour of considering the environment to be a civilian object.

b. Indiscriminate Attacks

The principle of distinction is sometimes referred to as the principle of discrimination. In this regard, the ICTY has held that ‘attacks, even when they are directed against legitimate military targets, are unlawful if conducted using indiscriminate means or methods of warfare, or in such a way as to cause indiscriminate damage to civilians or civilian objects. In other words, belligerents should not use methods or means of warfare that cannot distinguish between military objectives and civilian objects. The prohibition on indiscriminate attacks in both international and non-international armed conflict is confirmed as customary in Rule 11 of the ICRC’s Customary Law study.

In conclusion, the principle of distinction / discrimination prohibits damage to the environment in non-international armed conflict when the environment is classified as being a civilian object. The principle of distinction does not prohibit damage when the environment is classified as a military objective. Where the environment is to be considered a dual-use object, there should be a presumption in favour of recognising the environment as being a civilian object, prohibiting direct and indiscriminate targeting.

3. Proportionality

The principle of proportionality is a foundational concept within the laws of armed conflict. Proportionality recognises that there is a balance to be struck between the value of a military objective and the damage caused in launching an attack upon that

---

26 ibid 751, Swiney discussed the ICRC’s assertion that dual-use targets should be prima facie treated as civilian and as such, he asserted the argument that this would more than likely create incentives for belligerents to use human shields and deliberately mix military and civilian objects.

27 Prosecutor v Kaprelić et al ICTY Judgement, Case No IT-95-16-T, 14 January 2000 International Criminal Tribunal for the former Yugoslavia, para 524

28 Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules Rule 11
objective. As Hulme indicates ‘[p]roportionality does not guarantee absolute protection to civilians and civilian objects, including the environment, but instead provides a method of balancing the values at stake.’ In this regard, any prohibition on environmental damage through the principle of proportionality depends on the value that is attributed to the environment in any given circumstance.

The principle of proportionality does not appear in textual form in Additional Protocol II. The ICRC has identified a sufficient body of evidence to indicate that proportionality applies as a matter of custom in non-international armed conflict. However, this is not a universally held point of view. Interestingly, the closest one can get to a textual formulation of the customary principle of proportionality is in Article 8(2)(b)(iv) of the Statute of the International Criminal Court - the provision that deals with excessive environmental damage in international armed conflict.

---

29 Antonio Cassese, *International Law* (2nd edn, Oxford University Press 2005), 417 - ‘when attacking military objectives belligerents must make sure that any collateral damage to civilians is not out of proportion to the military advantage anticipated.’ See also Lauterpacht as quoted in A.P.V. Rogers, ‘The Principle of Proportionality’ in Howard M. Hensel (ed), *The Legitimate Use of Military Force: The Just War Tradition and the Customary Law of Armed Conflict* (Ashgate Publishing Limited 2008) 198 – non-combatants ‘were not immune from collateral damage but a just balance had to be maintained between the military advantage and the injury to non-combatants.’


32 Rogers, ‘The Principle of Proportionality’, 190 – ‘[a]lthough claims are made that proportionality is now a principle of customary international law, it seems not always to have been the case, at least not as evidenced by state practice, or not as currently understood.’ Rogers keenly disputes the continued existence of proportionality as a customary rule of international law from the time of its inclusion in the Lieber code, citing highly disproportionate aerial bombardments of civilian populations throughout World War II as proof that the principle of proportionality was not supported by state practice at that time at least. Further he supports his argument that the principle of proportionality was not customary law until at least after 1977 by citing anecdotal evidence of finding an absence of proportionality in the indices of books on armed conflict written prior to 1977, but with an abundance of entries contained in books published thereafter that year

33 Ibid, 209 – ‘Article 8, paragraph 2(b)(iv) comes closest to [the customary definition of proportionality] especially as the statute was drafted with states not party to Protocol I very much in mind and involved in negotiations.'
a. The Environment and the Principle of Proportionality

The environment is one of the many legitimate factors that must be considered when an assessment of proportionality is being carried out in advance of a military operation. The Office of the Prosecutor at the ICTY remarked that ‘military objectives should not be targeted if the attack is likely to cause collateral environmental damage which would be excessive in relation to the direct military advantage which the attack would be expected to produce.’\(^{34}\) The International Court of Justice, in its Nuclear Weapons Advisory Opinion, clearly stated that

‘...States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.’\(^{35}\)

As far as collateral damage to the environment is concerned ‘the military advantage must be weighed against the specific environmental damage likely, for example to endangered species, fragile habitats, and sites of natural heritage, and not under the simplistic rubric of the “environment”’.\(^{36}\) Desgagné argues that the principle of proportionality only prohibits damage if the environment is considered a civilian object.\(^{37}\) However, it is submitted that even if the environment itself is a military objective, the damage caused in attack must be proportionate to the overall military

\(^{34}\) Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia, ICTY 2000 <http://www.icty.org/x/file/Press/nato061300.pdf> accessed 4 January 2013, para 18

\(^{35}\) Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion ICJ Reports 1996 226, International Court of Justice (ICJ), 8 July 1996, para 30 and para 33

\(^{36}\) Hulme, War Torn Environment: Interpreting the Legal Threshold, 127

advantage gained. Military advantage essentially means that the act must have positive military utility or purpose.\(^{38}\)

The principle of proportionality also regulates the degree of force that may be used to target military objectives. In terms of striking the balance between proportionate use of force and proportionate collateral damage,\(^ {39}\) Hulme observes that ‘where only a rather low-level military advantage would be gained from a particular attack, the military would not be justified in causing environmental damage on a massive scale. Under this principle, however, a very important military advantage...would allow for a large amount of environmental damage.’\(^ {40}\) In other words, ‘[d]estroying an entire village or burning an entire forest to reach a single minor target, for example, would be considered a disproportionate strategy in relation to the military gain.’\(^ {41}\)

\(^{38}\) In terms of what counts as being concrete and direct military advantage, the ICRC Study provides useful explanations. The ICRC Customary Law Study helpfully highlights that ‘Upon ratification of Additional Protocol I, Australia and New Zealand stated that they interpreted the term “concrete and direct military advantage anticipated” as meaning that there is a bona fide expectation that the attack would make a relevant and proportional contribution to the objective of the military attack involved. According to the Commentary on the Additional Protocols, the expression “concrete and direct” military advantage was used in order to indicate that the advantage must be “substantial and relatively close, and that advantages which are hardly perceptible and those which would only appear in the long term should be disregarded”’ Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules 50; In addition, Bothe at al observe that ‘The term military advantage involves a variety of considerations, including the security of the attacking force. Whether a definite military advantage would result from an attack must be judged in the context of the military advantage anticipated from the specific military operation of which the attack is a part considered as a whole, and not only from isolated or particular parts of that operation. It is not necessary that the contribution made by the object to the Party attacked be related to the advantage anticipated by the attacker from the destruction, capture, or neutralization of the object.’ Bothe, Partsch and Solf, New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949, 324

\(^{39}\) Cassese, *International Law*, 417 - ‘when attacking military objectives belligerents must make sure that any collateral damage to civilians is not out of proportion to the military advantage anticipated.’ See also Lauterpacht as quoted in Rogers, ‘The Principle of Proportionality’ in 198 – non-combatants ‘were not immune from collateral damage but a just balance had to be maintained between the military advantage and the injury to non-combatants.’

\(^{40}\) Hulme, *War Torn Environment: Interpreting the Legal Threshold*, 126

\(^{41}\) United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, 13
b. Calculating Proportionality in Attack

There is an inherent vagueness within the principle that is often criticised – how can a commander on the battlefield be sure of the exact parameters of proportionality in any given situation? In this regard, taking ‘environmental considerations into account in the application of the principle of proportionality is [...] easier to proclaim than to implement in practice.’\(^{42}\) The proportionality test raises many questions: what is too much damage and how should military targets or civilian objects be valued to calculate the proportionality of an attack? Does the principle actually prohibit damage to the environment or does the ambiguity represent an inherent but significant obstacle to foreseeability in the law?\(^ {43}\)

The ICTY Committee established to review the NATO bombing campaign against the Federal Republic of Yugoslavia stated that at ‘a minimum, actions resulting in massive environmental destruction, especially where they do not serve a clear and important military purpose, would be questionable.’\(^ {44}\) However, without clear guidelines from which a proportionality assessment can be made, the exercise in assessing damage – particularly environmental damage – in non-international armed conflict is open to political manipulation rather than independent and impartial legal assessment.\(^ {45}\)

In most cases, assessing the proportionality of an attack takes place after the damage has occurred. As such, it is necessary to examine all of the circumstances of the attack to determine whether the damage or the force that was used was

---


\(^{45}\) W.J. Fenrick, ‘Targeting and Proportionality During the NATO Bombing Campaign Against Yugoslavia’ (2001) 12 European Journal of International Law 489, 491 ‘the forces or the state in control on the ground may have an interest in exaggerating collateral casualties and damage to civilian objects.’ See also Barnidge Jr, ‘The Principle of Proportionality Under International Humanitarian Law and Operation Cast Lead’, 276 ‘the theoretical shortcomings of the principle of proportionality, suggests that, more often than not, proportionality acts as the ultimate exemplar of law used instrumentally, as a tool to further a particular politics and paradigm of power.’
proportionate. However, assessing proportionality after the fact is a subjective exercise since ‘a court has to look at the situation as the accused person saw it and on the basis of the information available to him before making an objective finding about the foreseeability of excessive loss or damage.’ Military commanders would not, in general, be environmental experts nor would they be able to calculate the value of an ecosystem that is not familiar to them or which does not have an explicit anthropocentric value. This has implications in assessing proportionality from the subjective point of view of the belligerent before the attack.

Very serious environmental damage could only be justified where a ‘very substantial military advantage’ was achieved. However, UNEP overemphasise the subjective value that most armed forces place on the environment since they claim that ‘[m]any instances of environmental damage could be seen as a “disproportionate” response to a perceived threat and therefore considered illegal.’ In fact, most environmental damage in non-international armed conflict would probably be considered quite proportionate, especially if the belligerent, from their subjective point of view, did not place a high value on the environment in the first place.

c. Valuing the Natural Environment in Proportionality Assessments

The extent of the damage that can be caused to the environment depends on how it is valued: the greater the value that is placed on the environment, the less damage that can be proportionately caused. Once a value has been established, then the balancing exercise between the natural environment and the military objective or military operation can be properly assessed. Yet, the most optimum way to conduct a

46 Rogers, ‘The Principle of Proportionality’, 209
47 ibid 207
49 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 13
balancing exercise is to compare like values with like.\textsuperscript{51} However, as far as proportionality assessments are concerned, the ‘calculations are heterogeneous, because dissimilar value genres [...] are being weighed against each other.’\textsuperscript{52} The dissimilar value genres relevant to this discussion include ‘military, humanitarian and environmental values.’\textsuperscript{53} For example, can the value of ecosystem integrity be weighed against the destruction of a strategic military base located nearby? Clearly the issue of placing a value on the environment is a ‘complicating factor’,\textsuperscript{54} but necessary to determine the degree of protection conferred on the environment by the principle of proportionality.

In conclusion, the principle of proportionality can prohibit disproportionate environmental damage in non-international armed conflict. The degree to which environmental damage is considered to be disproportionate depends on the subjective value that is placed on the environment by the military commander or non-state armed group at the time of the attack. This subjectivity is the weak point in the proportionality protection as many military commanders or non-state armed groups may not be able to value the environment appropriately.

4. Military Necessity

Where a specific provision of the laws of armed conflict includes a military necessity clause, then where a military necessity exists, the prohibition in that particular law may be temporarily suspended for the duration of the military necessity.\textsuperscript{55} Military necessity was first captured in written form by Francis Lieber in Article 14 of General Orders No. 100 in 1863. The Lieber code was essentially distilled from general principles of human morality, reason and empirical evidence in the form of practice or law.\textsuperscript{56} Lieber felt that, at the time, military necessity had the potential to

\begin{itemize}
\item \textsuperscript{51} ibid 150-151
\item \textsuperscript{52} Ibid 150-151
\item \textsuperscript{53} Desgagné, ‘The Prevention of Environmental Damage in Time of Armed Conflict: Proportionality and Precautionary Measures’, 117
\item \textsuperscript{54} Schmitt, ‘The Principle of Discrimination in 21st Century Warfare’, 151
\end{itemize}
become a ‘rule-swallowing’ norm and so he deliberately phrased Article 14 to limit the application of military necessity only to the most essential acts - acts to which there would be no alternative.\textsuperscript{57} In other words, ‘casualties caused carelessly are not “necessary” to the achievement of any military purpose.’\textsuperscript{58} The doctrine of military necessity received recognition by the international community as being of importance to armed conflict in the Declaration of St. Petersburg 1908 and it has since become a central tenet of the customary laws of armed conflict. From an environmental point of view in the present day, ‘[o]ne cannot easily contend that the plundering of natural resources would satisfy the criteria of military necessity’\textsuperscript{59} – especially as the prohibition against pillage in Article 4(2)(g) of Additional Protocol II has no associated military necessity clause - and so, in theory, the exploitation of natural resources could not be permitted as a means of warfare pursuant to the doctrine of military necessity.

a. Military Necessity as an Exception to the Laws of Armed Conflict

The scope of military necessity has been limited considerably over the past two centuries. In mid-19\textsuperscript{th} century Germany, military necessity was associated with \textit{kriegsraison}. \textit{Kriegsraison} means ‘the necessities of war' and was associated with the maxim \textit{Kriegsraison geht vor Kriegsmanier} – the necessities of war take precedence over the rules of war.\textsuperscript{60}

Essentially, \textit{kriegsraison} implied that

‘the commander on the battlefield can decide in every case whether the rules will be respected or ignored, depending on the demands of the military situation at the time. It is quite obvious that if combatants were

\textsuperscript{57}Scott Horton, ‘Kriegsraison or Military Necessity? The Bush Administration's Wilhelmine Attitude Towards the Conduct of War’ (2006-2007) 30 Fordham International Law Journal 576, 580

\textsuperscript{58}Rogers, ‘The Principle of Proportionality’, 206


\textsuperscript{60}Yves Sandoz and others, \textit{Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949} (Yves Sandoz, Christophe Swinarski and Bruno Zimmermann eds, Martinus Nijhoff Publishers 1987), 391
to have the authority to violate the laws of armed conflict every time they consider this violation to be necessary for the success of an operation, the law would cease to exist.\(^{61}\)

The *kriegsraison* theory of military necessity was ‘condemned at Nuremberg’\(^ {62}\) - during *The Hostages Trial* the Court indicated quite clearly that ‘military necessity or expediency [does] not justify a violation of positive rules.’\(^ {63}\) However, military necessity is no longer regarded as being the ‘bête noir’\(^ {64}\) of international law which, for one reason or another, allowed ‘uncontrolled brute force to rage rampant over the battlefield or wherever the military have control.’\(^ {65}\) *Kriegsraison* has now been fully ‘discredited’\(^ {66}\) and has no place in the modern laws of armed conflict.\(^ {67}\)

**Military Necessity - Subordinate to the Laws of Armed Conflict**

Military necessity remains subordinate to the laws of armed conflict at all times.\(^ {68}\) That military necessity implies a breaking of the laws of armed conflict under any circumstances is certainly not the case.\(^ {69}\) Military necessity cannot be used to justify what would otherwise be a violation of international law. It can only be invoked where military necessity ‘is explicitly provided for by the rule in question’.\(^ {70}\) In spite

\(^{61}\) ibid 391

\(^{62}\) ibid 391

\(^{63}\) Wilhelm List and Others (*The Hostages Trial*) (1949) Law Reports of Trials of War Criminals Selected and Prepared by the United Nations War Crimes Committee Vol VIII 34, 66


\(^{65}\) ibid 251

\(^{66}\) Sandoz and others, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* 391


\(^{68}\) ibid

\(^{69}\) ibid 115

\(^{70}\) Sandoz and others, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*. See also M. Greenspan, *The Modern Law of Land Warfare* (University of California Press 1959), 314 as cited in McCoubrey, ‘The Nature of the Modern Doctrine of Military Necessity’, 221: ‘In fact the rules of war make allowance within their framework for military necessity, which cannot transcend the rules themselves...[M]ilitary necessity was...taken into account when the rules were framed, and the individual rules themselves indicate to what extent they may be modified under the stress of military necessity.’
of this, military necessity does sometimes appear ‘to cover acts of dubious legality, normality, and utility.’\(^7\)

For Lieber, it was imperative that military necessity remain fundamentally **subject** to the laws of armed conflict, rather than as a blanket exception to them.\(^2\) In this way, military necessity gives belligerents ‘the benefit of a freedom which is not arbitrary but within the framework of law’.\(^3\) In this regard, drafters of the laws of armed conflict have consciously connected military necessity exceptions to some rules and consciously omitted them as against others.\(^4\) To this end, the drafters of the San Remo Manual on Non-International Armed Conflict have concluded that ‘the extensive codification of the *jus in bello*, [means that] the principle of military necessity has little practical bearing on the conduct of hostilities except insofar as it is retained in treaty form in specific situations.’\(^5\)

b. **Military Necessity and Environmental Damage**

The implication of military necessity for the protection of the environment in non-international armed conflict can be simply stated. If military necessity is subordinate to the laws of armed conflict, then it can only provide exceptions to laws when permitted by that particular law. Sweeping environmental damage that would otherwise violate laws of armed conflict to which no military necessity exception has been incorporated would not be justified by the customary doctrine of military necessity.

\(^7\) O’ Brien, ‘The Meaning of ”Military Necessity” in International Law’, 173-174

\(^2\) Horton, ‘Kriegsraison or Military Necessity? The Bush Administration’s Wilhelmine Attitude Towards the Conduct of War’, 580

\(^3\) Sandoz and others, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, 393

\(^4\) O’ Brien, ‘The Meaning of ”Military Necessity” in International Law’, 131 - ‘international lawyers could refute any claim of a general exception of military necessity by pointing out that legitimate exceptions of this kind had already been provided.’

Chapter 4

The Nature of the Required Necessity

O’ Brien argues that the concept of ‘imperative necessity means that there is no equally effective lawful military means, involving less damage or suffering, which is sufficient to the legitimate end.’ Necessity does not exactly mean that there must be urgency at a particular point in time. Nonetheless, necessity will more often than not be immediate. Indeed ‘[i]t would seem from the pattern of judicial and quasi-judicial decisions over the past 150 years or so that military necessity is effectively limited to actions dictated by circumstances precluding reasonable alternatives in pursuit of an objective legitimate in terms, at least, of the jus in bellow in itself. It seems doubtful whether an absolute absence of alternatives is demanded.’ As McCoubrey observed

‘[a]ll that can clearly be said is that ‘necessity’ connotes an immediate and overwhelming circumstance in military action, which renders strict compliance, upon rational basis, impracticable rather than ‘impossible’. Impractical is a term here carefully chosen, it is by no means intended to imply the concession to tactical and strategic convenience which is implicit in the maxim kriegraison.’

In the High Command case in Nuremberg, military necessity was raised as a justification by General Rendulic for the scorched earth policy implemented during the German retreat from Finnmark. The Tribunal held that ‘military necessity could only be pleaded in such circumstances where ‘defensive’ necessity precluded any reasonable alternative course of action. In the [High Command case] the order concerned was not a response to any sudden and overwhelming need but rather an ‘anticipatory’ measure forming part of a ‘scorched earth’ policy in occupied territory which was itself unlawful.’ As such the necessity was not urgent in point of time

---

77 ibid 138-139
78 McCoubrey, ‘The Nature of the Modern Doctrine of Military Necessity’, 239
79 ibid 226
80 ibid 237
81 ibid 225

102
when viewed in retrospect, though the Court was satisfied that there was sufficient necessity 'as it appeared to the defendant at the time'.

The Office of the Prosecutor at the ICTY, in considering the environmental damage that resulted from the NATO bombing campaign in the Former Republic of Yugoslavia in 1999, indicated that since military necessity had been successfully used as a defence by General Rendulic for what ultimately turned out to be a mistaken belief that scorched earth tactics were necessary, there is no reason why this ruling could not act as a legitimate precedent in any future case. However, this would lower the effectiveness of military necessity to prohibit unnecessary environmental damage since mistaken beliefs, if reasonable and honestly held, would be enough to justify a defence of military necessity. While the necessity may indeed continue to exist 'over an extended period' of time, once the period of military necessity is over, ‘compliance with legal provisions must be resumed’.

In conclusion, while ‘[j]ustification for the greatest war atrocities is claimed in the sweeping assertion of military necessity’ in reality, there should be a distinct ‘contrast between necessity and atrocity’. From the above discussion it is clear that military necessity may only be used to justify a breach of the laws of armed conflict if such an exception is explicitly included in the text of that rule. As Hulme surmises, ‘the doctrine of military necessity has become a limited one, active only where sanctioned within the law itself.’ In this regard, military necessity does not significantly undermine existing treaty law that provides indirect protection to the environment in non-international armed conflict as the treaty-based rules in Common Article 3 and Additional Protocol II that were discussed in Chapter 3 have

82 Wilhelm List and Others (The Hostages Trial), 68-69
84 McCoubrey, ‘The Nature of the Modern Doctrine of Military Necessity’, 239
85 ibid
87 Hilaire McCoubrey, International Humanitarian Law: Modern Developments in the Limitation of Warfare (1st edn, Ashgate, Dartmouth 1990), 203
88 Hulme, War Torn Environment: Interpreting the Legal Threshold, 131
no associated military necessity clause. However, military necessity may have implications for the application of the customary laws of armed conflict in non-international armed conflict.

5. Humanity / Unnecessary Suffering

a. The Principle of Humanity

The principle of humanity is often defined in terms of unnecessary suffering, or vice versa. The principle predominantly prohibits needless, superfluous or gratuitous injury, such as that caused by dum dum bullets or white phosphorous bombs. Some scholars have argued that the principle of humanity is a mere reflection of the combined effect of the principles of distinction, proportionality and military necessity. Perhaps the principle of humanity can be whittled down to the central idea that ‘within the parameters set by the specific provisions of IHL, no more death, injury, or destruction [should] be caused than is actually necessary for the accomplishment of a legitimate military purpose in the prevailing circumstances.

The fundamental standards of the principle of humanity are applicable at all times, throughout peace and war. However, despite efforts since the adoption of the Turku Declaration on Minimum Humanitarian Standards in 1990, the UN in particular and the international community at large have reached something of an

---

89 Treaty law discussed in Chapter 3 from 54-77

90 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 13

91 For example: ‘Grotius...clearly condemns unnecessary suffering and excessive damage and does so in the name of humanity...’ Leslie C. Green, Essays on the Modern Law of War (2nd edn, Transnational Publishers 1999), 342


93 International Committee of the Red Cross, Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law, ICRC, Geneva 2009, 80

94 Emily Crawford, ‘Road to Nowhere? The Future for a Declaration on Fundamental Stabdards of Humanity’ Sydney Law School Legal Studies Research Paper No 12/02 January 2012, 15

impasse in adopting a UN Declaration on Fundamental Standards of Humanity. A contentious issue for states is the extent to which international law is continuing to encroach on their domestic sovereign affairs. Yet progress to date has not been ‘fruitless.’ Indeed ‘[w]ith every new report on fundamental standards of humanity, a clearer picture is developed regarding precisely what can be considered as the constituent elements of those fundamental standards.’ The ICRC feels that ‘any further work on fundamental standards of humanity should be seen as a process, aimed at reiterating existing international humanitarian and human rights norms with a view to facilitating their dissemination and implementation.’

b. Inhumane Environmental Damage in Non-International Armed Conflict

According to the International Committee of the Red Cross, in armed conflict, the purpose of the principle of humanity is to ‘protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.’ Therefore, the principle of humanity could prohibit environmental damage that would ultimately result in excessive human suffering since ‘severe environmental damages can cause tremendous suffering among war zone populations.’ UNEP observes that the ‘poisoning of water wells and the destruction of agricultural land and timber resources that contribute to the sustenance of the population, as seen in the ongoing

\[96\] Crawford, ‘Road to Nowhere? The Future for a Declaration on Fundamental Standards of Humanity’

\[97\] ibid 18

\[98\] ibid 16

\[99\] ibid


\[101\] André Durand, The International Committee of the Red Cross (ICRC, Geneva 1981), 54

\[102\] Betsy Baker, 'Legal Protections for the Environment in Times of Armed Conflict' (1993) 33 Virginia Journal of International Law 351, 366-367 - ‘to the extent that damage to the environment - as a military objective or collaterally - causes unnecessary suffering, it violates [the principle of humanity]’

conflict in Darfur, could be considered “inhumane” means of warfare. If the principle of humanity is taken to prohibit ‘force that "needlessly or unnecessarily causes or aggravates both human suffering and physical destruction”’, then an expansive reading of the principle may even prohibit environmental damage causing unnecessary suffering to animals, flora, fauna or the natural environment as a whole, as well as to human beings.

In conclusion, the principle of humanity has the potential to prohibit inhumane environmental damage in non-international armed conflict. However, its broad and somewhat indefinite meaning represents a significant obstacle in terms of delivering concrete environmental protection in the heat of battle.

6. Precautions in Attack / Against the Effect of Attack

Precautions in attack, according to the ICRC’s Customary Law Study, describes the obligation to take constant care to spare the civilian population, civilians and civilian objects from damage, including taking precautions to avoid or at the very least minimise incidental damage to same. When a lawful attack is launched, ‘all feasible precautions’ are required of both the attacking party and the party being attacked in order to avoid (or at least to minimize) the collateral effects of hostilities on civilian persons, the civilian population and civilian objects.

During the Diplomatic Conference 1974-1977 “[t]he requirement to take precautions in attack was included in the draft of Additional Protocol II but was dropped at the last moment as part of a package aimed at the adoption of a simplified text.” However, Article 13(1) of Additional Protocol II does state that ‘the civilian

---


107 ibid Rule 22


109 Draft Additional Protocol II submitted by the ICRC to the Diplomatic Conference leading to the adoption of the Additional Protocols, Article 24(2), as referred to in Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Volume I: Rules*, 52
population and individual civilians shall enjoy general protection against the dangers arising from military operations—a provision which the ICRC maintains it would be difficult to comply with ‘without taking precautions in attack.’ Therefore, the obligation to take precautions against the effects of attack applies customarily in non-international armed conflict.

If belligerent parties cannot take all precautions to prevent an attack from having disproportionate, unnecessary or indiscriminate consequences, then it could ultimately result in an obligation to call off the planned attack. However, it has been observed that ‘[t]he duty to take precautionary measures is not absolute. It is a duty to act in good faith to take practicable measures, and persons acting in good faith may make mistakes.’ In addition, it takes more than one isolated instance of failing to take adequate precautions to violate this customary obligation. The Office of the Prosecutor at the ICTY maintains that

‘If precautionary measures have worked adequately in a very high percentage of cases then the fact that they have not worked well in a small number of cases does not necessarily mean they are generally inadequate.’

a. Precautions Against Environmental Damage

From an environmental point of view, minimising damage through precautions in advance of an attack ensures that the natural environment does not get harmed to

---

110 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 609, Art 13(1)
111 Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules, 52
112 ibid Rules 22
113 Hulme, ‘Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?’, 681
114 Fenrick, ‘Targeting and Proportionality During the NATO Bombing Campaign Against Yugoslavia’, 501
116 Ibid 29
any greater degree than is absolutely necessary.\textsuperscript{117} The obligation to take environmental precautions in and against the effects of attack may be couched in the somewhat broader obligation to take care of the environment during the conduct of hostilities.\textsuperscript{118} The ICRC have commented on this, stating that

‘Environmental considerations should lead to greater weight being given to the medium and long-term consequences of an attack, including the long-term environmental consequences that will affect civilian life after the end of hostilities. Furthermore, these provisions point to possible precautionary measures that should be considered with a view to minimizing environmental damage \textit{per se}.’\textsuperscript{119}

It is submitted that this principle may in reality have a negative effect on environmental protection. In taking precautions to avoid damaging the civilian population, the natural environment may be harmed as a least-worst option. For example, though in the context of the international armed conflict in the Persian Gulf in 1991, ‘pilots were advised to attack bridges in urban areas along a longitudinal axis. This measure was taken so that bombs that missed their targets – because they were dropped either too early or too late – would hopefully fall in the river and not on civilian housing.’\textsuperscript{120} A further example, again in the context of international armed conflict in Kosovo, describes a situation where a NATO pilot ‘who was in charge of carrying out an aerial operation against an enemy radar noticed, after the attack had been launched, that the targeted site was near a church. In order to avoid damaging the church, the pilot decided to remove his weapon from the target, letting it harmlessly explode in the woods instead.’\textsuperscript{121}

From these two examples, it would appear that the obligation to take precautions in attack does not enhance protection for the environment in armed conflict, but rather increases the chances that the environment may be harmed in some way, to prevent

\textsuperscript{117} Desgagné, ‘The Prevention of Environmental Damage in Time of Armed Conflict: Proportionality and Precautionary Measures’, 117

\textsuperscript{118} Hulme, ‘Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?’

\textsuperscript{119} Desgagné, ‘The Prevention of Environmental Damage in Time of Armed Conflict: Proportionality and Precautionary Measures’, 117

\textsuperscript{120} Queguiner, ‘Precautions Under the Law Governing the Conduct of Hostilities’, 801

\textsuperscript{121} ibid 804
casualties amongst the civilian population. While this may be the lesser of two evils in terms of human casualties, it is worth re-emphasising that ‘a decision to target a military objective is expected to include an evaluation of potential harm to the environment qua environment – even if no civilians are in danger of being hurt’

b. ICRC Customary Law Rule 44 – Due Regard for the Environment in Military Operations

Rule 44 of the ICRC’s Customary Law Study states that, under customary law,

‘Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimise, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions’

The obligation to have due regard for the environment is derived from principles of precaution in attack. As to the practical requirements to take due regard of the environment, Hulme argues that

‘the obligation is one of ‘taking steps’, in attack and defence, to protect the environment, often referred to in shorthand as an obligation of ‘due diligence’. In answering the question of what steps need to be taken to show ‘due diligence’, environmental law typically requires only

---


123 Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules, Rule 44, 147

124 ibid, Rule 44

125 Hulme, ‘Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?’, 685
‘reasonable’ steps, and there is no reason to suggest that this would not also be appropriate for the ‘care’ obligation. ¹²⁶

Due regard for the environment could be fulfilled by the action of preparing detailed environmental impact assessments of a proposed attack so that environmental effects can be factored into a proportionality assessment. However, this would be difficult where time is limited and reliable, detailed and up-to-date information on the environment is not at hand. At the very least, “[a] good faith application of the obligation would surely entail much more than a simple ‘tick box’ approach: it would require a proper environmental assessment in the circumstances of potential harm.”¹²⁷

However, Aldrich questions the validity of Rule 44 as a customary norm. He maintains that ‘there is little, if any, precedent for this rule in existing law.”¹²⁸ Further, as far as this customary rule may apply to non-international armed conflict, it has been asserted that the evidence presented to support it has been drawn from peacetime environmental law and as such is of dubious value in determining customary rules to apply in times of armed conflict.¹²⁹ In particular, there is nothing in the evidence to support Rule 44 being an obligation owed by non-state actors in non-international armed conflict.¹³⁰ The general rule to take precautions in attack and pay due regard to the environment should not be confused with the peacetime precautionary principle, whose application in armed conflict is doubtful at best¹³¹

In conclusion, the customary obligation to take precaution in attack requires environmental information to be factored into assessments. It also requires precautions to be taken to minimise environmental damage during the conduct of hostilities. However, in fulfilling this obligation vis-a-vis civilians, the environment may be harmed as a least-worst-option.

¹²⁶ ibid 680
¹²⁷ ibid 681
¹²⁸ George H. Aldrich, ‘Customary International Humanitarian Law: An Interpretation on Behalf of the International Committee of the Red Cross’ (2005) 76 British Yearbook of International Law, 515
¹²⁹ Hulme, ‘Natural Environment’, 220
¹³⁰ ibid
¹³¹ ibid 223-228
7. ICRC Customary Law Study

Apart from Rule 44 above, there are three further rules within the ICRC’s Customary Law Study that are of interest in examining the protection of the environment in non-international armed conflict. Rules 43, 44 and 45 fall under the heading of customary rules protecting the ‘Natural Environment’. In this section, in addition to Rules 43 and 45, Rule 76 on the use of herbicides will also be analysed. In the case of Rules 43 and 45, the ICRC indicates that they may ‘arguably’ apply in non-international armed conflict. In this sense, ‘[t]he expression “arguably” is somewhat problematic, as it amounts to admitting (without saying so explicitly) that the norms at issue are not yet customary. Half measures in this area are difficult to envision: either the norm fulfils the conditions and is considered to be customary, or it does not.’

Rule 43 contains general principles which do apply customarily in non-international armed conflict. However it is strongly argued here that, on balance, Rule 45 does not apply as a matter of custom in non-international armed conflict.

The Customary Law Study has at times been unfairly criticised for interpreting rules as being customary which have not yet reached the level of state practice or opinio juris to elevate them so. UNEP argues that by taking a liberal approach to what may be regarded as custom, this ‘could clarify some of the outstanding questions and, in the process, create more definite measures to protect the environment in armed conflict.’ It is proposed that the ICRC has over-emphasised the degree to which Rule 45 can be considered customary law in either international or non-international armed conflict. As such there is mixed protection for the environment in non-international armed conflict through the ‘customary’ rules contained in the ICRC’s Customary Law Study.

---


134 United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, 21
a. Customary Rule 43 – General Principles on the Conduct of Hostilities

Rule 43 as identified by the ICRC states that

‘The general principles on the conduct of hostilities apply to the natural environment:

A. No part of the natural environment may be attacked, unless it is a military objective.

B. Destruction of any part of the natural environment is prohibited, unless required by imperative military necessity.

C. Launching an attack against a military objective 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 is prohibited.’

This rule basically extends the general rules of armed conflict – the principle of distinction, the doctrine of military necessity, and the principle of proportionality – to specifically apply to environmental damage. In other words, the environment may only be attacked if it is a military objective, and if it satisfies the demands of proportionality.

Somewhat worryingly, the ICRC has highlighted military necessity as being a stand-alone rule, as opposed to it being tied as a limitation to a specific law of armed conflict. It is submitted that, in light of the discussion above on military necessity, this principle cannot be used to subvert all laws of armed conflict – just those to which a military necessity exception has been attached. As such, the ICRC has possibly overstated the law on this point. Nonetheless, these rules do apply customarily in non-international armed conflict and the extent to which the environment is protected through these general principles has been discussed earlier in this Chapter.

135 Henckaerts and Doswald-Beck, Customary International Humanitarian Law Volume I: Rules, 143

136 ibid 143
b. Customary Rule 45 – Causing Serious Damage to the Natural Environment

Rule 45 states as follows

‘The use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon.’

This rule is an amalgamation of Articles 35(3) and 55 of Additional Protocol I – the only provisions of the laws of armed conflict that directly and explicitly exist to protect the environment. No equivalent provisions were included in Additional Protocol II and so the extent to which this rule applies in non-international armed conflict would indeed rest on its customary law status. The ICRC asserts that Rule 45 applies as a matter of custom to all international armed conflicts and only arguably in non-international armed conflict. However, the evidence presented to support it being a rule of customary law has been observed as being rather unconvincing, to the extent that it should have been described by the ICRC as only arguably customary for even international armed conflict.

Nonetheless, it is submitted that non-international armed conflicts are at no disadvantage if Rule 45 is not considered to be customarily applicable to these conflicts. In fact, as the key threshold requirements of ‘widespread, long-term and serious’ damage have been widely – almost universally – criticised as being inadequate and ineffective, to have these as the standards of permissible environmental damage in non-international armed conflict could potentially undermine any positive effect that the indirect treaty provisions and customary law principles would have. If this rule did apply customarily in non-international armed conflict.

137 ibid, 151
139 Hulme has argued that the threshold of ‘severe’ as it appears in Additional Protocol I should have been used to describe this element of the threshold, rather than ‘serious’ as serious damage is a lower threshold of harm and not indicative of the manner in which AP I has been transcribed in state practice. See Hulme, ‘Natural Environment’, 229
conflict, it would certainly not enhance environmental protection because it has done very little, if anything, to enhance environmental protection in international armed conflict.

As to the second sentence of Rule 45, prohibiting the use of the environment as a weapon in armed conflict, the justification provided by the ICRC is unconvincing.\textsuperscript{140} Of course, there is no military exception clause to Articles 35(3) and 55 of Additional Protocol I and as such, there is no specific military necessity exception included by the ICRC in their iteration of Rule 45. Therefore, it should be presumed that, if Rule 45 eventually attained customary status, widespread, long-term and severe environmental damage could not be justified or excused by the doctrine of military necessity under any circumstances.

c. Customary Rule 76 – Herbicides

Rule 76 of the ICRC’s Study on Customary International Law states that

\begin{quote}
  The use of herbicides as a method of warfare is prohibited if they:
  
  (a) are of a nature to be prohibited chemical weapons;
  
  (b) are of a nature to be prohibited biological weapons;
  
  (c) are aimed at vegetation that is not a military objective;
  
  (d) would cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which may be expected to be excessive in relation to the concrete and direct military advantage anticipated; or
  
  (e) would cause widespread, long-term and severe damage to the natural environment.\textsuperscript{141}
\end{quote}

This rule prohibits the use of herbicides in warfare under certain conditions, though the issue of defoliants in armed conflict is clearly the primary reason for the identification of this rule. There is a clear environmental nexus to Rule 76. It maintains that herbicides would arguably be prohibited if their composition reached

\textsuperscript{140} Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law Volume II: Practice*, 876

\textsuperscript{141} Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Volume I: Rules*, 265
the level of chemical or biological weapons.\textsuperscript{142} However, presumably these weapons would be prohibited as such anyway pursuant to the treaties on chemical or biological weapons discussed in Chapter 3. The same issue appears when it is pointed out that herbicides would be specifically prohibited if they are ‘aimed at vegetation that is not a military objective’ – under the customary principle of distinction such a practice would be prohibited anyway, and there is no additional prohibition identified through this emergent customary rule. It is identified as being a rule of customary international law in non-international armed conflict. However, the ICRC admits that there is ‘less specific practice concerning the use of herbicides in non-international armed conflicts’\textsuperscript{143}

8. Conclusion

The customary rules of armed conflict do in some respects prohibit environmental damage in non-international armed conflict. However, the determination of customary law applicable in non-international armed conflict is difficult as ‘violations [of the law] are as frequent as they are flagrant’\textsuperscript{144} in armed conflict and the requirements of ‘repetition, widespread practice, and consistency – all \textit{sine qua non} conditions for the consolidation of a customary norm’\textsuperscript{145} will be difficult to identify in most cases. As Meron observes, at the very least, ‘customary law [should be] sufficiently established to overcome possible \textit{ex post facto} challenges.’\textsuperscript{146} Therefore, to adhere to the rule of international law and the principle of legality, customary laws and their ability to prohibit environmental damage in non-international armed conflict must be clearly identified by an appropriate degree of state practice and \textit{opinio juris}. In this Chapter, the principles of distinction, proportionality, necessity, humanity and precautions in and against the effect of attack were all shown to apply as a matter of custom in non-international armed conflict. Some of the rules

\textsuperscript{142} ibid 265
\textsuperscript{143} ibid , 267
\textsuperscript{144} Queguiner, ‘The Principle of Distinction: Beyond and Obligation of Customary International Humanitarian Law’, 678
\textsuperscript{145} ibid 678
\textsuperscript{146} Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), \textit{Protection of the Environment During Armed Conflict and Other Military Operations} (Naval War College 1996), 356
identified by the ICRC as being customary were less convincingly shown to apply to non-international armed conflict and as such, their enforcement would be dubious in terms of the rule of law.

The principle of distinction protects the environment in non-international armed conflict to the extent that the environment is classified as a civilian object. This is the default classification for the environment. As a civilian object, the environment cannot be directly targeted at any time. However, making the determination as to when the environment has lost its civilian protection is not straightforward – how should conflict resources be assessed, for instance? Further difficulties arise where the environment has dual military and civilian uses.

The principle of proportionality prohibits environmental damage that is excessive in relation to the overall military advantage achieved. Difficulties arise in valuing the environment against military targets. It is submitted that the principle of proportionality is of greatest use when the environment is highly valued.

Military necessity prohibits environmental damage to the extent that it generally prohibits wanton destruction and damage. Therefore the environment may not be unnecessarily harmed. Unless there is a military necessity exception clause to a specific provision of the treaty-based laws of armed conflict, then the principle of military necessity cannot circumvent or undermine the environmental protection generated from an indirect interpretation of treaty provisions.

The principle of humanity or the prohibition on unnecessary suffering is a more nuanced rule than other customary principles. In essence it prohibits environmental damage that would otherwise be inhumane or cause unnecessary suffering to the human population. It has the potential, however, to be quite far reaching, possibly also prohibiting unnecessary suffering caused to animals and the natural environment in general. The manner in which this would be applied in practice is unclear.

The principle of taking precautions in and against the effects of attack requires military commanders to take environmental conditions into account in assessing the overall effects that an attack would have. However, in taking precautions, commanders will most likely prioritise human protection and as such, the
environment may be harmed as a least-worst option. Therefore, the overall potential for environmental protection through this principle is mixed.

Finally, the ICRC has asserted several rules that may customarily apply in non-international armed conflict to prohibit environmental damage. It was proposed here that the provisions in Rule 45 – which make customary Articles 35(3) and 55 of Additional Protocol I - arguably does not apply in non-international armed conflict. Even if it did, it would be of little effect since Article 35(3) has been widely criticised to date as being ineffective, requiring too much environmental harm to occur to trigger a breach.

In conclusion, the most that can be said about the customary laws of armed conflict that apply in non-international armed conflict is that they compel ‘commanders to consider potential environmental ramifications of combat actions and to weigh them against the expected tactical advantage.’ In this regard, the customary laws discussed above,

‘are so fraught with vagaries and uncertainties that they may not provide sufficient guidance to the commander on the ground. Indeed, by their nature, it is often only possible to evaluate the legality of particular actions on an ex post facto basis – after the possibly irreversible environmental damage has occurred. There is neither an institutionalized way to protect such areas in a strategic manner, nor a mechanism by which to evaluate particular actions.’

Though environmental protection can be achieved by relying entirely on the customary laws of armed conflict, the prohibitions on excessive environmental damage are not strong.

147 Wilcox, ‘Environmental Protection in Combat’, 304
Chapter 5

The Martens Clause and the Prohibition of Environmental Damage in Non-International Armed Conflict

1. Introduction

The Martens Clause is often referred to as a means of prohibiting environmental damage in non-international armed conflict. Customary law fills the proscriptive gaps in treaty-based laws. However, where both customary and treaty law fail to provide guidance on a particular issue, the Martens Clause can temporarily plug that hole. The Martens Clause is driven by the premise that the law on the conduct of hostilities should be shaped ‘by reference not to existing law but to more compelling considerations of humanity, of the survival of civilisation, and of the sanctity of the individual human being.’

Gaps in positive law are ‘not sufficient excuse for immoral and inhuman acts, even in wartime, and even in the direst military necessity.’ Until treaty-based or customary law develops to contribute a more permanent and direct environmental rule to the laws of non-international armed conflict, the Martens Clause may be used to identify emerging prohibitions on methods and means of warfare. However, it is submitted that those emerging prohibitions may not be enforceable in practice.

It is by no means a settled issue but there is some support for the assertion that the Martens Clause has the power to create legal norms. However, there are a considerable number of questions that have not yet been addressed in this regard. For instance, if environmental prohibitions do exist in the laws of armed conflict as a result of the Martens Clause, what exactly are they and how have they been recognised as such? What is the status of these prohibitions in international law and

---

1 Hersh Lauterpacht, ‘The Problem of the Revision of the Law of War’ (1952) 29 British Year Book of International Law 360, 379
how have they manifested themselves in reality? If the Martens Clause does not have the capacity to create norms, then arguments supporting environmental protection in this way are severely flawed.

There are dangers involved in relying too much on the Martens Clause to provide effective environmental protection in non-international armed conflict. Such an assertion may create the false impression that the laws of armed conflict are adequately equipped to deal with environmental damage and this may in turn inhibit advancements towards properly enumerating environmental proscriptions in treaty-based laws. Therefore detailed examination into the relationship between the Martens Clause and environmental protection in non-international laws of armed conflict is very much justified.

This chapter will balance the existence of environmental Martens Clause norms against prevailing interpretations of the purpose and function of the Martens Clause in contemporary laws of armed conflict. There will be a discussion of the manner in which the Clause can elevate emerging standards of humanity or trends in public opinion to the level of identifiable principles that have legal effect. This will be contrasted with the very real possibility that Martens Clause norms cannot exist. In this way it will be possible to build up a more exact picture than currently exists of the extent to which environmental damage is presently prohibited in non-international armed conflict through the Martens Clause.

2. The Origins of the Martens Clause

First proposed during the Hague Peace Conference in 1899, it is from its author, Russian jurist F.F. de Martens, that the Clause takes its name. The Martens Clause was duly inserted into the Preamble of Hague Convention II on the Laws and Customs of War on Land 1899 by unanimous vote. Salter asserts that ‘[t]his unanimous acceptance by participating states implies that its core principles were


4 Hague Convention (II) with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 29 July 1899
already generally accepted, albeit perhaps as dictates of morality not law at that time. Thereafter, a slightly modified version was included in the 1907 Hague Convention No. IV. From the outset, the Martens Clause has not remained a static text, as it changes slightly from instrument to instrument. However, questions remain as to whether drafters have been fully conscious of the implications that their slight textual modifications would have on the normative framework of international humanitarian law.

The Martens Clause was introduced into the laws of armed conflict so that new developments in armed conflict would not escape regulation just because they were not within the consciousness of the drafters of the day. Certainly the Martens Clause remains relevant within the modern laws of armed conflict. The rate at which new methods and means of warfare emerge in the present day is far greater than it was in 1899. Neither treaty-based laws of armed conflict nor customary norms can keep pace with this constant progress. However,

‘The Martens Clause, as originally enunciated, was clearly a product of its immediate context; a diplomatic tool to breach an impasse that had arisen during the Hague Conference of 1899. Martens primarily wished to ensure that negotiations were not deadlocked over questions of partisan or resistance warfare. However, what Martens arguably could not have foreseen was the legacy of his sixty-nine word diplomatic solution.’

---


6 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. The Hague, 18 October 1907

7 See, for example, Theodor Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’ (2000) 94 American Journal of International Law 78, 81

8 James D. Fry, ‘Contextualized Legal Reviews for the Methods and Means of Warfare: Cave Combat and International Humanitarian Law’ (2006) 44 Columbia Journal of Transnational Law 453, 455 Fry aptly surmises that ‘technology advances at breakneck speed. Humanity scrambles to keep up, relying on what some consider “woefully outdated” documents and standards. Is international humanitarian law doomed forever to lag behind on account of its inelasticity? ... Indeed, context-based legal reviews of methods and means of warfare can help close loopholes and ensure that the spirit of these laws prevails’.

9 Emily Crawford, ‘The Modern Relevance of the Martens Clause’ (2006) 6 ISIL Yearbook of International Humanitarian and Refugee Law 1, 19
By encouraging an examination of the principles of humanity and the dictates of the public conscience, there is an acceptance within the Martens Clause that the moral codes of the day may provide provisional guidance through uncertain or unsettled legal terrain.\(^{10}\)

**a. The Martens Clause and Non-International Armed Conflict**

As far as non-international armed conflict is concerned, it is submitted that the ‘emasculated version of the clause’\(^{11}\) contained in Additional Protocol II is the version that applies.\(^{12}\) It reads as follows:

‘[I]n cases not covered by the law in force, the human person remains under the protection of the principles of humanity and the dictates of the public conscience’\(^{13}\)

The only common factors that remain between this version of the Clause and all others are the references to *the principles of humanity* and *the dictates of the public conscience*. Other versions that apply in international armed conflict refer to the law of nations and civilisation. Cassese regards allegations of a difference in the nature of the Martens Clause resulting from the brevity of the text in Protocol II as being ‘contrary to the whole spirit of international humanitarian law’.\(^{14}\) Indeed, it is well settled that *the principles of humanity* and *the dictates of the public conscience* have always acted as the powerful anchor phrases within the Clause. Therefore the absence of references to

---

\(^{10}\) Rupert Ticehurst, ‘The Martens Clause and the Laws of Armed Conflict’ (1997) 37 International Review of the Red Cross 125, 125


\(^{12}\) For drafting history of the Martens Clause in Additional Protocol II, see Howard S. Levie (ed) *The Law of Non-International Armed Conflict: Protocol II to the 1949 Geneva Conventions* (Martinus Nijhoff Publishers 1987) It appears that of all four paragraphs to appear in the ultimate version of the preamble to Additional Protocol II, the final clause – the Martens Clause – was the most controversial and caused considerable debate as to its relevance in Protocol II, the appropriateness of its wording and the significance of the phrase ‘the dictates of the public conscience’.

\(^{13}\) Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 609, Preamble

Martens Clause Norms

‘principles of the law of nations, as they result from the usages established among civilized peoples’\textsuperscript{15} in the Protocol II Martens Clause should be viewed more as an indication of ‘the recalcitrance of the States…in extensively regulating internal armed conflicts’\textsuperscript{16} rather than as sign of a divergence in the substance of the Clause across different classifications of armed conflict.\textsuperscript{17} Therefore it could be concluded that all interpretations of the Martens Clause in general and the anchor phrases in particular, remain relevant to both international and non-international armed conflicts.

The Martens Clause is a fundamental principle in the laws of armed conflict that continues to ‘inform and colour the international Conventions relating to the law of war which have been concluded since the end of World War II.’\textsuperscript{18} At the ICTY, the Martens Clause has been invoked to justify the recognition of customary international law without the requirement of detailed and consistent state practice supporting such a conclusion. Where \textit{opinio juris} exists to support the creation of customary international law then, as Hensel observes, the Martens Clause is referred to in the absence of correlating state practice to confirm the existence of binding customary norms.\textsuperscript{19} This use of the Martens Clause has generated some criticism, particularly as it was used in the \textit{Kupreškić} Case\textsuperscript{20} at the ICTY to recognise a rule of customary international law prohibiting reprisals against the civilian population in armed conflict where there was clear state practice to the contrary.\textsuperscript{21} The root of the controversy surrounding this interpretation of the Martens Clause may be that there is no certainty or foreseeability in applying legal norms in this way. Some scholars feel

\textsuperscript{15}Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3

\textsuperscript{16}Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 210

\textsuperscript{17}ibid. Cassese says that ‘[o]ne therefore fails to see why the legal value of the clause should be confined to some classes of armed conflicts and not to others.’

\textsuperscript{18}Michael A. Meyer and Hilaire McCoubrey (eds), \textit{Reflections on Law and Armed Conflicts: The Selected Works on the Laws of War by the late Professor Colonel G.L.A.D. Draper, OBE} (Kluwer Law International 1998), 258

\textsuperscript{19}Howard M. Hensel (ed) \textit{The Legitimate Use of Military Force: The Just War Tradition and the Customary Law of Armed Conflict} (Ashgate Publishing 2008), 148

\textsuperscript{20}\textit{Prosecutor v Kupreškić et al} ICTY Judgement, Case No IT-95-16-T, 14 January 2000 International Criminal Tribunal for the former Yugoslavia

\textsuperscript{21}Hensel (ed) \textit{The Legitimate Use of Military Force: The Just War Tradition and the Customary Law of Armed Conflict}, 148

123
that the Martens Clause ‘is not to be nitpicked like a tax statute.’ At the very least, the uncertainty surrounding the operation of the Martens Clause serves to reinforce ‘the value of codification of international law.’

Essentially, when codified or customary laws fail to address a particular issue, the Martens Clause provides a window of opportunity. Through carefully constructed positivist walls, the Martens Clause forms a portal to the nebulous world of natural law to find guidance and answers on issues which appear unregulated by the law as it stands. Such guidance is indeed needed to clarify what level of environmental damage is legally impermissible in non-international armed conflict. The drafters of the 1907 Hague Convention, in which the Martens Clause appeared for the second time, ‘clearly [did] not intend that unforeseen cases should, in the absence of a written undertaking, be left to the arbitrary judgment of military commanders’. Therefore the creation of prohibitions on certain environmental damage in non-international armed conflict via the Martens Clause is by no means an over-emphasis of the Clause’s presumed powers or purpose.

The Martens Clause has heavily influenced the creation of treaty-based laws since 1899. It has been argued that the Martens Clause ‘in more recent times…has been the starting point and the avenue through which some of the most recent extensions and additions to humanitarian law have been made in the two Additional Protocols of 1977.’ However, in terms of autonomous norm-creation, the Martens Clause applies only ‘during periods of prescriptive evolution caused by discordant valuation

---

22 Oral Submission by Samoa, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 13 November 1995 at 10.35am, Peace Palace, The Hague, 45
24 Cassese maintains that the Martens Clause is a curious mix of natural and positive law, contrived as such possible by accident by de Martens. See Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 188-189
25 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. The Hague, 18 October 1907, Preamble
26 Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’, 84
27 Draper, ‘The Development of International Humanitarian Law’, 71
paradigms or prescriptive vagueness’. With the support of its ‘evasive yet appealing contents’ (that is, the principles of humanity and the dictates of public conscience) the Martens Clause is ‘more than an oratorical flight of fine words.’ It is purposefully ‘articulated in strong language, both rhetorically and ethically’ which could theoretically support the development of new environmental prohibitions in non-international armed conflict. Therefore the discussion now turns to the ways in which the Martens Clause can assume a norm-creating role in international law.

3. The Creation and Status of Martens Clause Norms in International Law

Theoretically, the Martens Clause has the potential to create norms which exist parallel to the traditional system of treaty-based and customary international law. Trends in the public conscience and standards in humanity constantly evolve in reaction to advancements in the nature and scope of the damage that can be caused by armed conflict. Therefore, Martens Clause norms could be used to avoid a situation where there may be overwhelming evidence of a solid and permanent change in the public conscience which is not recognized by or reflected in the practice of States or the content of the law at any given point in time.

In the ICJ’s Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, the dissenting opinions of Judge Shahabuddeen and Judge Weeramantry stand out as being singularly authoritative amongst all of the sources that explore the norm-creating function of the Martens Clause. Although the majority of the Court on that occasion acknowledged the ‘continuing existence and applicability’ of the Martens Clause, this had little influence on the overall conclusions reached in the

30 Draper, ‘The Development of International Humanitarian Law’, 73
31 Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’, 75
33 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion ICJ Reports 1996 226, International Court of Justice (ICJ), 8 July 1996, 260
Advisory Opinion and it certainly did nothing to elaborate upon the operation of the Clause in any meaningful way.\textsuperscript{34} Even though the reflections provided by both Judge Shahabuddeen and Judge Weeramantry take place within the context of dissenting opinions, their positions do not necessarily contradict the opinion of the majority on this point.\textsuperscript{35}

Judge Shahabuddeen felt that the Martens Clause did possess something of a normative character.\textsuperscript{36} In support of this, he stated that ‘the Martens Clause was intended to fill gaps left by conventional international law and to do so in a practical way.’\textsuperscript{37} Judge Shahabuddeen argued that the Clause could be used to infer actual limitations on armed conflict which may not yet be part of customary law. He maintained that ‘the Martens Clause provided authority for treating the principles of humanity and the dictates of public conscience as principles of international law\textsuperscript{38} which ought to be interpreted according to the ‘tolerance levels of the international community\textsuperscript{39} at any given time. According to this logic, a Martens Clause norm was necessarily transient in nature as the Clause itself had the power to ‘justify a method of warfare in one age and prohibit it in another.’\textsuperscript{40}

In addressing the legal source of Martens Clause norms, Judge Shahabuddeen insisted that ‘it was not necessary to locate elsewhere the independent existence of such principles of international law; the source of the principles lay in the Clause itself.’\textsuperscript{41} This is not as controversial a position as it initially appears; it conforms to Article 38(1)(b)\textsuperscript{42} of the Statute of the ICJ which mirrors the opening phrase of the

\begin{flushleft}
\textsuperscript{34} Judith Gardam, ‘The Contribution of the International Court of Justice to International Humanitarian Law’ (2001) 14 Leiden Journal of International Law 349, 358-359

\textsuperscript{35} ibid 359

\textsuperscript{36} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion 405

\textsuperscript{37} ibid

\textsuperscript{38} ibid 406

\textsuperscript{39} ibid

\textsuperscript{40} ibid

\textsuperscript{41} ibid 408

\textsuperscript{42} Statute of the International Court of Justice, 18 April 1946, 3 Bevans 1179; 59 Stat. 1031; T.S. No. 993 Art 38(1)(b) - ‘The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply…the general principles of law recognized by civilized nations’
\end{flushleft}
original Martens Clause itself.\textsuperscript{43} To treat the Martens Clause as ‘its own self-sufficient and conclusive authority... in cases in which no relevant rule was provided by conventional law’ \textsuperscript{44} is therefore by no means an aberration of international law. Martens Clause norms could therefore exist alongside treaty and customary law. Indeed, contrary to the doubts of some commentators\textsuperscript{45} Judge Shahabuddeen finds that quite a number of the delegates at the 1899 Hague Peace Conference may have intended that the Martens Clause possess this very powerful normative role.\textsuperscript{46}

Judge Shahabuddeen’s position is strengthened and supported by the dissenting opinion of Judge Weeramantry in the same Advisory Opinion. Judge Weeramantry clearly refers to principles which exist ‘behind such specific rules...already...formulated’.\textsuperscript{47} This indicates that the Martens Clause, including the version contained in Additional Protocol II, forms a conduit between the traditionally enumerated laws of war and emerging standards or trends in the public conscience. In this way, a norm created through the Martens Clause remains just that - a Martens Clause norm - until such a time as its customary law status can be confirmed or it becomes included in the text of an international legal instrument. In addition, Judge Weeramantry shared the view that the Martens Clause provided guidance for both foreseeable and unforeseen circumstances.\textsuperscript{48} Both judges failed to

\textsuperscript{43} It does not, however, mirror the version of the Martens Clause in Additional Protocol II as there is no mention in Additional Protocol II of ‘principles of law recognised by civilised nations’.

\textsuperscript{44} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion 408

\textsuperscript{45} Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 200; also see Draper, ‘The Development of International Humanitarian Law’, 72

\textsuperscript{46} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion 409

\textsuperscript{47} ibid 484

\textsuperscript{48} ibid. This position echoes the oral submission made by Australia during the public sitting of the ICJ Advisory Opinion on the Threat or Use of Nuclear Weapons - ‘Of course, neither the concept of “humanity”, nor the “dictates of public conscience” are static. Conduct which might have been considered acceptable by the international community earlier this century might be condemned as inhumane by the international community today.’ Oral Submission by Australia, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 30 October 1995, Peace Palace, The Hague, 39. Australia further submitted that ‘In line with such changes in the attitude of the world community, over time the permissible uses of one particular type of weapon may be progressively restricted, until finally prohibited altogether.’ Oral Submission by Australia, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 30 October 1995, Peace Palace, The Hague, 40
comment on the extent to which Martens Clause norms may be binding on parties to a conflict and so this remains an open question.

It is easy to appreciate the value of recognising emerging moral standards and reflecting them in binding laws of armed conflict. In so doing, the Martens Clause mirrors natural law ideals which consist of ‘non-consensual law based upon the notion of the prevalence of right and justice’. As Ticehurst surmised ‘international law should not reflect the views of the powerful military States alone. It is extremely important that the development of the laws of armed conflict reflect the views of the world community at large.’ The Martens Clause has the potential – and indeed the support – to play a more prominent role in the development of the laws of armed conflict. Therefore it would be very much within the spirit of the Martens Clause to create prohibitions based on identifiable present-day attitudes towards environmental damage in non-international armed conflict.

a. Support for the Existence of Environmental Martens Clause Norms

There is a great deal of growing support for the finding of binding environmental Martens Clause norms. This support should not be mistaken for conclusive evidence that such norms exist – that issue will be explored later in this Chapter. Instead, it merely shows that there is a belief amongst scholars that these norms ought to exist. In many cases, while the link between the Martens Clause and environmental protection is explicitly recognized, the actual creation of new norms remains an unmentioned topic. Since neither the Martens Clause nor the laws of war that apply in non-international armed conflict explicitly mention environmental issues, the only way that the Martens Clause could protect the environment is through some degree of norm-creation taking place.

---

49 Ticehurst, ‘The Martens Clause and the Laws of Armed Conflict’
50 ibid
51 See Bernard Victor Aloysius Röling, *International Law in an Expanded World* (Djambatan 1960), 38 - ‘the concept of civilisation, or the custom or general opinion of civilized peoples, was a source of standards, not merely in the laws of war, but also in the laws of peace...’ as quoted in Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 190 at footnote 5. See also Sperdutti, as translated in Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 191 at footnote 6
The applicability of the Martens Clause to the protection of the environment in armed conflict has been highlighted by the ICRC. The ICRC have said that the ‘validity [of the Martens Clause] in the context of the protection of the environment in time of armed conflict is indisputable.’\textsuperscript{52} UNEP has gone one step further by asserting that ‘actions resulting in environmental destruction…could be considered questionable, even without specific rules of war addressing environmental issues in detail (per the Martens Clause).’\textsuperscript{53} While UNEP acknowledges that the existence of Martens Clause norms is controversial\textsuperscript{54} they also appreciate the growing support for these norms amongst academic commentators.\textsuperscript{55} This may indicate a trend towards the increasing normalization of this interpretation of the Martens Clause in international law.

Despite growing support for environmental Martens Clause norms, acceptance is not universal. Some commentators are reluctant to recognise Martens Clause-based environmental prohibitions before the late 1970s or early 1980s, since it is felt that the dictates of the public conscience and the principles of humanity had not evolved in this way before that time.\textsuperscript{56} However, most scholars agree that such prohibitions exist now in the present-day and all seem to subscribe to the belief that the Martens


\textsuperscript{53} United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law (UNEP Post-Conflict and Disaster Management Branch 2009), 20

\textsuperscript{54} ibid 46

\textsuperscript{55} ibid 47

Clause ‘operates during the evolution of prescriptive norms. As the law proper grapples with how to handle environmental issues, the “laws of humanity” and “dictates of public conscience” will theoretically serve to ensure a modicum of protection.’

There is further support from States for the recognition of binding environmental Martens Clause norms. This is evident from the Oral Submissions of Australia⁵⁸, Mexico⁵⁹, Malaysia⁶⁰, New Zealand⁶¹, Samoa⁶², Marshall Islands⁶³, Solomon Islands⁶⁴, Costa Rica⁶⁵ and Zimbabwe⁶⁶ to the International Court of Justice in the Advisory Opinion on the Threat and Use of Nuclear Weapons. Of all states to mention the

⁵⁸ Oral Submission by Australia, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 30 October 1995, Peace Palace, The Hague, 39
⁶⁰ Oral Submission by Malaysia, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 7 November 1995, Peace Palace, The Hague, 60
⁶² Oral Submission by Samoa, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 13 November 1995 at 10.35am, Peace Palace, The Hague, 45, 46, 51, 52
⁶⁴ Oral Submission by Solomon Islands, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 14 November 1995, 10.00am, Peace Palace, The Hague, 50
⁶⁶ Oral Submission by Zimbabwe, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 15 November 1995, 15.30pm, Peace Palace, The Hague, 33
Martens Clause in their submissions to the ICJ, only the USA\textsuperscript{67} expressly refuted the ability of the Clause to create prohibitions on environmental damage in armed conflict. There is clear support for determining environmental Martens Clause norms amongst states, but like the opinion of scholars in this field, that support is not universal. What remains unclear is the content and impact of these norms as ‘[a]ny law, but especially a law pertaining to armed conflict, should retain a significant measure of predictability in interpretation and application. The battlefield is no place for ambiguous and amorphous rules.’\textsuperscript{68} Equally, unclear laws that lack foreseeability would be in breach of the rule of international law.

4. The Source and Impact of Environmental Martens Clause Norms

In temporarily suspending the debate about the existence of Martens Clause norms, it is possible to isolate and explore some less frequently asked questions about the exact nature and content of such norms. These questions are just as relevant as the discussion above in determining whether environmental Martens Clause norms can be binding on parties to a non-international armed conflict. There has been, to date, a failure to address the issue of how the principles of humanity and the dictates of the public conscience transform strong trends in opinion or morality into binding rules of law. For example, to identify a Martens Clause norm, how specific must the trend be to ensure clarity within the law? Can assumptions be based on a general abhorrence of environmental damage, or must there be particular reactions to environmental damage in armed conflict as a starting point? This section will by no means provide conclusive answers, but it will instead serve to substantiate these legitimate questions and ignite further examination.

\textsuperscript{67} Oral Submission by USA, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 9 November 1995, 15.30pm, Peace Palace, The Hague, 78

\textsuperscript{68} Crawford, ‘The Modern Relevance of the Martens Clause’, 21
a. The Relationship Between the Environment, the Principles of Humanity and the Dictates of the Public Conscience

Reference to the principles of humanity and the dictates of the public conscience constitute an outstandingly powerful statement in international law. Through these phrases the individual is given a role in the setting of standards and perhaps even in the creation of binding norms within the laws of armed conflict. The most radical aspect of these phrases is that the voice of the people may be considered authoritative without necessarily being represented by a sovereign state or other such body. Sir David Maxwell-Fyfe, the United Kingdom’s prosecutor at Nuremberg, said that ‘[t]he law is a living thing. It is not rigid and unalterable. Its purpose is to serve mankind, and it must change and grow to meet the changing needs of society.’ Sometimes, mankind and society can make their collective opinions felt so powerfully that to ignore these messages would be unethical in the extreme. There is no place in the whole body of the laws of armed conflict that the changing expectations and values of society can be reflected as vividly as through the principles of humanity and the dictates of the public conscience. And, it is submitted that there is no area of international concern generating such identifiable and collective public reaction in the present day than the protection and preservation of the environment.

Dictates of the Public Conscience

In essence, dictates of the public conscience lie ‘at the heart of humanitarian law...recognis[ing] the need that strongly held public sentiments in relation to humanitarian conduct be reflected in the law.’ It has been suggested that ‘there is some scope to argue that the idea of ‘public conscience’ is akin to notions of ‘world opinion’.’ The strong position of public opinion - which has been ‘so influential in our era’ - is further supported by the comments of the Italian representative to the Sixth Committee of the UN General Assembly prior to the drafting of the Additional Protocols in 1977. He maintained that it was important to recognise that ‘the

69 Sir David Maxwell-Fyfe, Transcript of the Trial of The Major War Criminals before The International Military Tribunal “Blue Series”, Nuremberg 28 August 1946, 172
70 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion 487
71 Crawford, ‘The Modern Relevance of the Martens Clause’, 12
72 Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’, 84

132
demands of world opinion still have a great role to play as the sources of principles of international law...when written rules proved to be inadequate.\textsuperscript{73} In this regard, the first step in indentifying particular dictates of public conscience is to point to ‘a universal realization that there is...an element which deeply disturbs the public conscience of this age.’\textsuperscript{74}

One such element could be the ‘special public sensitivity’\textsuperscript{75} to environmental matters in the present day.\textsuperscript{76} Indeed there is no doubt surrounding the extent to which ‘the public conscience of the international community has been strengthened and sensitised to a high degree in relation to environmental problems.’\textsuperscript{77} Environmental issues permeate every aspect of human life. This can be seen in the growing number of declarations, resolutions, and treaties on environmental protection at local, regional and global levels. There is nothing to indicate that the public conscience wishes to limit environmental protection to times of peace only.\textsuperscript{78} In fact, the growing global ‘environmental conscience’\textsuperscript{79} – which ‘embraces prevention as opposed to cure’\textsuperscript{80} - inherently respects the recognition of the ‘environment’s

\textsuperscript{73} See ibid, 83 at footnote 5 quoting UN Doc. A/C.6/SR.1452 (1973), para 46

\textsuperscript{74} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 489. To this, Judge Weeramantry quoted Weston: ‘in this burgeoning human rights era especially, respecting an issue that involves potentially the fate of human civilisation itself, it is not only appropriate but mandated that the legal expectations of all members of human society, official and non-official, be duly taken into account’ (Burns H. Weston, ‘Nuclear Weapons and International Law: Prolegomenon to General Illegality’ (1982-1983) 4 New York Law School Journal of International and Comparative Law 252)

\textsuperscript{75} Rosario Dominguez-Mates, ‘New Weaponry Technologies and International Humanitarian Law: Their Consequences on the Human Being and the Environment’ in Pablo Antonio Fernandez-Sanchez (ed), The New Challenges of Humanitarian Law in Armed Conflicts: In Honour of Professor Juan Antonio Carrillo-Salcedo (Martinus Nijhoff 2005), 105


\textsuperscript{77} Dominguez-Mates, ‘New Weaponry Technologies and International Humanitarian Law: Their Consequences on the Human Being and the Environment’, 107

\textsuperscript{78} For a summary of the position of States on this point, see Ticehurst, ‘The Martens Clause and the Laws of Armed Conflict’

\textsuperscript{79} Hulme, ‘Armed Conflict, Wanton Ecological Devastation and Scorched Earth Policies: How the 1990-91 Gulf Conflict Revealed the Inadequacies of the Current Laws to Ensure Effective Protection and Preservation of the Natural Environment’, 51

\textsuperscript{80} ibid 52
interdependency with the survival of humankind, and ultimately...the inherent value of the environment in and of itself.\textsuperscript{81} Therefore there is strong evidence to indicate that the dictates of the public conscience within the Martens Clause have evolved to include a good degree of environmental protection. Nonetheless, there is some disagreement as to the extent of the environmental protection captured by the public conscience. In this regard, Huang maintains that ‘[w]hile devastating to the environment, the attack [on the Jiyeh power station in Lebanon] probably did not violate the fundamental dictates of the public conscience from an anthropocentric perspective.’\textsuperscript{82}

\textit{The Principles of Humanity}

The reference to the principles of humanity in the Martens Clause was thought to represent a paradigm substitution of ‘the principles of humanity [in place of] the unlimited discretion of the military commander.’\textsuperscript{83} It has been argued that the ‘Clause was not the origin of the principles of humanity but rather the specific acceptance by states in treaty form that these rules already existed outside of treaty law.’\textsuperscript{84} It serves to add an extra dimension of consideration to decisions being made by commanders both on and off the battlefield. Indeed it has been referred to as ‘the great truth which humanitarianism seeks to proclaim and practice as a universal principle.’\textsuperscript{85} Although ‘the [empirical] meaning of humanity is ambiguous’\textsuperscript{86}, the word itself carries many nuances. Chief amongst these nuances is a desire to limit injuries as far as possible under the circumstances. Clearly the principle of ‘[h]umanity implies a moral

\textsuperscript{81} ibid 51
\textsuperscript{83} Theodor Meron, ‘Francis Lieber’s Code and Principles of Humanity’ (1998) 36 Columbia Journal of Transnational Law 269, 280
\textsuperscript{84} Salter, ‘Reinterpreting Competing Interpretations of the Scope and Potential of the Martens Clause’, 404
\textsuperscript{86} Robin Coupland, ‘Humanity: What it is and how does it influence international law?’ (2001) 83 International Review of the Red Cross 969, 988
force,\textsuperscript{87} which by its very nature is integrated into the fabric of every provision within the laws of armed conflict.

Looking back to its first use in the St. Petersburg Declaration 1868,\textsuperscript{88} the principle of humanity was used to prohibit new weapons that were ‘contrary to the “progress of civilisation”’.\textsuperscript{89} In the present day, the destruction of the environment in armed conflict could be regarded as the antithesis to the advancement of modern civilisation. This is especially so given the deterioration of the environment globally, though particularly in relation to conflict-prone regions of the world. Environmental damage in armed conflict may easily result in irreparable harm that could lead to increased human – specifically civilian – suffering (either in the form of resulting loss of life or the creation of inhumane living conditions). It has been argued that humanity and inhumanity are ‘two contending and essentially moral coordinates [that] form a matrix in which the denouement of life on earth will be determined.’\textsuperscript{90} These sentiments are poignant when armed conflict is factored in as a supplemental source of harm adding to the already considerable challenges faced by current environmental conditions as a result of the effects climate change. There is no doubt that the role played by the principle of humanity now involves the substantial regulation of methods and means of warfare that have an adverse impact on the environment.

b. Deriving the Content of Environmental Martens Clause Norms

If environmental Martens Clause norms exist, then it is necessary that they have content. However, it is unclear just how specific the content of these norms can be at this point in time – for the law to be applied to non-state armed groups or individuals, the norms should conform to the principle of legal certainty and the requirement of foreseeability. Otherwise, Martens Clause norms run the risk of

\textsuperscript{87} ibid 969

\textsuperscript{88} Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grams Weight, 11 December 1868, 18 Martens Nouveau Recueil (ser. 1) 474

\textsuperscript{89} Coupland, ‘Humanity: What it is and how does it influence international law?’, 974

\textsuperscript{90} Gilbert, A., ’Betting on the Better Angels’ The Inaugural Henry Dunant Lecture, Australian Red, Melbourne 1999 as cited in Coupland, ‘Humanity: What it is and how does it influence international law?’, 977
imposing penalties and punishments without law, which would violate the principle of *nullum crimen nulla poena sine lege* discussed in Chapter 1.\(^91\)

There is further uncertainty regarding how explicit or widespread the trends that inform the resultant Martens Clause norms ought to be. Perhaps it is enough to point towards generalised statements resisting environmental damage on the whole. Or should there be evidence of very specific sentiments that condemn environmental damage in situations of non-international armed conflict in particular? In identifying the content of environmental Martens Clause norms, ‘[m]uch of the difficulty will result from the surfacing of cross-cultural and intra-societal differences.’\(^92\) Attitudes to the environment and environmental damage vary considerably around the globe and may be shaped by a particular context. Therefore, identifying trends and standards that are not temporally or geographically limited is essential in determining the potential content of a Martens Clause norm that conforms to the rule of law.

On the one hand, there is a strong case to be made for recognising generalised trends and attitudes to environmental protection as being eligible for elevation to normative proscriptions in armed conflict through the Martens Clause. This would involve interpreting present-day attitudes against deforestation or the protection of certain species of wildlife, for example, as being just as relevant to actions in warfare as in peacetime. There are difficulties where public opinion has not yet manifested a reaction to particular circumstances. Although such reactions would be helpful in pointing to a desire to prohibit environmental damage in non-international armed conflict, the strength of generalised sentiments against environmental damage could indicate that the environment should be protected in armed conflict too. In this way, the actions of commanders on the battlefield would be limited by an environmental Martens Clause norm with non-specific content, which would be of very dubious legality under the rule of international law.

Situations of armed conflict, over and above all other classifications of human interaction, require certainty, forseeability and simplicity in their legal restraints. For Martens Clause norms to be foreseeable, it would be necessary to identify a particular position – against the use of nuclear weapons for example – to understand what is

\(^91\) See Chapter 1 from 26-30

and what is not prohibited by the dictates of the public conscience and the principles of humanity. Of course the parameters of Martens Clause norms could never be as definite as treaty-based norms, or even customary law proper. But if the identified public opinion is acute and clear, then it can more easily influence the conduct of parties to a conflict and lead to ‘a number of pertinent matters in the public domain [being] judicially noticed’. This would understandably be a stronger position if Martens Clause norms were to have a practical impact.

c. The Practical Impact of Environmental Martens Clause Norms

The extent to which environmental Martens Clause norms can have practical effect is debatable. Judge Shahabuddeen stated that ‘[t]he basic function of the clause was to put beyond challenge the existence of principles of international law which residually served, with current effect, to govern military conduct by reference to the “principles of humanity...and the dictates of public conscience”’. This would necessarily imply that Martens Clause norms have a similar character to customary norms in that they have a greater role to play in the post-conflict justice setting than during actual combat. Often customary international law is used to prove that certain actions were prohibited by international law at the time of their committal, and that therefore prosecution for those actions does not violate the principle of *nullum crimen nulla poena sine lege*. In the few cases where the Martens Clause has featured as a prominent element in a court’s reasoning, it has usually been used to this effect.

There are radically divergent views as to whether or not a court should or indeed could recognise Martens Clause norms as binding principles of international law. On one side, Cassese believes that courts cannot elevate principles into binding rules of international law without some degree of implicit state consent. While on the contrary, Ticehurst maintains that this position is an affront to the very nature of the Martens Clause itself as this would endorse ‘the strongest military powers [having]

---

93 Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’, 84
94 *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, 410
95 ibid 408
the greatest influence in the development of the laws of armed conflict. Judge Shahabuddeen takes a more judicial approach and maintains that ‘[t]he task of determining the effect of a standard may be difficult, but it is not impossible of performance; nor is it one which a court of justice may flinch from undertaking where necessary.’ He does not mention whether state consent is required but he does stress that the court ‘may [not] go on a roving expedition; it must confine its attention to sources which speak with authority.’ Sean McBride does not seem to limit his understanding of sources of the dictates of the public conscience to just state supported expressions.

Therefore, while Martens Clause norms may have greatest effect in the post-conflict justice arena where they conform to the rule of law, there is by no means a consensus as to whether new environmental norms would be recognised as being legally binding.

As a point of comparison to gauge the efficacy of environmental Martens Clause norms, the case of nuclear weapons provides an interesting analogy. There is a very identifiable trend in the dictates of public conscience and countless standards in the principles of humanity that strongly oppose the use of nuclear weapons in every circumstance. Based on the arguments made earlier in this chapter, these trends and standards are specific enough and sufficiently widely held to perhaps be considered valid Martens Clause norms. However, they were not recognised as such by the International Court of Justice in its Advisory Opinion on the Threat and Use of Nuclear Weapons. Gardam asserts that on this occasion the arguments before the Court were intended to prove that ‘the Clause was a means by which IHL could keep in step with new developments in community values that were not necessarily

---

98 Ticehurst, ‘The Martens Clause and the Laws of Armed Conflict’
99 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 410
100 ibid
101 Sean McBride, ‘The Legality of Weapons of Social Destruction’ in C. Swinarski (ed), Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet (Martinus Nijhoff 1984), 406 - ‘Many resolutions adopted by the general Assembly of the United Nations have, either directly or by inference, condemned completely the use, stockpiling, deployment, proliferation and manufacture or nuclear weapons. While such resolutions may have no formal binding effect in themselves, they certainly do represent ‘the dictates of public conscience’ in the 20th century, and come within the ambit of the Martens Clause prohibition.’
reflected in the *opinion juris* of states.\(^{102}\) But the overwhelming evidence of public opinion against the use of nuclear weapons did not make a significant impact on the Court’s ultimate conclusions. If this is the effect that public opinion strong enough to induce the creation of a Martens Clause norm has, then Martens Clause norms cannot be considered to have much of a practical effect at all.

### 5. The Case Against Environmental Martens Clause Norms

The evidence above pointing to the existence and substance of environmental Martens Clause norms was deliberately presented without counter-argument. Yet, even without challenge the case that can be made for environmental protection in armed conflict through the Martens Clause is quite weak. This section will specifically discuss the faults in the assertions that have been made regarding environmental protection in non-international armed conflict through the Martens Clause.

#### a. Challenging the Norm-Creating Process

Quite simply, if the norm-creating function is not universally accepted then strong doubts can be raised over the ability of the Martens Clause to operate in this way. Many commentators believe that the general strength and character of the sentiments contained in the Martens Clause has ‘compensated for the somewhat vague and indeterminate legal content of the clause.’\(^{103}\) Yet, there is some merit to the proposition that the Martens Clause may be too uncertain to be of any meaningful use to the modern day laws of armed conflict.\(^{104}\) As far as its effect on non-international armed conflict goes, the Clause is situated only in the preamble to Protocol II, not in its operative paragraphs: a deliberate act by the drafters of the day.\(^{105}\) Therefore, there is considerable evidence to support the assertion that the

---

\(^{102}\) Gardam, ‘The Contribution of the International Court of Justice to International Humanitarian Law’, 358

\(^{103}\) Meron, ‘The Martens Clause, Principles of Humanity, and Dictates of Public Conscience’, 75


Martens Clause has instead an alternative purpose in the laws of armed conflict, one which does not involve the creation of new legal principles.

Indeed Cassese has identified two ways in which the Martens Clause may operate. The norm-creating function is the most radical interpretation of the Clause’s purpose. Yet even within this niche, not all proponents agree that the norms created will have binding effect. Röling maintains that the Martens Clause merely identifies standards which would be non-legally binding, as opposed to hard and fast rules that carry legal consequences when breached. Standards which carry no legal weight would do very little to prohibit environmental damage in non-international armed conflict.

The most conservative interpretation of this use of the Martens Clause is that it has provided the inspiration and motivation for the negotiation of treaty norms and nothing more. Based on this understanding, perhaps the Martens Clause is supposed to merely provide guidance in the interpretation of customary law or justification for the drafting of future treaty provisions. Of course, if this were the case, then environmental protection in non-international armed conflict may well be favourably recognised by future endeavours to codify this area of the law of armed conflict. However, this function – to inspire treaty-based law of armed conflict provisions – does nothing to protect the environment in the absence of efforts to codify the law in this way.

The second use of the Martens Clause, identified by Cassese, is to guard against adverse inferences being drawn where treaties fall silent on a particular issue. This, according to Greenwood, is ‘the very minimum that the Clause has the potential to do.’ This second interpretation is the one that was used by the Constitutional

---

106 Röling, *International Law in an Expanded World*, 38 - ‘the concept of civilisation, or the custom or general opinion of civilized peoples, was a source of standards, not merely in the laws of war, but also in the laws of peace...’ as quoted in Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 190 at footnote 5


108 ibid 189

Court of Colombia\(^\text{110}\) to defeat the argument that actions not specifically prohibited by Additional Protocol II were therefore permitted.\(^\text{111}\) Put simply, the Martens Clause would ensure that the absence of enumerated rules on environmental protection in Additional Protocol II do not therefore mean than environmental damage is allowed. However, the absence of a rule still means that environmental damage is not explicitly prohibited either.

b. Challenging the Content of Environmental Martens Clause Norms

If there is no way to identify relevant dictates of the public conscience or principles of humanity that clearly show sustained resistance to environmental damage in non-international armed conflict, then environmental Martens Clause norms cannot exist because they would have no substance. As discussed above, it is extremely difficult to identify specific developments in public opinion and morality that relate to environmental protection in non-international armed conflict. Although this issue is beginning to appear on the international agenda\(^\text{112}\) there is little evidence of it permeating the public conscience to the same extent as, say, the prohibition of nuclear weapons. Therefore it would be very difficult to substantiate environmental Martens Clause norms through the dictates of the public conscience or the principle of humanity.

There are further difficulties in deriving the substance of norms through the Martens Clause, as there is considerable preference for an element of state consensus in identifying the dictates of the public conscience and the principles of humanity, since any norm that is recognised would become part of the corpus of international law. Strebel maintains that where there is clear practice amongst states, then a norm based

---


\(^{111}\) ibid

on the principles of humanity and the dictates of the public conscience ought to be inferred in situations of legal doubt and in the absence of prevailing positive law rules.\textsuperscript{113} Cassese argues that ‘[t]his determination is made by determining the standards that states consider to be required by humanity or public conscience at any given moment.’\textsuperscript{114} He further suggests that ‘the view of states acts as a sort of filter designed both to prevent arbitrariness (or at least subjective appraisals by courts and other interpreters) and to make the elevation of “principles” to international legal standards contingent upon the approval of states.’\textsuperscript{115} Additionally, Sperduti, who vehemently supports the power of the Martens Clause to create norms, requires some form of state endorsement in order to discern which moral norms ought to be given legal value and recognition.\textsuperscript{116}

Judge Shahabuddeen provides a balanced analysis of the role that state endorsement plays in identifying potential Martens Clause norms. In the ICJ’s Nuclear Weapons Advisory Opinion, he firstly reiterated that ‘the “dictates of public conscience” could not translate themselves into a normative prohibition unless this was possible through the Martens Clause.’\textsuperscript{117} However, he qualified this by asserting that a Court would not have the power to just ‘transform public opinion into law’.\textsuperscript{118} While Judge Shahabuddeen indicated that the opinion of states was important, it was relevant only to ‘[indicate] the state of the public conscience’\textsuperscript{119} not as conclusive proof of the existence or absence of a Martens Clause norm.

Cassese argued that ‘[c]learly, under this construction, the opinion of states plays a different role from that required by the customary process’\textsuperscript{120} because ‘no practice is required’\textsuperscript{121} in making Martens Clause norms. However, Cassese does not argue that

\textsuperscript{113} Cited in Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 190-191 at footnote 5
\textsuperscript{114} ibid 192
\textsuperscript{115} ibid
\textsuperscript{116} ibid 191 at footnote 6, paraphrasing G. Sperduti, \textit{Lezioni di diritto internazionale} (Milan, Giuffrè 1958), 68
\textsuperscript{117} \textit{Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion}, 409
\textsuperscript{118} ibid
\textsuperscript{119} ibid 410
\textsuperscript{120} Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky’, 192
\textsuperscript{121} ibid
state support is unnecessary. Therefore it seems likely that some form of state support is required for public opinion on an issue to be transformed through the Martens Clause into a binding norm. By requiring states to articulate the dictates of the public conscience there is considerable scope for the message to be politicised or skewed.

c. Challenging the Enforcement of Environmental Martens Clause Norms

Enforcement of the laws of armed conflict in non-international armed conflict is difficult at the best of times even for the most clearly enumerated laws. Therefore no stretch of the imagination is required to recognise the problems involved in the enforcement of Martens Clause norms in non-international armed conflict. The problems are magnified in the case of environmental protection in non-international armed conflict, since there has been no real effort to realise and enforce the codified environmental provisions in Additional Protocol I and the Statute of the International Criminal Court (both concerning international armed conflict). Simonds recognises some difficulties in properly implementing environmental Martens Clause norms. He maintains that ‘[f]irst, such a flexible standard...does not provide a clear rule for armed forces in the field. Second, the standards of content may result in bias in enforcement and may allow the injection of one tribunal’s or culture’s morals concerning the environment.’122 Considerable leaps in judicial reasoning, plus a willingness amongst parties to a conflict to be bound by such novel and uncertain rules, would be necessary before environmental Martens Clause norms could become truly binding in law.

6. Dangers in Relying on the Martens Clause for Environmental Protection

There is a danger that too much reliance on the Martens Clause to fill the proscriptive gaps in the law will jeopardise or even inhibit the advancements that need to be made in properly codifying the prohibition of environmental damage in non-international armed conflict. If the Martens Clause can create effective

environmental norms and they are relied upon, then there is no issue. Equally, if the Martens Clause cannot adequately protect the environment, and this conclusion is accepted, no danger exists. However, if scholars continue to believe that the Martens Clause can sufficiently guard against impermissible levels of environmental damage in non-international armed conflict when, for many reasons it cannot do this, a radical change in perspectives is required to move the discussion forward.

With regard to environmental protection in non-international armed conflict, the Martens Clause is regularly cited with great favour, ahead of perhaps more appropriate indirect provisions contained in Additional Protocol II. At times it seems as though a reference to the Martens Clause in general exempts commentators from engaging in further discussion on the issue. However, to rely on such novel and untested ideas without exploring them further creates the illusion that a reliable solution exists for the problem of environmental damage in non-international armed conflict when it does not. This ultimately stifles the incentive to carry out very necessary and radical reform in the laws of armed conflict on this point.

It is evident from the discussion above that while a strong case for environmental Martens Clause norms can be made at the theoretical level, it is unlikely that these norms exist in reality. The Martens Clause cannot be relied upon to provide any degree of adequate environmental protection. If such a result manifests itself in the future, it will most likely be because the Clause is being interpreted in conjunction with another provision of the laws of armed conflict, not because the norm-creating function of the Clause is at work.

It is especially important to understand the role that can actually be played by the Martens Clause when it comes to non-international armed conflict as ‘some of the worst environmental degradation has taken place by counter-insurgent forces, i.e. Vietnam, and in civil conflict, e.g. Afghanistan.’ Also, Martens Clause norms binding on non-state groups and individuals in non-international armed conflict would need clarity and foreseeability to satisfy the rule of law requirements. The international community needs to move towards finding a permanent solution to the

123 Hulme, ‘Armed Conflict, Wanton Ecological Devastation and Scorched Earth Policies: How the 1990-91 Gulf Conflict Revealed the Inadequacies of the Current Laws to Ensure Effective Protection and Preservation of the Natural Environment’, 68
absence of limitations on environmental damage in the laws of non-international armed conflict. By failing to take into account the flaws in the Martens Clause theory, the real issue in need of attention is camouflaged and this hinders essential progress in the field.

7. Conclusion

The Martens Clause is an important and foundational clause within the laws of armed conflict. It is expected to provide guidance where there are normative lacunae in the law. Some scholars have interpreted this guidance as amounting to legally binding norms. Others refute this interpretation of the function of the Martens Clause. Nonetheless, the Martens Clause is the most frequently cited provision within the laws of armed conflict when the issue of environmental protection in non-international armed conflict is discussed. However, this steadfast reliance on the ability of the Martens Clause to fill the gap in the law on this point has never been thoroughly probed.

This chapter discussed in sequence many issues in relation to the potential effect of the Martens Clause on the prohibition of environmental damage in non-international armed conflict. The discussion firstly indicated that the Clause applies to non-international armed conflict both as a matter of customary international law and as a provision in the preamble to Additional Protocol II. The discussion then considered whether environmental Martens Clause norms could be created. It concluded that in theory, such norms could be created, but that they would be extremely vague at best and this may not satisfy the requirements of the rule of international law. However, the existence of legally binding Martens Clause norms which have as their subject matter the prohibition of environmental damage in non-international armed conflict is not universally accepted.

This chapter concluded by asserting that reliance on the idea of environmental Martens Clause norms has led to a false reality that law on this issue exists. Indeed ‘no Court or Tribunal has ever acted upon the notion that the concepts of humanity and public conscience have created an international obligation.’\textsuperscript{124} There is no international state practice to support the assertion that the Martens Clause has been

\textsuperscript{124} Crawford, ‘The Modern Relevance of the Martens Clause’, 17
Chapter 5

...elevated to an independent source of international law. There is no certainty surrounding the existence of Martens Clause norms. Even if they did exist, it may be difficult to substantiate and enforce these norms. Ultimately, the Martens Clause should not be relied upon to prohibit environmental damage in non-international armed conflict.
Chapter 6
Means of Preventing States from Causing Environmental Damage in Non-International Armed Conflict

1. Introduction

Environmental protection in non-international armed conflict need not be exclusively dependent on the laws of armed conflict. There is growing acceptance for the use of other branches of international law and practice to supplement the laws of armed conflict where gaps or vagaries exist. The effect of international human rights law, international environmental law and international compensation mechanisms in prohibiting environmental damage in non-international armed conflict will be examined in this chapter. UNEP supports the approach of supplementing the laws of armed conflict in this way as it has previously indicated that where there is no clear guidance in the primary body of laws to apply in armed conflict, ‘other rules...may provide an appropriate pattern for resolving a concrete problem in accordance with equitable principles.’

One limitation on this approach is that the branches of international law identified in this chapter are binding only on states, not non-state actors. In this regard, there are other shortcomings to note. For instance, in many non-international armed conflicts, there may be a ‘near total collapse of the central government apparatus and the existence of parallel political authorities exercising quasi-governmental powers.’ As such, it may be difficult under the circumstances to identify the party within a state owing obligations under international law.

---

1 As quoted in Jay E. Austin, ‘Lessons from Other Legal Regimes: Introduction’ in Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000), 183 at footnote 1

This chapter will firstly discuss the extent to which international human rights law can apply during non-international armed conflict to indirectly protect the environment. The discussion will then consider the extent to which international environmental law continues to apply in armed conflict to compliment the laws of armed conflict in preventing environmental damage during the conduct of hostilities. Thirdly, international compensation mechanisms could hold states liable for the payment of damages to facilitate compensation for and repair of irreparable loss and damage to the environment during non-international armed conflict. In this regard, the United Nations Compensation Commission is a model that will be explored as a means of protecting the environment through *ex post facto* economic deterrence.

**Continuance of ‘Peacetime’ Laws in Armed Conflict**

There are several theories by which international laws continue to apply during armed conflict. Theories such as the classification theory, intention theory, sliding scale theory and theory of differentiation assist in determining which international laws continue to apply during armed conflict. The theory of *lex specialis* determines which laws apply as a matter of primacy where the laws of armed conflict and other applicable laws are in contradiction. While there is a large body of scholarship on the effect of armed conflict on treaties and other norms of international law, the determination of whether a law continues to apply will be made on a case-by-case basis, subject to the most appropriate theory of continued applicability under the circumstances.

---


2. Environmental Human Rights in Non-International Armed Conflict

Human rights protections are becoming increasingly important in the context of non-international armed conflicts and are generally considered to continue throughout armed conflict unless an obligation has been lawfully derogated from. However, to be effective in conflict, human rights laws must be sufficiently specific. It is submitted that environmental protection based on human rights principles is not developed sufficiently to offer an effective protection. This is all the more so in respect of non-state actors as the human rights obligations of such groups remain controversial. It will be recalled from Chapter 1 that where international law appears ambiguous, states should not benefit from that ambiguity. Individuals and non-state groups, on the other hand, ought to benefit from ambiguity in accordance with the principle of legality and the rule of international law.

It is conceded that while it is an interesting discussion warranting further study, the human rights obligations of non-state actors are beyond the scope of this part of the thesis as this section aims to demonstrate that emerging human rights jurisprudence on environmental protection is too abstract at this point to be instructive in armed conflict.

The idea of protecting the environment through the existing human rights system is not new; developments have been ongoing in this regard over the past two decades or so. To date, it seems that ‘only massive and severe damage to the environment

---


6 Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory International Court of Justice, Advisory Opinion, 2004 ICJ Reports 136, para 106


9 See Chapter 1 from 26
Chapter 6

constitutes a violation of human rights.\textsuperscript{10} As such, while warfare affects the natural environment, this damage may not result in a violation of human rights standards.\textsuperscript{11} Environmental protection through human rights may not be specific enough to have any prescriptive value in armed conflict at this point.

a. Environmental Protection through Human Rights

*International Developments*

The links between human rights and the environment began to converge in 1972 during the UN Conference on the Human Environment in Stockholm – a conference which took place, notably, *during* the armed conflict in Vietnam. In this regard, Principle 26 of the final Declaration of the Conference referred to the effect that nuclear weapons had on humans and the environment.\textsuperscript{12} The final Declaration of the Conference – a non-legally binding instrument – also made a pointed reference to the link between human rights and the environment, noting that ‘both aspects of man’s environment, the natural and the manmade, are essential to his well-being and to the enjoyment of basic human rights’.\textsuperscript{13} Principle 1 of the Declaration went further to establish the right to a healthy environment by stating that

\begin{quote}
‘Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.’\textsuperscript{14}
\end{quote}

The Brundtland Report\textsuperscript{15}, published in 1987, was the precursor to the Rio Declaration in 1992, and it also recognised that ‘all human beings have the

\textsuperscript{10} Voneky, ‘Peacetime Environmental Law as a Basis of State Responsibility for Environmental Damage Caused by War’, 201


\textsuperscript{13}ibid para 1

\textsuperscript{14} ibid Legal Principle 1

\textsuperscript{15}United Nations World Commission on Environment and Development ’Our Common Future’, UN Doc A/42/427, 4 August 1987
fundamental right to an environment adequate for their health and well being.' In 1990, the UN General Assembly issued a resolution on the ‘Need to Ensure a Healthy Environment for the Well-Being of Individuals.’ The UN Special Rapporteur on Human Rights and Development made the link between existing human rights and environmental protection in her 1994 report. The Draft Principles on Human Rights and the Environment which were annexed to the report paid particular attention to the absence of environmental protection in armed conflict. The report stated that:

‘The protection of the environment in time of armed conflict has come tragically to the fore in the Iran-Iraq conflict, the Gulf war and in the conflict in the former Yugoslavia. [These conflicts] have fuelled questions about the content, limits, shortcomings and indeed effectiveness of international humanitarian law intended to protect the environment as such, together with persons and their property, against damage to the environment in the course of hostilities.’

Existing human rights are living provisions that can be dynamically interpreted to reflect present day realities. In this way, some human rights can respond to new situations which are created as a result of changing environmental conditions and growing environmental awareness on a global scale. As such international human rights bodies have begun to consider the environmental dimension of existing human rights. Under the International Covenant on Civil and Political Rights (ICCPR),

---

16 ibid Legal Principle 1

17 UNGA Res A/RES/45/94 Need to Ensure a Healthy Environment for the Well-Being of Individuals, 14 December 1990


20 ibid para 106

the most successful environmental protection has taken place in the context of the minority rights provision, article 27. It states:

‘In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language.’

There is clearly no overt environmental language in this article, yet the jurisprudence that has emerged from the Human Rights Committee to date has largely focused on circumstances of environmental destruction that have had an adverse effect on the ability of minorities to profess and practice their culture, religion or language. Pertinent cases in this regard are *Lubicon Lake Band v Canada*; *Länsman v Finland*; and *Apirana Mahuika v New Zealand*. Article 27 has been interpreted by UNEP as indicating ‘that during conflict situations, occupying States could be required to let local groups control resources, when those resources are not considered a legitimate military objective.’ While the protection of the environment in situations of occupation is outside the scope of this study, the extent to which indigenous groups can control and dispose of natural resources may indeed be implicated under the jurisprudence that the Human Rights Committee has developed. It has been argued that the Article 27 jurisprudence creates ‘a framework of accountability in conflict zones for holding all belligerents accountable for actions taken that have adverse effects for the territory in question. Alteration of the environmental quality,


22 International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 52, UN Doc. A/6316 (1966); 999 UNTS 171; 6 ILM 368 (1967)

23 ibid Article 27


27 United Nations Environment Programme, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP Post-Conflict and Disaster Management Branch 2009), 48
unsustainable patterns of resource exploitation all impact adversely on the natural resources of the territory in question.\textsuperscript{28}

Articles 1(2)\textsuperscript{29}, 6(1)\textsuperscript{30} and 17(1)\textsuperscript{31} of the ICCPR can also be interpreted in an environmental way, though applications brought under Articles 6 and 17 to date have been ruled inadmissible by the Human Rights Committee\textsuperscript{32} and so there is no legal precedent for environmental interpretations of these articles. The arguments in relation to these articles are merely scholarly at this point. Article 6 on the right to life could be useful in expanding a rights-based approach to environmental protection, as this article cannot be derogated from, in accordance with Article 4 of the ICCPR. There is a clear connection between the right to life and law of armed conflict provisions on the protection of civilians.

There have been few meaningful developments in the context of the International Covenant on Economic, Social and Cultural Rights\textsuperscript{33} (ICESCR). In the context of the ICESCR, Article 11 on the right to be free from hunger and to an adequate standard of living, food, clothing and housing is relevant, as is Article 12 on the right to the highest attainable standard of health. However civil and political human rights have been more easily or more readily applied in situations of armed conflict than economic, social and cultural rights. The latter category could be more difficult to enforce as they are seen as requiring some degree of political stability and economic growth to guarantee, which may not exist in a situation of non-international armed conflict. However, it still stands that a state in the midst of a non-international armed conflict...


\textsuperscript{29} International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 52, UN Doc. A/6316 (1966); 999 UNTS 171; 6 ILM 368 (1967), Art 1(2) ‘In no case may a people be deprived of its own means of subsistence’

\textsuperscript{30} ibid, Art 6(1) ‘Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life’

\textsuperscript{31} ibid, Art 17(1) ‘No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation’


\textsuperscript{33} International Covenant on Economic, Social and Cultural Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 49, UN Doc. A/6316 (1966); 993 UNTS 3; 6 ILM 368 (1967)
conflict is obliged to respect economic, social and cultural rights which have been ratified by that state, unless they have been legitimately limited under Article 4 of the ICESCR.

**Regional Developments**

The African Charter on Human and Peoples Rights, in Article 24 states that

‘All peoples shall have the right to a general satisfactory environment favourable to their development.’

The Government of Nigeria was found to have violated Article 24 in Ogoniland when they failed to fulfil their obligations under the Charter to the native Ogoni People. The Court held that the rights in Article 24 ‘recognise the importance of a clean and safe environment that is closely linked to economic and social rights in so far as the environment affects the quality of life and safety of the individual.’ More explicitly, where the right to a healthy environment applies it ‘imposes clear obligations upon a government. It requires the state to take [...] measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources.’ The African Court on Human and Peoples Rights has equally interpreted other human rights in a way that protects the environment. These cases ‘have generally invoked the right to health, protected by Article 16 of the African Charter, rather than the right to environment contained in the same document.’ Together, the right to the highest attainable standard of health and the right to a healthy environment ‘obligate governments to desist from directly threatening the health and environment of their citizens.’

---


37 *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, para 52

38 Shelton, ‘Human Rights and the Environment: Jurisprudence of Human Rights Bodies’

39 *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, para 52
The African Commission on Human and Peoples Rights, established by the Charter, has stated that ‘[t]he African Charter, unlike other human rights instruments, does not allow for states parties to derogate from their treaty obligations during emergency situations. Thus, even a civil war in Chad cannot be used as an excuse by the State violating or permitting violations of rights in the African Charter.’

Therefore, both Article 16 and Article 24 of the African Charter on Human and Peoples Rights and the associated jurisprudence conclusively applies throughout the conduct of hostilities in non-international armed conflict in Africa, in those states that have signed up to the Charter.

In the European context, the European Court of Human Rights has made significant progress in protecting the environment through human rights. Under the European Convention on Human Rights and Fundamental Freedoms (ECHR), Article 2 on the right to life; Article 6(1) on access to justice; Article 8 on the right to a private and family life; Article 10 on freedom of expression and the right of access to information; and Article 1 of the Additional Protocol to the Convention on the issue of property rights and the peaceful enjoyment of possessions have each

---


46 Vides Aizgardēkabs Klubs v Latvia No 57829/00 (27 May 2004); Guerra v. Italy ; Bladet Tromso and Stensaas v. Norway [1999] ECHR 29

47 Oneryildiz v Turkey; Pine Valley Developments Ltd v Ireland (1991) (1991) 14 EHRR 319
generated a body of case law from which a general human rights-based approach to environmental protection can be distilled. This approach may apply extraterritorially where signatory states are involved in non-international armed conflict elsewhere.48

In the American context, Article 11 of the 1988 San Salvador Protocol49 to the American Convention on Human Rights50 contains a right to a healthy environment. Specifically the Protocol states that

‘1. Everyone shall have the right to live in a healthy environment and to have access to basic public services.
2. The States Parties shall promote the protection, preservation, and improvement of the environment.’51

Both the Inter-American Court and Commission have yet to rule on alleged violations of Article 11 of the San Salvador Protocol. However there have been several cases considered by the Inter-American Court of Human Rights on violations of other human rights which have resulted in positive environmental benefits.52 These claims have linked environmental damage to the right to life and the rights of indigenous groups.53


50 American Convention on Human Rights, OAS Treaty Series No. 36; 1144 UNTS 123; 9 ILM 99 (1969)


53 Shelton, ‘Human Rights and the Environment: Jurisprudence of Human Rights Bodies’
b. Evaluating a Rights-Based Approach to Environmental Protection in Non-International Armed Conflict

There are benefits to prohibiting environmental damage through the human rights system. The state has a continued responsibility to uphold the human rights of individuals throughout non-international armed conflict, unless those rights have been specifically and lawfully derogated from or limited for the duration of the conflict. The extra-territorial application of human rights is also of benefit, particularly where states are engaged in non-international armed conflict outside of their own borders. In using a human rights-based approach to environmental protection, the established enforcement mechanisms associated with human rights are available as a means of adjudication.

However, prohibiting environmental damage in this way is not without its difficulties. Like most indirect environmental protection, anthropocentrism is a key feature of the prohibition and the environment is rarely, if ever, the central point of concern. Also, the responsibilities and obligations associated with international human rights law flow between a state and the individual. This creates problems for the enforcement of environmental protection through human rights when the violating party is a non-state actor.\(^54\)

It is submitted that environmental protection through human rights is an emerging aspect of the law in this field. Despite good progress at international and regional courts, the law on this issue is still quite vague and imprecise. It was submitted in Chapter 1\(^55\) that where laws are ambiguous, the rule of international law would permit them to be interpreted strictly to ensure that the individual rather than the state benefits from the vagaries in the law. However, in the case of environmental human rights, it should be recognised that the law is yet too vague to hold states accountable in any coherent manner and as such this body of law is not a good candidate to fill the proscriptive gap that exists at present on environmental protection in non-international armed conflict.

\(^{54}\) Richard Matthew, Oli Brown and David Jensen, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (United Nations Environment Programme 2009), 49

\(^{55}\) See Chapter 1 from 26-30
3. Protection through Peacetime Environmental Laws and Concepts

International environmental law can be an important part of the framework of protection for the environment in non-international armed conflict. Indeed ‘[p]revention of environmental damage is the underlying objective in all environmental law instruments and requires the avoidance, reduction or control of activities that are damaging to the environment.’56 Unlike the laws of armed conflict, international environmental law is informed by the ‘scientific reality of environmental damage’.57 Peacetime environmental protection systems are ‘more nuanced and tailored to their subject matter than the sporadic attempts to incorporate environmental concerns into the law of war.’58 In that regard, it has been argued that the ‘law of war should remain receptive to the hard-won lessons from three decades of peacetime environmental protection.’59

While peacetime environmental law does ‘not address the extreme circumstances encountered in full-scale armed conflict’,60 Meron observes that it may ‘contribute to de-legitimizing environmentally disastrous conduct by government and rebel forces as they battle for the hearts and minds of the people.’61 In support of this, UNEP maintains that ‘IEL may continue to apply with the same or greater force during internal conflicts than during international conflicts.’62 However, the usefulness of

56 Karen Hulme, War Torn Environment: Interpreting the Legal Threshold (Martinus Nijhoff Publishers 2004), 52
58 Jay E. Austin, ‘Lessons from Other Legal Regimes - Introduction’ in Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic and Scientific Perspectives (Cambridge University Press 2000), 183
59 ibid 189
60 Ibid, 183
61 Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996), 355
62 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 47

158
Laws Binding on States

peacetime environmental law is not universally endorsed. Al Duaij argues that, notwithstanding the reduction in peacetime environmental damage, international environmental law instruments "frequently fail to protect the environment during armed conflicts." 63

The extent to which international environmental law continues to apply throughout armed conflict, international or non-international, is not a settled matter. At the very least, international environmental law binds the state 'at least within the part of the state territory that is under its control.' 64 Despite perceived continuity of application in non-international armed conflict, the legal landscape is complicated by 'the fact that, in most cases, these wars are accompanied by a near total collapse of environmental management systems.' 65 The extent to which a state may be in a position to fulfil their obligations and responsibilities under international environmental law may very well depend on the intensity, duration and parties to the non-international armed conflict in question. The state may try to 'suspend [international environmental] treaties on grounds of national emergency, necessity or force majeure.' 66

The discussion below will focus on multi-lateral environmental agreements, customary international law and soft-law principles, and the concept of sustainable development, all of which have been raised by scholars as being important for the protection of the environment in armed conflict.

63 Nada Al-Duaij, ‘Environmental Law of Armed Conflict’ (Pace University 2002), 166
65 Okowa, ‘Natural Resources in Situations of Armed Conflict: Is There a Coherent Framework for Protection?’, 251
66 Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’, 355
a. Multi-lateral Environmental Agreements

The field of international environmental law is replete with numerous and detailed multi-lateral environmental agreements (MEAs). MEAs may be global or regional in jurisdiction. They focus on aspects of the environment that require specific international protection and forms of environmental harm that require regulation.

The main issue that is faced in determining whether or not MEAs protect the environment in non-international armed conflict is not a difficulty in identifying instruments that apply to the type of damage expected in non-international armed conflict, but rather knowing which peacetime protections continue to apply with effect in armed conflict. Some MEAs indicate that they remain operational throughout armed conflict, but the vast majority are silent on this issue. UNEP, in this regard, have discussed 18 MEAs that, to a greater or lesser degree, have the potential to protect the environment in armed conflict.

One example is the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols (Barcelona Convention) which, UNEP argues, could have applied during the 2006 conflict in Lebanon between Israel and Hezbollah, where the targeting of a petro-chemical facility in Jiyeh caused an oil spill in the adjacent Mediterranean coastal area. A further example is the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses which indicates that ‘[i]nternational watercourses and related installations, facilities and other works shall enjoy the protection accorded by the principles and rules of international law applicable in international and non-

---

67 There are over 900 environmental law treaties in force at present. Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000), 621 at footnote 5.

68 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 35

69 ibid 35-40

70 Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 16 February 1976, Barcelona, 1102 UNTS 27

71 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 36

international armed conflict and shall not be used in violation of those principles and rules.\textsuperscript{73}

On a regional basis, UNEP identify the 2003 revised version of the African Convention on the Conservation of Nature and Natural Resources.\textsuperscript{74} Not only does Article XV\textsuperscript{75} of the Convention prohibit state parties to a conflict from damaging the environment, Articles XV(1)(a) and XV(1)(d) seem to require the state to not only protect the environment from harm but to repair any harm that does occur, whether or not the state caused the damage during the armed conflict.

b. Customary Environmental Principles and Soft Law Instruments

In customary international environmental law there seems to be consensus on state responsibility for transboundary marine pollution where it affects a neutral state.\textsuperscript{76} This consensus, built upon the principle in the Trail Smelter Arbitration\textsuperscript{77} - \textit{sic utere tuo ut alienum non laedas}, which loosely translates as do not use your own property in such a way as to harm the property of others – would hold the state in which the pollution originated liable for transboundary environmental harm caused by that pollution. This may have implications for environmental protection in non-international armed conflicts that are fought across state borders. The Trail Smelter principle was

\begin{itemize}
  \item \textsuperscript{73}ibid, Article 29
  \item \textsuperscript{74}African Convention on the Conservation of Nature and Natural Resources (Revised Version, 2003) 1001 UNTS 3
  \item \textsuperscript{75}ibid Art XV: ‘The Parties shall:
    \begin{itemize}
      \item [a)] take every practical measure, during periods of armed conflict, to protect the environment against harm;
      \item [b)] refrain from employing or threatening to employ methods or means of combat which are intended or may be expected to cause widespread, long-term, or severe harm to the environment and ensure that such means and methods of warfare are not developed, produced, tested or transferred;
      \item [c)] refrain from using the destruction or modification of the environment as a means of combat or reprisal;
      \item [d)] undertake to restore and rehabilitate areas damaged in the course of armed conflicts.’
    \end{itemize}
  \item \textsuperscript{76}United Nations Environment Programme, \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law}, 40
  \item \textsuperscript{77}United States v Canada’ Trail Smelter Case, 3 RIAA 1905 (1938/1941) . See also Arthur K. Kuhn, ‘The Trail Smelter Arbitration - United States and Canada’ (1938) 32 American Journal of International Law 785
\end{itemize}
reaffirmed and further bolstered in the Corfu Channel case\textsuperscript{78}, the first case to be brought before the ICJ in 1947. The ICRC Guidelines for Military Manuals and Instruction on the Protection of the Environment in Armed Conflict\textsuperscript{79} adhere to the precedent set in these cases by stating that ‘obligations relating to the protection of the environment towards States not party to an armed conflict are not affected by the existence of the armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict.’\textsuperscript{80} In short, the environment in neutral states should be protected from transboundary pollution arising from non-international armed conflict.\textsuperscript{81}

The 1982 World Charter for Nature\textsuperscript{82}, contained in UN General Assembly Resolution 37/7, contains several articles that are pertinent to customary international environmental law and its potential to protect the environment in non-international armed conflict. Though non-binding on states, the World Charter for Nature ‘bears weight as a normative expression.’\textsuperscript{83} Firstly, Article 5 states that ‘[n]ature shall be secured against degradation caused by warfare or other hostile activities’.\textsuperscript{84} Article 20 states quite simply that ‘[m]ilitary activities damaging to nature shall be avoided.’\textsuperscript{85} Article 11 states that ‘[a]ctivities which might have an impact on nature shall be controlled, and the best available technologies that minimize significant risks to nature or other adverse effects shall be used’,\textsuperscript{86} and lists particular elements of serious environmental damage which ought to be avoided.

---

\textsuperscript{78} Corfu Channel Case (United Kingdom v. Albania) Assessment of Compensation, 15 XII 49, International Court of Justice (ICJ), 15 December 1949

\textsuperscript{79} Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict, UN Doc. A/49/323 (1994), Annex 1

\textsuperscript{80} ibid para 5

\textsuperscript{81} United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 40

\textsuperscript{82} World Charter for Nature, UN Doc A/RES/37/7, 2 October 1982

\textsuperscript{83} United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 42

\textsuperscript{84} World Charter for Nature, UN Doc A/RES/37/7, 2 October 1982, Art 1(5)

\textsuperscript{85} ibid Art 20

\textsuperscript{86} ibid Art 11
Other examples of customary environmental principles that may be relevant to environmental protection in non-international armed conflict are the precautionary principle and the polluter pays principle. The precautionary principle broadly resembles the humanitarian law rule to take precautions in attack, discussed previously in Chapter 4\(^\text{87}\), and it calls for caution rather than cure where the environmental impacts of an activity are uncertain or unknown.\(^\text{88}\) The precautionary principle in non-international armed conflict may play a role in light of ‘accelerated technological developments...which create unprecedented potential harmful effects on...the environment.’\(^\text{89}\) However, the precautionary principle is usually described as being an emergent principle as opposed to a binding norm in international law.\(^\text{90}\) As such, the extent to which it could have an impact on the conduct of hostilities in non-international armed conflict is unclear: at the very least it bolsters the environmental dimension of the law of armed conflict requirement to take precautions in attack.

The polluter pays principle maintains that those who create or are most responsible for pollution or environmental harm should bear the cost of cleaning up or repairing the damage. The polluter pays principle appears to have been given effect through the United Nations Compensation Commission, discussed below, which held Iraq liable to pay compensation for environmental damage caused during the Persian Gulf War in the early 1990s.

c. Sustainable Development

Sustainable development does not directly prohibit the destruction of the environment in non-international armed conflict. It is a principle concerning the environment in the context of development.\(^\text{91}\) The term *sustainable development* entered the vocabulary of international relations in 1987 with the publication of Our

\(^{87}\) See Chapter 4 from 106-111  
\(^{89}\) ibid 11  
\(^{90}\) ibid  
Common Future\textsuperscript{92} by the World Commission on the Environment and Development. This report, more commonly referred to as the Brundtland Report, conceptualised sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.\textsuperscript{93} Sustainable development became the foundational concept for the 1992 UN Conference on the Environment and Development held in Rio de Janeiro.

Sustainable development is not a concept that is legally binding on States. At its very core, sustainable development aims to promote a certain type of global growth by balancing the three mutually supportive pillars of development: environment, economy and society. Sustainable development may prevent environmentally-motivated armed conflicts from occurring in the first place. For example ‘the Rwandan conflict was partly precipitated by demand for arable land. As a result, equipping nations to engage in proper environmental management and sustainable development could have the collateral benefit of mitigating military aggression in the first place.’\textsuperscript{94} However, it is argued here that sustainable development cannot prohibit environmental damage during the conduct of hostilities.

\textit{Sustainable Development and Armed Conflict}

Links have been made between environmental damage, development and armed conflict.\textsuperscript{95} The 1987 Brundtland Report – Our Common Future – acknowledged the implications and impact of armed conflict on the successful operation of sustainable development policies.\textsuperscript{96} It made the argument that as environmental stresses are both the cause and consequence of armed conflict, sustainable development may have the effect of decreasing that stress before conflict begins or after the conflict has ceased. It also implicates armed conflict as a cause of unsustainable development.

\textsuperscript{92} United Nations World Commission on Environment and Development ‘Our Common Future’, UN Doc A/42/427, 4 August 1987

\textsuperscript{93} ibid Chapter 2

\textsuperscript{94} Mark A. Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’ in Jay E. Austin and Carl E. Bruch (eds), \textit{The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives} (Cambridge University Press 2000), 644

\textsuperscript{95} Council of Europe, Committee on the Environment, Agriculture and Local and Regional Affairs, Report on Armed Conflicts and the Environment, Doc 12774, 17 October 2011

\textsuperscript{96} United Nations World Commission on Environment and Development ‘Our Common Future’, UN Doc A/42/427, 4 August 1987, Chapter 11
Principle 24 of the 1992 Rio Declaration on Environment and Development states that ‘warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.’\textsuperscript{97} It is clear that the Rio Declaration does not envisage that sustainable development will play a limiting role on the conduct of hostilities. Rather it indicates that other legally binding mechanisms ought to protect the environment in this kind of situation for the sake of sustainable development.\textsuperscript{98} It is evident that sustainable development was not originally seen to be a solution to the problem of environmental protection in armed conflict, even though the Rio Declaration itself was drawn up and adopted at a time when much consideration was being given to the inadequacy of the environmental laws of armed conflict.\textsuperscript{99}

Sustainable development makes the most sense, and would have the greatest effect in creating a robust environment in advance of armed hostilities. The sustainability equation, at least in an environmental context, is unbalanced when natural resources are used up faster than it is possible to replenish them. As some conflicts have environmental issues at their core, strongly implementing sustainable development in times of peace may prevent the outbreak of conflict in the first place. In fact, sustainable development is especially important in these contexts as the laws of armed conflict themselves are not designed to cover the use or abuse of natural resources outside of the conduct of hostilities – the prohibition on pillage being one of the only potential exceptions to this generalisation.\textsuperscript{100}

\textsuperscript{97} Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992), Art 24


\textsuperscript{99} The oil well fires that occurred at the end of the Persian Gulf War in 1990-91 happened the year before the UN Conference on Environment and Development.

In the post-conflict phase, the prioritisation of environmental considerations could be an effective building block for sustainable peace.\textsuperscript{101} Indeed, ‘[a]rmed conflict cannot always be prevented, but unnecessary destruction of the environment can pose a serious problem not only for the international community, but also for the protagonists who will find that future peace is more fragile where the physical environment that supports stable communities suffers avoidable harm.’\textsuperscript{102}

In conclusion, sustainable development does not and cannot prohibit environmental damage in non-international armed conflict. It may instead be a more useful concept for consideration in the pre- or post-conflict phase.

4. **International Compensation Mechanisms**

Though not strictly part of the *corpus* of international law proper, a novel modality for holding states responsible for environmental damage caused in non-international armed conflict would be through international civil liability and compensation schemes funded by states.\textsuperscript{103} The premise behind this modality is that environmental damage would be cheaper to avoid than to create.\textsuperscript{104} Compensation schemes would

\textsuperscript{101} See *forthcoming* Carl E. Bruch, Carroll Muffet and Sandra S. Nichols (eds), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (Routledge 2012)


operate like any *ex post facto* system of deterrence: by setting a precedent to make it financially unappealing to cause extensive environmental damage during the conduct of hostilities. States may see that the cost of conflict is rising considerably\(^\text{105}\) and may choose to modify their methods and means of warfare to ensure that as little unnecessary or collateral damage is caused to the environment. Compensation schemes could also facilitate the restoration of the environment to its pre-conflict condition, preventing further environmental damage from occurring in the long-term. However, compensation mechanisms need state consent to be established because without this there is little chance of recovery.\(^\text{106}\) Without consent, compensation schemes may appear to be punitive post-conflict reparation schemes that resemble, intentionally or otherwise, victor’s justice.\(^\text{107}\)

There may be some conceptual difficulties associated with the use of international mechanisms, such as the United Nations Compensation Commission discussed below, for non-international armed conflict, particularly where the conflict takes place entirely within the borders of a state and with no resultant transboundary environmental damage. Requiring a state to fund an international compensation scheme to repair wartime environmental damage that occurred within that state might be a challenge.

a. United Nations Compensation Commission

The United Nations Compensation Commission\(^\text{108}\) (UNCC) is a subsidiary organ of the UN Security Council that was created in 1991 to process claims and pay compensation for damages and losses resulting from Iraq’s unlawful invasion and occupation of Kuwait. The 1990-91 Gulf War is thought to have caused over $350 billion worth of damage to the environment, property and human life.\(^\text{109}\) The UNCC is not a permanent body but rather a ‘single-mission organisation of limited

---

\(^\text{105}\) Libera, ‘Divide, Conquer and Pay: Civil Compensation for Wartime Damages’, 309


\(^\text{109}\) Klee, ‘Morning Panel: Response, Assessment and Remediation of Environmental Damages - Symposium: International Responses to the Environmental Impacts of War’, 600
lifetime.'\textsuperscript{110} It was established by Security Council Resolution 687\textsuperscript{111} on 3\textsuperscript{rd} April 1991 and captured Iraq’s liability ‘under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq’s unlawful invasion and occupation of Kuwait’.\textsuperscript{112} Iraq unilaterally accepted liability under Resolution 687,\textsuperscript{113} bolstering the argument that state compliance with this model of compensation scheme is necessary.

The United Nations Compensation Commission is not an adjudicative or adversarial body as ‘Iraq’s liability is not an issue’.\textsuperscript{114} A report issued by the Secretary-General tidily surmised that ‘the commission is not a court or an arbitral tribunal before which parties appear; it is a political organ that performs an essentially fact-finding function of examining claims, verifying their validity, evaluating losses, assessing payments and resolving disputed claims.’\textsuperscript{115}

Resolution 687 made provision for the establishment of a fund from which the compensation was to be drawn.\textsuperscript{116} This fund was generated from the sale of Iraqi oil.\textsuperscript{117} However, this did not fully work and alternative means of funding to fulfill the UNCC’s mandate had to be sought. In replicating this model for other conflicts, it is important to note that the ‘problem of finding solvent defendants is particularly acute in the aftermath of war, given the large scale of wartime damages, the ravaged state of most post-war economies, and the enormous number of competing claims.’\textsuperscript{118}

\begin{thebibliography}{99}
\bibitem{111}United Nations Security Council Resolution 687, S/RES/687, 8 April 1991
\bibitem{112}ibid
\bibitem{113}Low and Hodgkinson, ‘Compensation for Wartime Environmental Damage: Challenges to International Law After the Gulf War’, 412
\bibitem{114}Klee, ‘Morning Panel: Response, Assessment and Remediation of Environmental Damages - Symposium: International Responses to the Environmental Impacts of War’, 599
\bibitem{116}ibid
\bibitem{117}Libera, ‘Divide, Conquer and Pay: Civil Compensation for Wartime Damages’, 297
\bibitem{118}Austin, ‘Lessons from Other Legal Regimes: Introduction’, 185
\end{thebibliography}
Environmental Claims at the UNCC

Environmental destruction, which had previously been considered an incidental and inevitable, if unfortunate, consequence of warfare was recognised as being a ‘fundamental part of military strategy’\(^1\) the consequences of which were eligible for compensation under the UNCC. The United Nations Compensation Commission received over 2.6 million claims requesting compensation for losses totaling approximately $350 billion.\(^2\) These claims have been divided into six formal categories of damage, arranged apparently in order of priority and importance. The most complex claims include those in category F4\(^3\), which were made by governments for the remediation of environmental damage caused during the conflict. Within the broad category of F4 claims, five distinct sub-categories of environmental damage were identified. Included in the list of possible F4 claims were losses and expenses arising from:

- (a) Abatement and prevention of environmental damage, including expenses directly relating to fighting oil fires and stemming the flow of oil in coastal and international waters;
- (b) Reasonable measures already taken to clean and restore the environment or future measures which can be documented as reasonably necessary to clean and restore the environment;
- (c) Reasonable monitoring and assessment of the environmental damage for the purposes of evaluating and abating the harm and restoring the environment;
- (d) Reasonable monitoring of public health and performing medical screenings for the purposes of investigation and combating increased health risks as a result of the environmental damage; and
- (e) Depletion of or damage to natural resources.\(^4\)

\(^1\) Low and Hodgkinson, ‘Compensation for Wartime Environmental Damage: Challenges to International Law After the Gulf War’, 406

\(^2\) Klee, ‘Morning Panel: Response, Assessment and Remediation of Environmental Damages - Symposium: International Responses to the Environmental Impacts of War’, 600

\(^3\) UNCC, ‘Category "F" Claims’ <http://www.uncc.ch/claims/f_claims.htm> accessed 12 January 2013

In 1996, UNEP’s specially convened Working Group on liability and compensation for environmental damage arising from military activities issued a report commenting on the different aspects of the environmental claims being brought before the UNCC. It addressed the five categories of damage in detail. The view of the Working Group was that ‘compensation must make the environment “whole” through restoration, replacement of resources that cannot be fully restored, or monetary damages if neither restoration nor replacement can be achieved.’ The Security Council maintained that the compensation should ‘address damages so thoroughly that an observer could not discern that the Iraqi invasion of Kuwait [or indeed any conflict] ever occurred.’ As of 25 October 2012, all F-category environmental claims have been awarded and paid. However, the amount of compensation awarded to claimants for F-category claims was not for the full amount: mostly claimants received between 1% and 7% of the overall amount being claimed.

b. Critical Factors for the Success of Compensation Mechanisms

There are problems inherent in determining responsibility for environmental damage. Establishing a causal link between one party and the damage and putting an economic value on the environment that has been damaged are clear challenges. Environmental claims are complicated, time consuming and require detailed and careful consideration.

The United Nations Compensation Commission was structured in such a way as to give priority consideration to pressing humanitarian considerations. The more complex environmental claims were second from the bottom in terms of importance and had only begun to be considered roughly ten years after the

---

125 ibid
126 UNCC, ‘Status of Processing and Payment of Claims’
127 Juni, ‘The United Nations Compensation Commission as a Model for an International Environmental Court’ 216
conflict had ended. Although environmental claims were of a more complex nature than the humanitarian claims, assessing evidence to support environmental claims almost ten years after the damage had actually occurred, obviously added additional complexity to the process.

A knock-on effect of the lack of priority given to environmental claims in the United Nations Compensation Commission was the lack of funds available to satisfy awards made. The issue of funding is indeed the most crucial aspect in determining whether a compensation scheme can be set up to act as a deterrent. In this regard, two contrasting examples are illustrative. In the context of the conflict in the DRC,

‘the report of the UN Panel of Experts [...] raised the possibility of developing an international commission to award monetary compensation for illegal logging and mining (Report of the Panel of Experts 2001). The panel recommended that individuals should receive compensation for damage or looting to their livestock, crops, and other property, and that the “governments of Burundi, Rwanda and Uganda and their allies should pay compensation to the companies whose properties and stocks of coltan, cassiterite, gold, timber and other materials were confiscated or taken...”. The panel also suggested that the responsible governments should be held liable for damage to wildlife in four national parks.’

However, ‘the likely defendants—the governments of Burundi, Rwanda, and Uganda, as well as the various rebel factions—are not likely to have substantial assets with which to pay a judgment against them.’

In contrast, when funding is available to some degree, environmental remediation can take place. In this regard,

128 Klee, ‘Morning Panel: Response, Assessment and Remediation of Environmental Damages - Symposium: International Responses to the Environmental Impacts of War’, 600
129 ibid
132 ibid
‘The destruction of natural resources in Colombia and Venezuela provides another model for civil compensation...guerrilla attacks on Colombian pipelines have spilled more than two million barrels of crude oil and contaminated Colombian waterways with aquatic impacts that extended to Venezuela. Rather than seeking compensation for damage to all environmental values, Venezuela reached an agreement with Colombia whereby ECOPETROL (Empresa Colombiana de Petróleos), Colombia’s national petroleum company, compensates the Venezuelan petroleum company PDV (Petróleos de Venezuela) for the actual costs of cleaning up downstream contamination in Venezuela. While this agreement covers remediation costs, it does not include compensation for more extensive environmental or natural resources damages. This less formal model, based on negotiation, may represent a more practical approach, particularly in the typical situation of an ongoing internal armed conflict where there is no “deep-pocket” state defendant to hold liable.’

The United Nations Compensation Commission is a very workable model upon which ad hoc compensation schemes may be modelled in future. If predicable economic consequences accompany environmental damage in armed conflict, the deterrent effect of this form of state responsibility would be much stronger and states would be somewhat incentivised to cause as little environmental damage as possible in combat.

133 ibid, 181-182, footnotes omitted

5. Conclusion

The prevention of environmental damage in non-international armed conflict through the laws of armed conflict can be somewhat supplemented and complimented by relevant provisions of other branches of international law and approaches to state responsibility.

International human rights law and international humanitarian law are continuously converging. International human rights law is often referenced to fill the gaps in the laws of armed conflict. This is particularly important in Common Article 3 armed conflicts to which very little treaty-based laws of armed conflict apply. Despite observations from scholars that human rights law can fill the gaps in environmental protection in non-international armed conflict, it is submitted that this is not a strong way to prohibit environmental damage during the conduct of hostilities. The protection of the environment through and in human rights law is still in its infancy and as such is not certain or specific enough at present to make a meaningful impact on the conduct of state forces engaged in non-international armed conflict.

Peacetime international environmental laws have a role to play in protecting the environment in non-international armed conflict. However, very few treaties explicitly provide for continued application during the conduct of hostilities. As Meron observes, ‘to be effective, protection of the environment must be continuous and ongoing. It cannot be contingent upon whether there is a state of peace, international war or civil war.’ The concept of sustainable development is an important one in the discourse on environmental protection, but it has a limited role to play in protecting the environment during the conduct of hostilities in non-international armed conflict.

Deterring states from causing, or allowing, environmental damage to occur during non-international armed conflict by holding them financially responsible for the harm is another possible way to prevent environmental damage in non-international armed conflict. In this regard, the United Nations Compensation Commission provides good lessons in the administration of international civil liability for

135 Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in 353

173
environmental damage caused in armed conflict. As far as non-international armed conflicts are concerned, it is not clear how well suited an international compensation mechanism would be to administer compensation for environmental damage caused by a state within that state’s own territorial boundaries. Equally it is unclear how such a mechanism would hold states liable for damage caused by non-state actors during the conflict. There are many issues to be resolved in this regard, but it is possible that compensation schemes may be an alternative means of protecting the environment in non-international armed conflict, outside of strict legal prohibitions.

In conclusion, three alternative means by which environmental damage could be prohibited in non-international armed conflict were discussed. All have serious limitations and only apply to one party to a non-international armed conflict: the state. Many non-international armed conflicts are fought between two or more non-state actors and as such, the laws discussed above would have little effect in prohibiting environmental damage in such circumstances.
Chapter 7
Means of Preventing Both Non-State and State Actors from Causing Environmental Damage in Non-International Armed Conflict

1. Introduction

This chapter is focused on addressing the imbalance in the extent to which international law binds both state and non-state armed groups. Holding non-state groups accountable for conduct in armed conflict is a constant challenge. Armed non-state groups include ‘freedom fighters, guerrillas, separatists, secessionists, terrorists and rebels’ and any other group that is characterised by their independence from state control. Non-state actor engagement in non-international armed conflict is fuelled by multiple factors including, but not limited to, the exercise of power within a state and the control of territory. In this context, ‘bind[ing] insurgents to emerging international rules that protect the environment...represents a major problem for the international community.’ The state is not responsible for all environmental damage caused in non-international armed conflict and so it is important to identify means that compliment the laws of armed conflict that prevent non-state groups from causing excessive environmental damage in non-international armed conflict. In this regard, individual criminal responsibility and the concept of safe environmental spaces apply equally to state and non-state groups.

1 Liesbeth Zegveld, Accountability of Armed Opposition Groups in International Law (Cambridge University Press 2002), 700 at footnote 28
3 Theodor Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996), 354
4 ibid
This chapter will firstly discuss individual criminal responsibility for environmental damage at the International Criminal Court. As the IMT in Nuremberg observed in 1947, ‘[c]rimes against international law are committed by men, not abstract entities, and only by punishing individuals who commit such crimes can the provisions of international law be enforced.’ This will involve an examination of the crimes of genocide, war crimes, crimes against humanity and aggression for the effect that each may have on the prohibition of environmental damage in non-international armed conflict. As international criminal law may be frequently amended in light of the ICC Statute’s requirement for periodic review and revision, the discussion will conclude with an appraisal of calls for the establishment of an appropriate environmental war crime for non-international armed conflict.

This chapter will also discuss the use of ‘safe areas’ as special areas of environmental protection in non-international armed conflict. This suggestion is being more frequently highlighted as a potentially positive means of protecting the environment from harm in non-international armed conflict. However, it is submitted that there are difficulties with the approach of environmental safe zones. To be successful in protecting the environment, safe environmental zones require the co-operation and buy-in of non-state parties to the conflict.

2. Individual Criminal Responsibility for Environmental Damage at the ICC

Since the advent of the UN ad hoc international criminal tribunals, individual criminal responsibility has been the default mechanism for holding non-state actors individually responsible for unacceptable and unlawful conduct in armed conflict. There are considerable advantages in ‘[a]pplying international law directly to individuals [as it] often increases the efficacy and deterrence effect of a given provision.’ Not every principle of the laws of armed conflict – treaty-based or customary – has been criminalised however. There is only one enviro-centric crime in the entire statute of the International Criminal Court – Article 8(2)(b)(iv) – which

---

5 France et. al. v. Goering et. al. 22 IMT 411, 466 (Int'l Mil Trib 1946)

6 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law (UNEP Post-Conflict and Disaster Management Branch 2009), 47
criminalises long-term, widespread and severe environmental damage in international armed conflict. There is no comparable war crime applying to non-international armed conflict within the statute.\(^7\)

Prior to the adoption of the Statute of the International Criminal Court in 1998, non-state ‘belligerents appear[ed] unfamiliar with or not interested in international humanitarian law, and less susceptible to international condemnation.’\(^8\) Mindful of the fact that ‘no tribunal since Nuremberg has prosecuted individuals for war-related environmental damage,’\(^9\) this chapter argues for the prevention of environmental damage through the deterrent effect of penal law and penal sanctions. The effects of ‘criminal punishments of a magnitude sufficient to deter a thinking individual from committing a crime’\(^10\) are simultaneously the strength and weakness of this approach since the deterrent effect of criminal law is by no means a certainty: rather, it is often challenged.\(^11\) Indeed it could be argued that the criminal law is only taken ‘seriously when it represents a realistic threat.’\(^12\) In addition, the appropriateness of criminal law to protect the environment is not a settled issue.\(^13\)

---

7 Carl E. Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’ (2000-2001) 25 Vermont Law Review 695, 704-705 - ‘The drafters of the Statute also considered, but rejected, the possibility of defining war crimes for environmental wrongs committed during internal armed conflict.’


11 ibid


The criminalisation of environmental damage occurs when the environmental interests at stake are highly valued\(^\text{14}\) by society and prioritised as being fundamental to social order.\(^\text{15}\) Environmental damage in non-international armed conflict may rise to the threshold of gravity necessary to label it as an international crime,\(^\text{16}\) particularly if the effects are transboundary in nature.\(^\text{17}\) By 1998, when the Rome Statute was being negotiated, a great deal of thought and scholarship had been devoted to highlighting the environmental effects of international armed conflict. The environmental provisions of Additional Protocol I had been extensively discussed, particularly in light of the oil fires which were a distinct feature of the Persian Gulf War.\(^\text{18}\) As discussed in Chapter 1, this body of scholarship almost universally concluded that the provisions in Additional Protocol I for the protection of the environment were not fit for purpose. Nonetheless, the drafters of the Rome Statute included environmental war crimes in Article 8 that mirrored the provisions in Additional Protocol I. This was a disappointing ‘restatement of existing law’\(^\text{19}\) with terms that are considered too imprecise to give rise to criminal liability in reality.\(^\text{20}\) Though it may be a little ‘unfair to describe the listing of environmental crimes as an afterthought...it is clear they were not of primary concern.’\(^\text{21}\)

In spite of this, it is submitted that the Rome Statue still has the potential to indirectly protect the environment though effective criminal deterrence because

---


\(^\text{15}\) ibid

\(^\text{16}\) Steven Freeland, ‘Crimes Against the Environment - A Role for the International Criminal Court?’ (2005) 5 Revue Juridique Polynésienne 335, 339

\(^\text{17}\) Bruch, ‘All's Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 748 - ‘As a practical matter, in order to hold belligerents criminally liable for environmental damage in an internal conflict, it may be necessary for the harm to have a transboundary effect or grave impacts on people.’


\(^\text{19}\) Joe Sills and others, *Environmental Crimes in Military Actions and the International Criminal Court (ICC) - United Nations Perspectives* (U.S. Army Environmental Policy Institute 2001), 4


\(^\text{21}\) Sills and others, *Environmental Crimes in Military Actions and the International Criminal Court (ICC) - United Nations Perspectives*, 4
environmental harm could be seen to be ‘a means of committing international crimes already on the books.’

The absence of a distinct war crime for environmental damage in non-international armed conflict does not preclude the harm from being considered a violation of other war crimes provisions, or genocide, crimes against humanity or aggression. Deliberately inflicted environmental damage in non-international armed conflict clearly constitutes a threat to the ‘wellbeing of the world’, as envisaged by the Rome Statute’s preamble. Freeland has thus observed that ‘[t]he commission of acts intended to render very significant damage to the environment and to seriously affect the livelihood and well-being of a group of people, from a moral viewpoint at least, falls within the nature of actions that the ICC has been created to deal with.’

From the perspective of the rule of law, the pursuit of prosecutions for environmental harm indirectly through non-environmental crimes in the Statute of the ICC may violate the principle of *nullum crimen nulla poena sine lege*. Unless the environmental dimension to the crime is foreseeable, then indirectly penalising environmental damage in non-international armed conflict could be argued to amount to *ex-post facto* criminalisation of conduct. Belligerents need to know that their conduct could amount to a violation of international criminal law in advance,

---


23 Weinstein, ‘Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?’, 698 ‘Given the history of environmental destruction in international conflict and the improbability of prosecution of environmental war crimes as stand-alone violations, the international community should focus on prosecuting environmental destruction when conducted to achieve another atrocity, such as genocide or crimes against humanity.’ See also Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 727 - ‘Norms against genocide and crimes against humanity likewise present possible avenues for punishing environmental crimes during internal conflict.’

24 Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Preamble


27 Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 748
and stretching interpretations of international criminal law too far to facilitate prosecution for environment damage is of little use in practice. In this regard, Bruch observes that ‘under existing international law, it is likely to be a Herculean task to prosecute individuals for environmental crimes arising from internal armed conflicts.’

A further point of concern is that by prosecuting environmental crimes indirectly, ‘the [environmental] destruction becomes a crime because of its humanitarian consequences’. The environmental damage would merely amount to the tool by which an atrocity is perpetrated and would not itself be the trigger for liability. As such, the International Criminal Court would not be able to address ‘the unique nature of [environmental] crimes’ if the harm is filtered through the lens of genocide, crimes against humanity, aggression or non-environmental war crimes. This approach ‘may minimize our ability to appreciate broader attacks on the environment that do not immediately affect human beings but are nonetheless inherently dangerous to the environment.’ In treating environmental damage as a tool by which human harm is caused there is always the risk that the environment gets ‘lost in the shuffle due to the ICC’s finite resources and the gravity of the other crimes brought to its attention.’ For instance, though the environmental damage taking place in the contemporary conflict in the Democratic Republic of the Congo is very serious, it may seem like ‘an ancillary crime, perhaps a minor, "throw-away" charge when compared to the laundry list of human brutality’ taking place throughout the conduct of hostilities there.

28 ibid 720
29 Weinstein, ‘Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities’, 720
30 Mark A. Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’ in Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000), 643
32 Mark A. Drumbl, Accountability for Property Crimes and Environmental War Crimes: Prosecution, Litigation and Development (International Centre for Transitional Justice 2009), 10
In addition, there is concern that punishment for environmentally-driven crimes at the International Criminal Court ‘will not address the unique nature of these crimes’\(^\text{34}\), in particular the need for some degree of restoration or clean-up as soon as is practicable after the conflict ends.\(^\text{35}\) The ICC does not have much scope ‘to compel restitution, remediation, civil liability, or otherwise to clean up the environmental harm.’\(^\text{36}\) Drumbl poses a valid question:

‘Is sequestered imprisonment of guilty individuals an effective sanction for environmental war crimes? Will the distant threat thereof deter future commission of the offense in the “fog of war”? Will it help remediate the harm? Will incarceration provide justice for victims in post-conflict zones?’\(^\text{37}\)

In this regard, the stigmatisation that accompanies international crimes has value, but only if prosecutions are actually brought against individual state and non-state actors and if solid and fair convictions occur on a consistent basis.\(^\text{38}\) Despite the stigma attached to international criminal convictions, ‘the reach of the criminal law, no matter how far it extends, can only accomplish so much.’\(^\text{39}\)

a. Genocide

The prohibition against genocide in the Statute of the ICC is receiving growing support as a means of indirectly prohibiting environmental harm in non-international

\(^{34}\) Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’, 643

\(^{35}\) Drumbl, Accountability for Property Crimes and Environmental War Crimes: Prosecution, Litigation and Development, 5 - ‘Conflicts and atrocities inflict wanton damage on environmental supply networks that, unless remediated in the wake of atrocity and as part of postconflict transition, simply may reactivate competition over fragile resources that, in turn, may catalyze hatreds that then re-explode.’

\(^{36}\) Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’, 643

\(^{37}\) Drumbl, Accountability for Property Crimes and Environmental War Crimes: Prosecution, Litigation and Development, 10

\(^{38}\) ibid 11 - ‘In the end, stigmatizing environmental war crimes through the ICC has important expressive value, but this value may quickly dissipate if there are no prosecutions or if successful prosecutions fail to improve the lot of individuals living in the environmentally desecrated areas.’

\(^{39}\) ibid
armed conflict. There is no requirement to link genocide to an armed conflict, though often genocide does occur within the context of armed conflict, particularly non-international armed conflict. A widely shared belief is that ‘significant environmental destruction during the course of armed conflict should attract criminal responsibility, particularly where the damage threatens the lives of specifically targeted populations.’

The definition of genocide in the 1948 Genocide Convention has been transcribed verbatim into the Statute of the International Criminal Court. Of particular interest is Article 6(c) of the ICC Statute, which concerns the deliberate infliction of ‘conditions of life calculated to bring about [a group’s] physical destruction in whole or in part’. It has been argued that Article 6(c) ‘could provide the means to punish "environmental cleansing"...defined as the "deliberate manipulation and misuse of the environment so as to subordinate groups based on characteristics such as race, ethnicity, nationality, religion and so forth.”

Of course, for conduct to be recognised as genocide, rather than as a crime against humanity, it must be done with the ‘intent to destroy, in whole or in part, a national, ethnical, racial or religious group.’ No stretch of the imagination is required to foresee how environmental conditions, or the calculated deterioration thereof, could

---


41 Freeland, ‘Crimes Against the Environment - A Role for the International Criminal Court?’, 339

42 Convention on the Prevention and Punishment of the Crime of Genocide (1951) 78 UNTS 277, Article 2

43 Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Article 6

44 ibid Article 6(c)


46 Convention on the Prevention and Punishment of the Crime of Genocide (1951) 78 UNTS 277, Article 6
be used to destroy a specific population and therefore amount to an act of genocide. However it has been argued that ‘[h]aving to wait for environmental degradation to approach the level of genocide before prosecuting the crime raises the threshold far too high and limits criminal law’s effectiveness to deter such crimes.’

In 1985, the Whitaker Report highlighted the suggestion that was made by some members of the Sub-Commission on Prevention of Discrimination and Protection of Minorities that the scope of the Genocide Convention be expanded to explicitly include environmental destruction. The proposal sought to include ‘ecocide’ in the Convention as an act of genocide. Ecocide within the context of the crime of genocide was envisaged to amount to ‘adverse alterations, often irreparable, to the environment - for example through nuclear explosions, chemical weapons, serious pollution and acid rain, or destruction of the rain forest - which threaten the existence of entire populations, whether deliberately or with criminal negligence.’

The rationale behind this proposition was that some members of the Sub-Commission felt that ‘indigenous groups are too often the silent victims of such actions’ and that the ‘physical destruction of indigenous communities amounted to genocide and required ‘special and urgent action.’

An illustrative example that supports this agenda for expansion is the situation of the Aché Indians in Paraguay during the 1970s. As a result of State policies to encourage mining and cattle-raising in forests occupied by this indigenous group, the Aché Indians were brutally targeted and their forested area of habitation was destroyed with the aim of removing them from the land. While not rising to the level of an


49 ibid para 33

50 ibid

51 ibid

52 ibid

armed conflict, the violence was carried out to such an extent that some commentators believe this group no longer exist. A further example is the case of the ‘Marsh Arabs’ - the native Shi’ite Muslims living in the Mesopotamian Marshes in Southern Iraq, reputed to be the original location of the Garden of Eden. Following their participation in an unsuccessful attempt to topple the Hussein government in 1991, the Marsh Arabs were met with sustained attempts by the State to destroy the group. This was done by direct killings, but also by targeting and destroying the very environment that the group had traditionally survived upon for thousands of years. The Iraqi Government built dams and canals on the Tigris and Euphrates rivers which drained the Mesopotamian Marshes to such an extent that only seven percent of those wetlands remain today. The destruction of this ecosystem has resulted in the deaths of large numbers of Marsh Arabs and the dispersal of many more. However, one crucial element in the proof of genocide that is missing in both examples is genocidal intent.

Genocidal intent is a constant stumbling block in the attempt to link genocide to environmental degradation, and the proposal for ‘ecocide’ in the Whitaker Report appears to suggest that a lower ‘criminal negligence’ standard would be more appropriate where environmental damage was concerned. Genocidal intent has remained a difficult mens rea standard to prove. In Sudan there has been notable evidence of a scorched earth policy employed by Government forces.


57 Schwabach, ‘Ecocide and Genocide in Iraq: International Law, the Marsh Arabs, and Environmental Damage in Non-International Conflicts’, 4

President, Omar Al Bashir, allegedly stated that he ‘did not want any villages or prisoners, only scorched earth’\(^{59}\) to remain in the Darfur region. The International Criminal Court decided in its first arrest warrant for Al Bashir in 2009 that this does not amount to proof of genocidal intent, but rather constitutes war crimes or crimes against humanity instead.\(^ {60}\) However, there is some promise that this policy will be addressed as genocide in light of the revised arrest warrant issued in July 2010.\(^ {61}\)

Environmental destruction may be the primary tool or indeed a ‘major accelerator’\(^ {62}\) of genocide. The terms of the Genocide Convention and Article 6 (particularly Article 6(c)) of the Statute of the International Criminal Court, open the possibility for the prosecution of environmentally destructive acts in non-international armed conflict as genocide. In reality, however, the chances of a conviction remain quite slight because of the high mens rea requirement.

b. Crimes Against Humanity

Crimes against humanity were first enumerated in treaty-form in the Statute of the International Criminal Court and have been highlighted as another possible means of preventing environmental damage in non-international armed conflict.\(^ {63}\) The Vietnamese Delegate at the Diplomatic Conference which drafted the Additional Protocols from 1974-77 felt that the environmental damage which the US caused in

---

59 The Prosecutor v Omar Hassan Ahmad Al Bashir 'Decision on the Prosecution's Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir' ICC-02/05-01/09, 4 March 2009, para 170

60 ibid para 172

61 The Prosecutor v Omar Hassan Ahmad Al Bashir 'Second Warrant of Arrest for Omar Hassan Ahmad Al Bashir' ICC-02/05-01/09, 12 July 2010, 7

62 Weinstein, 'Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?', 719

Vietnam during the Second Indo-China War was tantamount to crimes against humanity. To this end, the Vietnamese Delegation had submitted an amendment to the proposed environmental protection provisions in the draft Protocols which called for the prohibition as crimes against humanity the use of means or methods of combat, the immediate and long-term effects of which were genocide, biocide, destruction or disruption of natural conditions in the human environment. This is evidence that attempts to link crimes against humanity and environmental damage in armed conflict are not new – however they have yet to be represented directly in textual form, or indirectly through contemporary international criminal jurisprudence.

Though no armed conflict nexus is required to substantiate a violation of Article 7, crimes against humanity can be committed through environmental damage in non-international armed conflict. For example

‘crimes against humanity could include widespread or systematic attacks that are made in a discriminatory manner on drinking water, food sources, and other environmental components directly affecting the life and physical well-being of a population. Such a scene might be played out by armed and paramilitary forces poisoning wells in a systematic attempt to remove a civilian population of a particular ethnicity or religion from an area.

The Whitaker Report, discussed above in the section on genocide, indicated that environmental destruction would more comfortably fit the description of crimes against humanity than genocide. There are four relevant sections of Article 7 which

---


65 Amendment CDDH/41


67 Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 729

68 B. Whitaker, Revised and Updated Report on the Question of the Prevention and Punishment of the Crime of Genocide, United Nations Economic and Social Council Commission on Human Rights,
could enhance protection of the environment in non-international armed conflict: extermination, forcible transfer of populations; persecution, and other inhumane acts.

**Extermination**

Firstly, Article 7(1)(b) prohibits extermination. According to Article 7(2), ‘extermination’ includes ‘the intentional infliction of conditions of life...calculated to bring about the destruction of part of a population.’ Extermination as a result of environmental damage could occur where deliberate or reckless pollution is caused to such an extent that it jeopardises the very existence of the civilian population living in that area. The situation of the Marsh Arabs in Iraq would be a paradigm example of this category of crimes against humanity.

**Forcible Transfer of Populations**

Secondly, Article 7(1)(d) prohibits the forcible transfer of populations. According to Article 7(2) of the Rome Statute, the substance of this crime against humanity amounts to impermissible ‘forced displacement of the persons concerned by expulsion or other coercive acts from the area in which they are lawfully present.’ The situation in Southern Sudan where the water supply and land of communities were targeted to force their exodus in order to allow oil companies to take advantage of the natural resources there is an illustrative example of this particular crime.

---


69 Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Art 7(1)(b)

70 ibid Article 7(2)(b).

71 ibid Article 7(1)(d)

72 ibid Article 7(2)(d)

73 *The Prosecutor v Omar Hassan Ahmad Al Bashir 'Second Warrant of Arrest for Omar Hassan Ahmad Al Bashir'* , 7

74 *The Prosecutor v Omar Hassan Ahmad Al Bashir 'Decision on the Prosecution's Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir'* , para 170

75 International Association of Genocide Scholars, *Resolution on Darfur* (July 2007), para 6; *The Prosecutor v Omar Hassan Ahmad Al Bashir 'Second Warrant of Arrest for Omar Hassan Ahmad Al Bashir'* , 7
Scorched earth policies are another environmentally destructive method of warfare that could also force populations to move.

**Persecution**

Thirdly, Article 7(1)(h) prohibits persecution.\(^{76}\) Persecution involves the ‘intentional and severe deprivation of fundamental rights contrary to international law by reason of the identity of the group or collectivity.’\(^{77}\) Persecution could be used to prohibit the destruction of the environment which falls short of causing starvation amongst the civilian population. Where environmental destruction is caused in order to create extremely difficult living conditions in non-international armed conflict, then this particular crime against humanity may be violated and individuals could be held criminally responsible accordingly.

**Other Inhumane Acts**

Fourthly, Article 7(1)(k)\(^{78}\) prohibits other inhumane acts which are ‘committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack’.\(^{79}\) This final catch-all provision means that acts of ‘a similar character [to those listed above] intentionally causing great suffering, or serious injury to body or to mental or physical health’\(^{80}\) are prohibited. Though taking place in the context of a conflict in occupied territories, the use by Israel of white phosphorous as a weapon over the Gaza Strip in the 2008/09 conflict could be a potential violation of this crime against humanity.\(^{81}\)

\(^{76}\) Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Article 7(1)(h)

\(^{77}\) ibid Article 7(2)(g)

\(^{78}\) Wattad, ‘The Rome Statute & Captain Planet: What Lies Between 'Crimes Against Humanity' and the 'Natural Environment'?’, 269 - ‘fit well under Article 7(1)(k) of the Statute - which criminalizes other inhuman acts that intentionally cause great suffering, or serious injury to body or mental or physical health - especially since the Statute acknowledges the doctrine of dolus eventualis.’

\(^{79}\) Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Article 7

\(^{80}\) ibid Article 7(1)(k)

Laws Binding on States and Non-State Actors

**Crimes Against Humanity versus Genocide**

Many acts of environmental harm in non-international armed conflict which fall short of the threshold for genocide could potentially be caught in the crimes against humanity safety net. For example, a news report on the conflict in Sudan indicated that:

‘Victims, pressure groups and legal experts want the International Criminal Court, ICC, to charge Sudanese officials with man-made environmental crimes which they say contributed significantly to the mass displacement of Darfur civilians. In addition to ordering their campaign of terror and mass killings, the government instructed its allied Arab Janjaweed militia to drive out mainly black farmers and civilians by burning fields and contaminating water supplies, claim refugees.’

Without the genocidal intent requirement, crimes against humanity apply to a much broader base of circumstances. However any environmental damage which results in extermination, persecution, forcible transfer or other inhumane acts still remains subject to the requirement that the act be in furtherance of a widespread or systematic attack. This requirement should not be insurmountable in most circumstances of armed conflict. In addition, satisfying the knowledge requirement of crimes against humanity in the Rome Statute should also be a more attractive option to any prosecutor than conclusively proving genocidal intent. Furthermore, crimes against humanity do not require an armed conflict nexus and as such, can apply throughout all non-international armed conflicts.

c. **War Crimes**

As previously indicated, there is no direct environmental war crime for non-international armed conflict. As such, the war crimes provisions in the Statute of the International Criminal Court can only indirectly prohibit environmental damage in non-international armed conflict. Many of the war crimes with potential for environmental protection have counterparts in Additional Protocol II and as such,

---

82 Glassborow, ‘Court Urged to Consider Environmental Crimes’

the discussion in Chapter 3 on the treaty-based law of armed conflict provisions is relevant to the war crimes below and will not be repeated in this chapter.

Four ICC crimes applicable in non-international armed conflict could prohibit environmental damage indirectly. Firstly Article 8(2)(e)(i) prohibits intentionally launching an attack against the civilian population. Though there are minor textual differences, it has as its counterpart Article 13(2) of Additional Protocol II. The discussion on civilian protection in Chapter 3 is therefore relevant to the interpretation of any future application of Article 8(2)(e)(i) to environmental protection.84 Secondly, the forced displacement of civilians is a war crime in non-international armed conflict in Article 8(2)(e)(viii). Although there are slight textual differences, the discussion on Article 17 of Additional Protocol II in Chapter 3 is relevant in this regard.85 Thirdly, there is scope for environmental protection through Article 8(2)(e)(xii) which protects the property of an enemy in non-international armed conflict. There is no comparable provision to this in Additional Protocol II. As discussed in Chapter 386, there is good potential for prohibiting environmental damage through Article 14 of Additional Protocol II which protects objects indispensable to the survival of the civilian population. Regrettably this crime only exists in international armed conflict per Article 8(2)(b)(xxv).

As discussed in Chapter 3, pillage has the potential to prohibit environmental damage in non-international armed conflict. The discussion below compliments the examination of pillage in Chapter 3 by focusing on the crime of pillage in light of the jurisprudence that has been developed at the international criminal tribunals to date. This has a bearing on any future environmental prosecutions that could be taken under international criminal law.

Pillage

Pillage is prohibited as a war crime in non-international armed conflict in Article 8(2)(e)(v) of the Rome Statute and the discussion in Chapter 3 in relation to Article

84 See Chapter 3 from 54-58 and 71-77
85 See Chapter 3 from 76
86 See Chapter 3 from 65
4(2)(g) of Additional Protocol II is relevant in this regard.\textsuperscript{87} It has been observed that in the case of natural resource exploitation in ‘Liberia, Sierra Leone, Angola, Cambodia, DRC, and Iraq...the actions undertaken match the elements set forth in the statute [of the ICC]\textsuperscript{88} for pillage. Some scholarly consideration has also been given to the use of pillage in international criminal law as a means of holding multinational corporations responsible for the exploitation of natural resources in the context of non-international armed conflict\textsuperscript{89}, which is a feature of environmental damage that the laws of armed conflict are poorly equipped to control. While pillage was mentioned throughout the judgement against Charles Taylor at the Special Court for Sierra Leone in 2012, it was not linked as a crime to the expropriation of natural resources.

Previously, the terms plunder, pillage, spoliation and so on, were thought to differ according to the degree of violence used in the act of appropriation. No material difference is now thought to exist between the terms. What the Special Court for Sierra Leone and the International Criminal Tribunal for Rwanda describe as ‘pillage’, the ICTY have prosecuted as ‘plunder’ with no material difference being evident between the two. The contemporary understanding of pillage in international criminal law stems from the Delalić judgment at the ICTY, where the war crime of pillage was held to be ‘all forms of unlawful appropriation of property in armed conflict’.\textsuperscript{90} It should be noted that pillage therefore connotes all violent and, importantly, non-violent appropriations of both public and private property linked to the conduct of hostilities.

\textsuperscript{87} See Chapter 3 from 60


\textsuperscript{89} James G. Stewart, Corporate War Crimes: Prosecuting the Pillage of Natural Resources (Open Society Justice Initiative 2010)

\textsuperscript{90} Prosecutor v Zajnîl Delalić, Zdravko Mucîc, Haržîm Delî, Esad Landzo ‘Cebelići Camp Case’ ICTY, Case No IY-96-21-T, Judgement 16 November 1998 para 591 - ‘the offence of the unlawful appropriation of public and private property in armed conflict has varyingly been termed “pillage”, “plunder”, and “spoliation.”...While it may be noted that the concept of pillage in the traditional sense implied an element of violence not necessarily present in the offence of plunder, it is for the present purposes not necessary to determine whether, under current international law, these terms are entirely synonymous...the latter term...should be understood to embrace all forms of unlawful appropriation of property in armed conflict for which individual criminal responsibility attaches under international law, including those acts traditionally described as “pillage”.'
An extremely important decision on pillage in the context of natural resource exploitation was delivered by the Special Court for Sierra Leone in the trial of Charles Taylor, the former President of Liberia, in May 2012.\footnote{Prosecutor v Charles Ghanakay Taylor Special Court for Sierra Leone, Case No SCSL-03-01-T, Judgement, 18 May 2012} Pillage is contained in Article 3(f) of the Statute of the Special Court for Sierra Leone and, drawing from jurisprudence at the ICTY, the Trial Chamber held that following elements of the crime had to be proved beyond reasonable doubt:

- i. The perpetrator appropriated property;
- ii. The appropriation was without the consent of the owner;
- iii. The perpetrator intended to deprive the owner of the property.\footnote{ibid 168}

The Trial Chamber judgement identifies a high-level condoning of pillage as part of ‘Operation Pay Yourself’, which meant that AFRC/RUF soldiers could take whatever they wanted from civilians in lieu of military service.\footnote{ibid 665} This resulted in widespread looting, though with little environmental consequence. However, it created a culture of acceptance for the appropriation of public and private goods within which high-value natural resources, such as diamonds, could be expropriated with general impunity. The Prosecutor based the case against Charles Taylor on the premise that he launched a common plan to carry out ‘a campaign of terror in order to forcibly control the population and territory of Sierra Leone and to pillage its resources, in particular diamonds.’\footnote{ibid 757} However, the findings on pillage in the judgement were linked to the looting of money and other moveable goods, and diamonds in the possession of persons rather than the exploitation of natural resources. While the pillage of Sierra Leone’s natural resources, in particular diamonds, is conceptually referred to throughout the judgement against Charles Taylor, the crime of pillage was not enforced against these facts. This may be an important opportunity missed to link natural resource exploitation to pillage and create a body of jurisprudence in this regard.
It has been observed that ‘the closest provision to an environmental crime in the Statute of the International Tribunal for Rwanda is the one prohibiting pillage’, even though no environmentally oriented charges of pillage were pursued at the ICTR. As seen in the judgement against Charles Taylor above, the vast majority of pillage cases to date have dealt with moveable goods - chattels or money. It is argued here that past precedents should be revised in light of the features of contemporary non-international armed conflict. When pillage was included in the 1907 Hague Convention, it ‘was not intended to protect the environment’ however ‘it is definitely [now] a possibility’.

There is no military necessity exception built in to Article 8(2)(c)(v) of the Rome Statute and as such, pillage may not be justified or excused by military necessity. Ordinary necessity – not of the military kind – has been deemed to be the only exception to the crime of pillage in non-international armed conflict at the ICTY, and this jurisprudence would be of high persuasive value in any prosecution for pillage at the ICC. In the Hadžihasanović case at the ICTY, the Trial Chamber noted that

‘in the context of an actual or looming famine, a state of necessity may be an exception to the prohibition on the appropriation of public or private property. Property that can be appropriated in a state of necessity includes mostly food, which may be eaten in situ, but also livestock. To plead a defence of necessity and for it to succeed, the following conditions must be met: (i) there must be a real and imminent threat of severe and irreparable harm to life existence; (ii) the acts of plunder must have been the only means to avoid the aforesaid harm;

95 Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 723
96 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. The Hague, 18 October 1907
98 Erik Koppe ibid 273
99 For discussion on military necessity in this respect, see Chapter 4 from p. 98-104
(iii) the acts of plunder were not disproportionate and, (iv) the situation was not voluntarily brought about by the perpetrator himself.¹⁰⁰

Destructive acts such as burning are not included in the SCSL’s understanding of pillage,¹⁰¹ as there is no appropriation of property when the property is destroyed. The owner is indeed deprived of property whether the property is appropriated or destroyed, but only the appropriation of property falls into the war crime of pillage. As such, the crime of pillage could potentially cover the extraction and appropriation of natural resources in non-international armed conflict, but the associated environmental destruction that extraction involves would arguably not form part of the crime. The exploitation of natural resources in the Democratic Republic of the Congo, particularly in the Ituri region, is a prime example of pillage in the context of contemporary armed conflict and could potentially be pursued as such by the ICC since it is seized of the situation in the Democratic Republic of the Congo and has jurisdiction to prosecute crimes under its Statute which are taking place there.

Pillage as an international crime has the potential to pierce the corporate veil to hold senior members of multi-national corporations criminally responsible for natural resource exploitation in non-international armed conflict. Indeed some cases at the IMT at Nuremberg dealt with corporate control of oil.¹⁰² Pillage may very well result

¹⁰⁰ The Prosecutor v Enver Hadžihasanović and Amir Kubura ICTY, Case No IT-01-47-T, Judgement 15 March 2006, para 53

¹⁰¹ Prosecutor v Issa Hassan Sesay, Morris Kallon, Augustine Gbao Special Court for Sierra Leone, Case No SCSL-04-15-T, Trial Chamber Judgement 2 March 2009 para 212 - “The Appeals Chamber has ruled that a necessary element of the crime of pillage is the unlawful appropriation of property. As a result, acts of destruction such as burning cannot constitute pillage under international criminal law.” See also CDF Case SCSL Trial Chamber Judgement para 166 ‘Although Count 5 of the Indictment is entitled: “Looting and Burning”, the offence charged under this count is pillage, a violation of Article 3 Common to the Geneva Conventions and of Additional Protocol II, punishable under Article 3(f) of the Statute. The acts of burning, as charged in some paragraphs in Count 5 of the Indictment, will not be considered for the purposes of the offence of pillage as charged under Count 5. According to the definition of pillage as stated above, an essential element of pillage is the unlawful appropriation of property. Black’s Law Dictionary defines appropriation as “the exercise of control over property; a taking or possession”. In the act of looting, the offender unlawfully appropriates the property. Destruction of property by burning, however, does not, by itself, necessarily involve any unlawful appropriation. Thus, while both looting and burning deprive the owner of their property, the two actions are distinct since the latter crime may be committed without appropriation per se. As a result, the Chamber is of the view that the destruction by burning of property does not constitute pillage. The Chamber will not, therefore, take into account acts of destruction by burning for the purposes of determining the individual criminal responsibility of the Accused under Count 5.’

¹⁰² Stewart, Corporate War Crimes: Prosecuting the Pillage of Natural Resources 95-124
in accountability where other methods of corporate responsibility and state regulation of the private sector have failed.\textsuperscript{103} In conclusion, while pillage seems like the most promising ICC war crime for environmental protection in non-international armed conflict, the reality is that ‘there is not much expectation on the ICC to protect the natural environment through this provision.’\textsuperscript{104}

\textit{Amending Environmental War Crimes in Non-International Armed Conflict}

Addressing the absence of a specific provision that creates criminal liability for environmental damage in non-international armed conflict is often proposed as a solution to the so-called gap in protection.\textsuperscript{105} The Statute of the International Criminal Court makes provision for it to be reviewed and revised every seven years. It is argued that this should be viewed as an opportunity to negotiate an amendment to Article 8(2)(e) of the Rome Statute that would clearly enhance environmental protection in non-international armed conflict. The first review conference of the ICC Statute took place in Kampala in 2010, and the next is due to take place in approximately 2017.

At the first review of the Rome Statute, Belgium submitted a proposal, which was ultimately adopted, to amend non-international war crimes to include prohibitions on the use of certain weapons. It is not inconceivable that a proposal to amend the Rome Statute to include environmental war crimes for non-international armed conflict could be considered at the second or third review conference, should some state decide to champion the issue.

However, an improvement would not be achieved by a mere transcription of Article 8(2)(b)(iv), with its troublesome \textit{widespread, long-term and severe} thresholds of harm, into the Statute’s non-international war crimes section. The problems associated with Article 8(2)(b)(iv) have been discussed at length in almost all of the literature on the


\textsuperscript{104} Lopez, ‘Criminal Liability for Environmental Damage Occurring in Times of Non-International Armed Conflict: Rights and Remedies’, 242

subject of legal protection for the environment in armed conflict and in Chapter 2 of this thesis. In moving away from the ‘lack of ambition and vision’ that has characterised attempts to address the issue of environmental damage in armed conflict in international treaties over the past four decades, adopting an environmental war crime for non-international armed conflict in the next revision of the Statute of the ICC might be a good opportunity to finally negotiate a binding provision that is fit for purpose.

At present though, despite the environmental damage that occurred during the conflict between Israel and Hezbollah in 2006, between Israel and Hamas in Gaza at the end of 2008, and in the ongoing armed conflicts in the Democratic Republic of the Congo and so on, the International Criminal Court has made no attempt to prosecute individuals for environmental war crimes in accordance with Article 8(2)(b)(iv) or indirectly through any other provisions. It is submitted that at least one attempt at a prosecution for environmental war crimes would have to take place under the framework of contemporary international law to put the issue of environmental war crimes in non-international armed conflict on the agenda for any future ICC Statute review.

d. Aggression

Although the crime of aggression was included in the 1998 Rome Statute, the crime itself was only substantiated in the summer of 2010 during the first review of the Statute of the International Criminal Court. It will not come into force until 2017 at the earliest. The crime of aggression does not cover situations of environmental aggression. It is difficult to see how the crime of aggression, as now defined, could be perpetrated by any means of environmental degradation that falls short of the use of nuclear weapons, or extreme biological or chemical attacks.

Certainly the invasion, attack or bombardment of one state by the armed forces of another, as envisaged by Article 8 bis may cause a relative amount of environmental damage. However, such an act could easily transform into an armed conflict,

---


107 Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90, Article 8 bis
international or non-international. Given the scarce presence of environmental concern in international criminal law to date, and the unfinished status of the crime of aggression\(^{108}\), it is submitted that Article 8 \textit{bis} does not provide a feasible route for the prosecution of environmental damage in non-international armed conflict.

3. Safe Areas as Special Areas of Environmental Protection

It has been frequently suggested that ‘safe areas’ may be an effective way to prevent environmental damage in non-international armed conflict.\(^{109}\) The concept under discussion here goes by many names\(^ {110}\) and each will be used interchangeably throughout this section to essentially mean special areas of environmental protection which are modelled around the existing practice of designating safe areas of civilian protection or demilitarized zones that preclude military presence or conflict-related activity in that specific location.\(^ {111}\)


\(^{109}\) See Meron, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’, 355; Karen Hulme, ‘Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?’ (2010) 92 International Review of the Red Cross 675, 680 - ‘states could utilize the notion of demilitarized zones, which, although established to protect the civilian population, could conceivably be used to protect the environment provided the requirements of the provision are met. Michael Bothe utilizes a similar methodology in his suggestion of a new rule designed to protect certain environmental spaces.’; Harry H. Almond, ‘Weapons, War and the Environment’ (1990) 3 Georgetown International Environmental Law Review 117, 135; United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 20

\(^{110}\) The concept has been varyingly called ‘humanitarian area’, ‘humanitarian safe haven’, ‘humanitarian zone’, ‘protected zone’, ‘refugee haven’, ‘refugee safety zone’, ‘refugee zone’, ‘safe haven’, ‘safe environment’, ‘safe zone’, ‘safety zone’, ‘secure humanitarian zone’, ‘secure zone’, ‘security zone’, temporarily protected area’.- there is no ‘standard legal concept’. ‘Safe area’has been most frequently used as it seems to have ‘more common currency than the others...’ Hikaru Yamashita, Humanitarian Space and International Politics: The Creation of Safe Areas (Ashgate 2004), 4

\(^{111}\) Landgren, ‘Safety Zones and International Protection: A Dark Grey Area’, 438 - ‘many different terms have been used to describe the protective cloak cast over a particular population or location, and the confusion is more than linguistic. The essence of the notion in international humanitarian law is that of a location within the disputed country or territory, neutral and free of belligerent activity...’. See also Hulme, ‘Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?’, 680; Michael Bothe, ‘War and Environment’ in R Bernhardt (ed), Encyclopedia of Public International Law, vol 4 (Elsevier 2000), 1344; Michael Bothe and others, ‘International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities’ (2010) 92 International Review of
Draft Convention on the Prohibition of Hostile Military Activities in Internationally Protected Areas

The Draft Convention on the Prohibition of Hostile Military Activities in Internationally Protected Areas,\(^{112}\) drafted by the IUCN Commission on Environmental Law and the International Council of Environmental Law, attempted to propose legislation for safe environmental spaces at the international level. In peacetime, ‘[t]he creation of protected natural areas has long been an important conservation tool.’\(^{113}\) The IUCN Draft Convention would ‘require the UN Security Council to designate protected areas that would be marked “non-target” or demilitarized areas during conflicts’.\(^{114}\) Crucially, the Draft Convention ‘does not set forth a procedure for how the Security Council should determine which protected areas to include on its list.’\(^{115}\) Given how politicised resolutions at the Security Council can be, the compilation of a list of environmental safe areas may not be a realistic proposition\(^{116}\). For example while the Security Council has imposed sanctions targeting specific natural resources include a moratorium on the export of timber in Cambodia from 1992 to 1993, oil and diamond sanctions imposed for the first time on a non-state actor, the rebel group UNITA, during the civil conflict in Angola and the diamond sanctions in Sierra

the Red Cross 569, 577 and 579; Richard G. Tarasofsky, ‘Protecting Specially Important Areas During International Armed Conflict: A Critique of the IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas’ in Jay E. Austin and Carl E. Bruch (eds), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000), 572


113 Tarasofsky, ‘Protecting Specially Important Areas During International Armed Conflict: A Critique of the IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas’, 567

114 United Nations Environment Programme, Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law, 20

115 Tarasofsky, ‘Protecting Specially Important Areas During International Armed Conflict: A Critique of the IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas’, 575


198
Laws Binding on States and Non-State Actors

Leone, Liberia and still in force in Ivory Coast...on many occasions the Council has not imposed sanctions on natural resources where it could have, most notably in the case of Sudan. Moreover, in the current conflict in which illegal exploitation of natural resources is a major issue, namely in the Democratic Republic of Congo, no sanctions on the export of natural resources have been imposed.\(^\text{117}\)

Therefore, relying on the Security Council to act in a neutral manner in the designation of demilitarised zones is by no means a certainty. States are also usually quite cautious in nominating sites for inclusion on the UNESCO World Heritage Sites list. Therefore designating and respecting safe environmental areas in turbulent times of conflict might not be the most robust means of guaranteeing environmental protection within a state and between belligerent parties to a non-international armed conflict. In practice demilitarized zones and safe areas have been of mixed success.

a. Safe Areas: A Mixed Record of Success

The protection associated with safe areas seems to be breached more often than not, leading to the conclusion that the success of safe areas for the protection of civilians has steadily declined since the early 1990s.\(^\text{118}\) For example, in Bosnia-Herzegovina the ‘experiment in safe spaces went seriously awry.’\(^\text{119}\) Indeed it has been observed that of the safe areas that have been in place to date,

‘the most controversial has been the setting up of the UN-protected areas in Bosnia-Herzegovina [because] [i]n practice, this form of agreement meant little: Srebrenica was attacked and much of its male population massacred. Sarajevo and Goražde were also hit hard, but were able to


\(^{118}\) Hyndman, ‘Preventive, Palliative, or Punitive? Safe Spaces in Bosnia-Herzegovina, Somalia, and Sri Lanka’, 168

\(^{119}\) ibid 173
stave off the offensives more successfully due to more sizeable fighting forces.\textsuperscript{120}

The safe zones that were created in Bosnia-Herzegovina were heavily criticised because, ‘by concentrating vulnerable civilians in specified cities, the UN unwittingly created a target for aggressors’.\textsuperscript{121} Similar issues arose with the designation of safe zones in Sri Lanka in 2009.\textsuperscript{122} There is abundant evidence to support the conclusion that persuading civilians to congregate in particular areas designated as safe zones ultimately enables belligerents to precisely target that area as a military tactic, thereby jeopardising civilians and the surrounding environment alike.

b. Safe Areas and Environmental Protection

Special areas of environmental protection are an integral part of any peacetime environmental protection regime yet these areas are often locations of environmental damage in times of armed conflict.\textsuperscript{123} In theory, designating an area of particular environmental fragility or value as being out of bounds and off-limits to those in the midst of hostilities is a good proposition. It is submitted that, based upon the limited success of civilian safe zones to date, environmental safe zones are unlikely to succeed in their current format.

The situation in the Virunga National Park in the Democratic Republic of the Congo is a prime example of the shortcomings of this approach. The Virunga National Park is Africa’s oldest national park, a UNESCO World Heritage Site and home to one quarter of the entire remaining population of 800 endangered mountain gorillas.

\textsuperscript{120} ibid 172

\textsuperscript{121} ibid 175


\textsuperscript{123} Arthur H. Westing, ‘Protected Natural Areas and the Military’ (1992) 19 Environmental Conservation 343 - ‘Damage to protected natural areas in times of war can take the form of site disruption (through the expenditure of high-explosives, including the emplacement of mines, the expenditure of chemical weapons, the use of tracked and other vehicles, the setting of wildfires, the releasing of impounded waters, the construction of fortifications, the establishment of bivouacs, etc.), or it can be directed at specific components of the flora or fauna (through the cutting of trees, the hunting of wildlife, fishing, etc.). Damage to the infrastructure of a protected natural area can also occur, including the death and injury of personnel.’
Writing on 12 Sept 2012, a journalist notes that ‘Virunga has been closed for the past four months because of combat between M23 and Congolese troops in and around the park.’  

Indeed this ‘is not the first time armed conflict has spilled over into Virunga National Park. In 2007 and 2008, rebels took over the park headquarters; artillery and machine-gun fire killed nine mountain gorillas. The park reports more than 130 of its rangers have been killed in the past 15 years.’

This is not a recent phenomenon because, reporting in 2007, another journalist indicated that ‘[r]ebel groups opposed to Congo president Joseph Kabila control territory in the turbulent east. The most powerful group is led by an ethnic Tutsi named Laurent Nkunda, who commands thousands of well-armed rebels in the Virungas. Not far from here in January, troops from Nkunda’s group killed and presumably ate two silverbacks. A female was shot in May, another male and four females were slain in July; their killers had not been identified as we went to press.’

Clearly the designation of environmental safe zones does not preclude hostilities from taking place in these areas in non-international armed conflict.

c. Conditions Necessary for Safe Environmental Zones to Succeed

Clearly, ‘the successful use of classical safety zones has been very limited.’ In reality, non-state actors or rebel groups are interested in safe environmental zones because they may be able to easily hide in such locations. However, safe zones may


125 ibid


127 Landgren, ‘Safety Zones and International Protection: A Dark Grey Area’, 440

128 Cosma Wilungula, ‘Okapis, Gorillas, Elephants: The Other Victims of War in Eastern DR Congo’ (France 24, 28 August 2012) <http://observers.france24.com/content/20120828-okapis-gorillas-
be a salvageable concept, as recent scholarly research suggests that if safe areas are (i) agreed between parties, or (ii) concern a space that is naturally or traditionally perceived to be a sanctuary-like space and (iii) are monitored accordingly, they may have some chance of protecting the environment and any civilians that are located therein.

The ‘distinction between consensual ‘protected zones’, based in international humanitarian law, and ‘safe areas’, specified by the UN Security Council but not necessarily agreed to be warring factions, is a crucial one.’ This issue of consent on the part of all parties to the conflict is crucial. Safe zones which are seen to represent political or military aims are unlikely to succeed. Hyndman describes the importance of consent to the establishment of safe zones as follows:

‘Conventionally, safety zones were to be established with the agreement of the parties to the conflict. The civilian and demilitarized character associated with traditional safety zones is a natural corollary of consent to their establishment. Safety zones which represented territorial or military threats, or promoted political agendas, would have been a contradiction in terms, and would not have been accepted by the belligerents. Acceptance by all parties of the safety zone underlay subsequent respect for its conditions. The alternative to consent is enforcement. Enforced safety zones, however, depend on a credible threat, which in turn can

---

129 Hyndman, ‘Preventive, Palliative, or Punitive? Safe Spaces in Bosnia-Herzegovina, Somalia, and Sri Lanka’, 180-181 – such as Madhu in Sri Lanka

130 ibid 168 - ‘Internationally ascribed safe areas designated for civilians in war zones are most likely to work where first, warring factions consent to them; and second, the designated area has local connotations of sanctuary or safety.’

131 ibid 171


133 ibid 443 - ‘Safety zones imposed externally can promote political aims under a humanitarian cloak. However legitimate those political aims may be, they contribute to the perception of the safety zone as a punitive or partisan instrument.’
compromise the safety of the zone, politicise its existence, and complicate humanitarian access to it.\textsuperscript{134}

Clearly the issue of consent is not enough and some degree of enforcement should be built into the safe zones model to ensure that areas of protection are not entirely subject to the goodwill of belligerent groups. In this regard, ‘hybrid safety zones, lacking both consent and a credible threat, are unlikely to succeed.’\textsuperscript{135} Despite the issue of free consent being given by belligerents, and in the face of enforcement procedures ‘the banal but crucial fact [is] that any safety zone is as safe as the parties wish to make it.’\textsuperscript{136} As such, ‘safety zones [should not] be seen as an end in themselves: the fact that they are an interim measure, rather than a solution, has been emphasised repeatedly by the Secretary-General and others.’\textsuperscript{137} Former Special Representative to the Secretary General in Iraq, Sergio Vieira de Mello, ‘noted that the idea of protected areas raises as many questions as it appears to resolve.’\textsuperscript{138} It is argued here that designating demilitarized safe zones for environmental protection is not a failsafe measure or guaranteed means of preventing environmental damage in non-international armed conflict, though the idea should not be entirely discarded.

4. Conclusion

This chapter discussed two potential options by which non-state and state parties to an armed conflict could be compelled to refrain from causing environmental damage in non-international armed conflict. The first option is to look at means of criminalising environmental damage in non-international armed conflict and relying on the deterrent effect of international criminal law. The second option is to create safe environmental zones, modelled on the concept of safe areas for civilian protection.

\textsuperscript{134} ibid 442
\textsuperscript{135} ibid 454
\textsuperscript{136} ibid 453
\textsuperscript{137} ibid 454
\textsuperscript{138} Hyndman, ‘Preventive, Palliative, or Punitive? Safe Spaces in Bosnia-Herzegovina, Somalia, and Sri Lanka’, 170
In international criminal law and at the International Criminal Court in particular, ‘environmental damage is enjoined and punished only to the extent that the damage implicates other explicitly protected interests.’\(^{139}\) Therefore, the environmental damage is not being prohibited *per se*, and this limits the extent to which prosecutions can have a deterrent effect on conduct in the future. Nonetheless, the crimes of genocide, crimes against humanity and war crimes – in particular the war crime of pillage – could be used as the vehicle for the prosecution of environmental damage in non-international armed conflict in the future. For the requirements of foreseeability and *nullum crimen nulla poena sine lege* there should be a move towards linking international crimes with environmental damage in indictments and prosecutions for international crimes – arguably this has begun in the judgement against Charles Taylor that was delivered by the Special Court for Sierra Leone in 2012. However, as international criminal law cannot compel restitution of environmental harm, the adequacy of penal sentences as a punishment for environmental damage should also be questioned.

The issue of designating safe areas of environmental protection has some merit, and progress is already underway to sculpt a framework for this in the form of the IUCN’s Draft Convention on the Prohibition of Hostile Military Activities in Internationally Protected Areas. However, in practice, existing environmental protection zones and humanitarian safe areas have not been successful in armed conflicts to date. Indeed ‘[t]he horrifying experience with “safe areas” in Srebrenica and Tuzla, Bosnia, as well as the ongoing problems in World Heritage Sites, suggest that UN protection on paper—or even on the ground—is often woefully inadequate to the realities of modern warfare.’\(^{140}\) If environmental safe areas are to work to protect the environment in non-international armed conflict in the future, then lessons need to be learned from past experiences to ensure future success.

---

\(^{139}\) Bruch, ‘All’s Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict’, 740

Chapter 8
Conclusion

1. Introduction

This chapter will draw the research, examination and discussion in the thesis together to form an answer to the research question posed in Chapter 1. It will also discuss some of the key strengths and limitations of the conclusions drawn, thereby reinforcing the contribution of this research to the existing literature and identifying the implications for future research.

a. Context

There is an obvious increase in the number of non-international armed conflicts in the present day, a large number of which are being linked to the environment. However, within the laws of armed conflict, there are no direct provisions prohibiting environmental damage in non-international armed conflict. Frequently, the environment is said to be protected indirectly through other laws of armed conflict. However, no detailed legal analysis of the environmental dimension of other laws of non-international armed conflict has taken place. In this way, it can be argued that the law on this point remains uncertain at best. It is submitted throughout this thesis that legal regulation of environmental damage in non-international armed conflict is inadequately equipped to deal with present-day conflict conditions.

2. Research Question and Hypotheses

The research in this thesis set out to determine whether legal prohibitions on environmental damage in non-international armed conflict are adequate in light of the nature of contemporary non-international conflict. In constructing an answer to this question, five hypotheses were posed in Chapter 1 which together form the basis of a comprehensive conclusion.
a. Assessment of the Research Hypotheses

Hypothesis 1 – The environment is damaged in non-international armed conflict.

The discussion in Chapter 2 identified environmental damage in non-international armed conflict that was caused by both states and non-state actors. This damage can be as a result of targeting, methods and means of warfare, or illegal resource exploitation. Environmental damage in non-international armed conflict is a significant issue and there is evidence supporting the need for adequate prohibitions on environmental damage in the laws of non-international armed conflict.

Hypothesis 2 – Both states and non-state actors cause environmental damage in non-international armed conflict.

The discussion in Chapter 2 demonstrated that both state and non-state actors cause environmental damage in non-international armed conflict. Therefore the adequacy of existing international laws and means of protecting the environment in non-international armed conflict will depend on the extent to which they regulate the conduct of both state and non-state actors.

Hypothesis 3 – Certain laws of armed conflict have the potential to prohibit environmental damage in non-international armed conflict.

There are indeed laws of armed conflict that have the potential to prohibit environmental damage in non-international armed conflict. Chapter 4 identified the environmental potential within the customary laws of armed conflict. Chapter 3 identified Common Article 3, six provisions in Additional Protocol II and several arms control treaties that, to a greater or lesser degree, have the theoretical potential to prohibit environmental damage in certain circumstances. Chapter 5 demonstrated that the Martens Clause does not have the potential to prohibit environmental damage in non-international armed conflict.

Hypothesis 4 – Other branches of international law and other approaches to environmental protection fill the gaps in the prohibitions contained in the laws of armed conflict.

Other branches of international law and alternative approaches were identified in Chapters 6 and 7. In Chapter 6, the environmental human rights approach was shown to be too vague to work. Peacetime environmental law is useful, but many
instruments may not continue to apply in times of armed conflict. Compensation mechanisms were identified as being a novel option of preventing environmental harm through the deterrent effect of financial sanctions.

There is an imbalance in the extent to which other branches of international law and other approaches to environmental protection in non-international armed conflict apply to both state forces and non-state fighters. The provisions of international human rights law, international environmental law and international compensation mechanisms apply only to states in line with the principle of legitimacy. However, the provisions of international criminal law and the designation of environmental safe zones apply to both state and non-state groups. As such, while all five means of supplementing the laws of armed conflict on the protection of the environment in non-international armed conflict apply to states, only two of the five apply to non-state actors. The difficulty in applying international law to non-state actors is a limitation that has a direct impact on the extent to which these alternative approaches can fill the very wide gap on environmental protection in non-international armed conflict.

Hypothesis 5 – The interpretations of international law in furtherance of hypotheses 3 and 4 are in conformity with the rule of international law and the principle of legality.

When considering the international law principles discussed in the context of hypotheses 3 and 4 above (relating to Chapters 3, 4, 5, 6 and 7), not all provisions that could theoretically prohibit environmental damage conformed to the requirements of the principle of legality and the rule of international law. It was outlined in Chapter 1 that for laws to be validly enforced against individuals, they had to be certain, foreseeable and not in violation of the nullum crimen principle. The requirements under the rule of law for states were less strict, as it was submitted that individuals would benefit most where states were not given the benefit of ambiguous laws. Some provisions of treaty-based and customary laws of armed conflict, the Martens Clause, international human rights law, international environmental law and international criminal law were identified as being dubious in terms of the extent to which they conformed to the requirements of the rule of law. Therefore this hypothesis has not been fully proved.
b. Discussion on the Conclusions of the Research Hypotheses

This thesis had a simple objective: to identify the relevant provisions of international law that have the potential to protect the environment in non-international armed conflict and to evaluate the adequacy of these laws in light of contemporary non-international armed conflict. The examination throughout this thesis showed that all of the hypotheses required to conclude that the laws on this issue are adequate have been proved to some extent – laws, which apply to one or both parties to the conflict, exist to address the problem and they, in part, conform to the requirements of the rule of international law. However, there are several distinct problems to note in reaching a conclusion.

First, the problem identified under hypothesis 1, that the environment is damaged in non-international armed conflict, tells only part of the story. Certainly the environment is damaged during the conduct of hostilities, but by and large the most significant environmental issue is that of natural resource exploitation and the role it plays in fuelling or funding contemporary non-international armed conflict. The laws of armed conflict as they stand may potentially jeopardise these natural resources by allowing them to be classified as military objectives under the principle of distinction.

Second, while both state and non-state actors cause environmental damage, the balance of the law is firmly on the side of regulating the conduct of state armed forces. Environmental damage caused by non-state armed groups is grossly under-regulated. As such, the state seems to be required to respect the integrity of the environment much more than non-state actors. This could be perceived by state forces as giving non-state actors an unfair advantage during the conduct of hostilities, thereby incentivising state forces to disregard their environmental obligations in combat. However, it could equally be argued that no imbalance truly exists as the branches of law that apply to states only – international environmental law and international human rights law – were not found to enhance the laws of armed conflict on this point in any meaningful way.

Third, while certain laws of non-international armed conflict were identified as providing indirect protection to the environment, this protection was mostly from an anthropocentric point of view. It did not treat environmental damage as an issue of protection in its own right, but rather as a means of causing harm to civilians or
persons *hors de combat*. Put together, this suite of treaty-based and customary laws of armed conflict result in a honeycomb of environmental protection in non-international armed conflict, with many observable gaps and loopholes. Indeed, it has been rightly observed that

‘there is no definitive or readily enforceable code of conduct governing what warring parties can and cannot do to the environment. All the international community has been able to negotiate are scattered collateral references in a variety of treaties and conventions. At most, these references provide some definitional parameters as to what constitutes unacceptable treatment of the environment in times of war.’

Furthermore, though the provisions identified can, in theory, be interpreted as having an environmental dimension, many would fail to satisfy the requirements of the rule of international law and the principle of legality if enforced. As such, those laws cannot be deemed to provide environmental protection in practice.

Fourthly, there is a danger in overstating the extent to which environmental damage is covered by international law in non-international armed conflict. By arguing that civilian protection or the Martens Clause protect the environment adequately in non-international armed conflict (when, if examined, such presumed protection crumbles), the impetus to address this problem in the law is somewhat defeated. The international community needs to realise that the environment requires much more effective protection in non-international armed conflict in light of the nature of contemporary armed conflict. It is submitted that the emphasis placed on the capacity of existing laws to prohibit environmental damage in non-international armed conflict is unfounded. However, by continuing with this position, there is no real source of motivation for the international community to act.

---

c. Conclusions on Research Hypotheses and Proof of the Research Statement

Though the analysis of the research hypotheses would suggest that there is some degree of environmental protection in non-international armed conflict, that protection has serious and obvious gaps. In evaluating the adequacy of the laws and the extent to which they are fit for purpose in contemporary armed conflict, ‘[n]one of the [available] approaches offers a definite or comprehensive solution.’ The only conclusion that can be reached is that legal prohibitions on environmental damage in non-international armed conflict are not adequate in light of the nature of such contemporary conflicts.

3. Implications for Future Research

The research in the thesis has implications for future research on the issue of environmental protection in armed conflict. As this is the first focused discussion of laws of armed conflict on the issue of environmental protection in non-international armed conflict, a foundation for subsequent research and discourse has been established. It is hoped that this interrogation will result in further focused research to build a body of scholarship that redresses the imbalance in the literature as between the environmental consequences of international and non-international armed conflict.

A marked limitation of this study is the absence of dedicated and detailed case studies upon which to test the positions taken and conclusions reached. Examples of the environmental consequences of non-international armed conflict were indeed used throughout this thesis, but the discussion would have benefitted from a greater link to specific and concrete circumstances. As such, the next steps for this present research will be to test the theoretical conclusions against a specific situation of non-international armed conflict. Though there is much research on the exploitation of natural resources in armed conflict, there is less on the actual consequences of the conduct of hostilities. Therefore, some measure of empirical field research on the

---

2 Theodor Meron, 'Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts' in Richard J. Grunawalt, John E. King and Ronald S. McClain (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996), 358
environmental consequences of armed conflict during the conduct of hostilities in non-international armed conflict should be conducted to further contribute to the body of knowledge on this issue.

Finally, given the role of natural resources in fuelling and funding non-international armed conflict, a more expansive examination of international law in general should be undertaken, interrogating not only constraints on state and non-state armed groups, but on multinational corporations too. The laws of armed conflict should have clear jurisdiction over multinational corporations if they effectively control non-state actors in armed conflict. This would, it is argued, have a positive effect on environmental protection in conflict and may even have an impact on the whole paradigm of resource-fuelled conflicts in general.

4. Concluding Remarks

It was noted by the International Law Commission that since the early 2010s there has been a revival of interest amongst the international community in addressing the constant issue of insufficient or inadequate protection for the environment in armed conflict.3 However, states were recently consulted by the International Committee of the Red Cross with regard to strengthening protections for the victims of armed conflict. Four areas of reform were suggested by the ICRC, one of which was to strengthen environmental protection in the laws of armed conflict. The ICRC revealed that ‘States participating in the consultation...clearly indicated that it would not be realistic to work simultaneously on all four areas identified, and that priorities should be set...on...topics able to spark the greatest interest among States.’4 According to the ICRCs summary of the consultation, ‘[v]iews differ[ed] on protection of the natural environment in armed conflicts. The consultation brought to light no clear trend in favour of [pursuing a discussion on this subject].’5 Indeed, the opinions of States fell into three clear divisions: those states who felt that it was a

---

3 International Law Commission, Report on the work of its sixty-third session (26 April to 3 June and 4 July to 12 August 2011), General Assembly A/66/10, Annex E 'Protection of the Environment in Relation to Armed Conflicts', 354

4 International Committee of the Red Cross, ‘Strengthening Legal Protection for Victims of Armed Conflicts: Report 31IC/11/5.1.1’ (31st International Conference of the Red Cross and Red Crescent), 23

5 ibid 25
fundamental imperative to explore this issue\textsuperscript{6}; those states who felt that environmental laws of armed conflict ‘would undermine the capacity of their armed forces to conduct their missions’\textsuperscript{7}; and those that adopted an intermediate position, maintaining either that the environmental effects of armed conflict are not sufficiently scientifically established to enable new and appropriate laws to be drawn up or that the laws of armed conflict that currently pertain to the environment are adequate.\textsuperscript{8} The ICRC concluded that ‘[i]n short, the consultation showed that the States were apparently not yet ready to undertake an exercise aimed at strengthening the international law protecting the natural environment in time of armed conflict.’\textsuperscript{9}

It is submitted that it has become largely accepted that there is no direct environmental protection in non-international armed conflict. This state of affairs has been normalised and is not questioned by the international community at large. If the ICRC consultation is to be taken as evidence of the general policy of states towards the environmental consequences of armed conflict, then there is little hope for meaningful reform of this field in the near future. International law is created by states and state commitment to its development is necessary for enhanced protection. Yet despite the apathy or recalcitrance of the majority of states, the International Law Commission has placed this subject on its long-term agenda. As such, an unprecedented opportunity now exists to make meaningful recommendations for reform.

In light of present day environmental concerns, to have a body of international law without a direct reference to environmental protection in crucial situations such as non-international armed conflict is undesirable and, perhaps in decades to come, will be looked upon as being wholly inadequate. An analogy by C.S. Lewis illustrates this point. He observes that

‘[M]any of us have had the experience of living in some local pocket of human society – some particular school, college, regiment or profession

\textsuperscript{6} ibid 26
\textsuperscript{7} ibid
\textsuperscript{8} ibid
\textsuperscript{9} ibid
where the tone was bad. And inside that pocket certain actions were regarded as merely normal (“Everyone does it”) and certain others impractically virtuous and Quixotic. But when we emerged from that bad society we made the horrible discovery that in the outer world our “normal” was the kind of thing that no decent person ever dreamed of doing, and our “Quixotic” was taken for granted as the minimum standard of decency.\textsuperscript{10}

It is strongly argued that the simplest means of achieving adequate environmental protection in non-international armed conflict is through specific and direct provisions in the laws of armed conflict.\textsuperscript{11} Protection for the environment in non-international armed conflict might now seem Quixotic; but when looked upon in retrospect by civilisation in the future, it will seem as though it was the most basic protection that ought to have been enshrined in the laws of armed conflict, arm in arm with the fundamental canons of humanitarian protection such as the protection of civilians and the prohibition of unnecessary suffering.

\textsuperscript{10} C.S. Lewis, \textit{The Problem of Pain} (Harper Collins 1940), 56

\textsuperscript{11} Karen Hulme, \textit{War Torn Environment: Interpreting the Legal Threshold} (Martinus Nijhoff Publishers 2004), 288
Bibliography

Treaties and International Instruments


US War Department, Instructions for the Government of Armies of the United States in the Field, General Orders No 100 (Apr. 24, 1863)

Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grams Weight, 11 December 1868, 18 Martens Nouveau Recueil (ser. 1) 474

Hague Convention (II) with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 29 July 1899

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. The Hague, 18 October 1907

Treaty relating to the Use of Submarines and Noxious Gases in Warfare, Washington, 25 L.N.T.S. 202 (1922)

Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, 94 L.N.T.S. 65, entered into force Feb. 8, 1928

Statute of the International Court of Justice, 18 April 1946, 3 Bevans 1179; 59 Stat. 1031; T.S. No. 993

Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (First Geneva Convention), 12 August 1949, 75 UNTS 31
Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Second Geneva Convention), 12 August 1949, 75 UNTS 85

Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention), 12 August 1949, 75 UNTS 287

Geneva Convention Relative to the Treatment of Prisoners of War (Third Geneva Convention), 12 August 1949, 75 UNTS 135

Convention for the Protection of Human Rights and Fundamental Freedoms, ETS 5; 213 UNTS 221, 4 November 1950

Convention on the Prevention and Punishment of the Crime of Genocide (1951) 78 UNTS 277


International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 52, UN Doc. A/6316 (1966); 999 UNTS 171; 6 ILM 368 (1967)

International Covenant on Economic, Social and Cultural Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 49, UN Doc. A/6316 (1966); 993 UNTS 3; 6 ILM 368 (1967)


American Convention on Human Rights, OAS Treaty Series No. 36; 1144 UNTS 123; 9 ILM 99 (1969)

Convention Concerning the Protection of the World Cultural and Natural Heritage, 1037 UNTS 151; 27 UST 37; 11 ILM 1358 (1972)

Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Biological Weapons Convention) (1972) 1015 UNTS 163

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 16 February 1976, Barcelona, 1102 UNTS 27

Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976, 1108 UNTS 151

Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3

Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 609


Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (and Protocols) (As Amended on 21 December 2001), 10 October 1980, 1342 UNTS 137


World Charter for Nature, UN Doc A/RES/37/7, 2 October 1982


United Nations World Commission on Environment and Development 'Our Common Future', UN Doc A/42/427, 4 August 1987
Bibliography


UNGA Res A/RES/45/94 Need to Ensure a Healthy Environment for the Well-Being of Individuals, 14 December 1990


Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992)


Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, Geneva 3 May 1996, 2048 UNTS 93


Rome Statute of the International Criminal Court, UN Doc. A/CONF. 183/9; 37 ILM 1002 (1998); 2187 UNTS 90


Protocol on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol V), Geneva 28 November 2003, 2399 UNTS 100

Bibliography

Cases


*United States v Canada* Trail Smelter Case, 3 RIAA 1905 (1938/1941)

*France et. al. v. Goering et. al.* 22 IMT 411, 466 (Int'l Mil Trib 1946)

*Trial of Alfred Jodl* (1948) Trial of the Major War Criminals before The International Military Tribunal "Blue Series" Vol XXII

*Corfu Channel Case (United Kingdom v. Albania)* Assessment of Compensation, 15 XII 49, International Court of Justice (ICJ), 15 December 1949

*Wilhelm List and Others (The Hostages Trial)* (1949) Law Reports of Trials of War Criminals Selected and Prepared by the United Nations War Crimes Committee Vol VIII 34

*Arrondelle v. UK* 26 DR 5 (1982)

*Zimmerman and Steiner v Switzerland* [1983] 6 EHRR 17


*Yanomami Community v. Brazil* Case 7615, Inter-American Court of Human Rights, Decision of 5 March 1985, resolution 12/85

*Baggs v UK* [1987] 9 EHRR 235


*Powell and Raynor v UK* [1990] 12 EHRR 355

*Oerlemans v. Netherlands* [1991] EHRR 52


*Zander v Sweden* [1993] 18 EHRR 175


*Lopez Ostra v Spain* [1994] EHRR 46

220
Prosecutor v Tadić ICTY Case No IT-94-1, Decision on Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995

Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion ICJ Reports 1996 226, International Court of Justice (ICJ), 8 July 1996


Balmer-Schafroth v. Switzerland [1997] ECHR 46

Guerra v. Italy [1998] ECHR 7

Prosecutor v Zejnil Delalić, Zdravko Mucic, Hazim Delić, Esad Landžo 'Celebrić Camp Case' ICTY, Case No IY-96-21-T, Judgement 16 November 1998


L.C.B. v United Kingdom [1999] 27 EHRR 212


Prosecutor v Kupreškić et al ICTY Judgement, Case No IT-95-16-T, 14 January 2000 (International Criminal Tribunal for the former Yugoslavia)

The Mayagna (Sumo) Awas Tingni Community v. Nicaragua Judgment of August 31, 2001, Inter-Am Ct HR, (Ser C) No 79 (2001)


Hatton and Others v. the United Kingdom [2003] EHRR 338

Kyrtatos v Greece [2003] 40 EHRR 390

Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory International Court of Justice, Advisory Opinion, 2004 ICJ Reports 136

Moreno Gomez v Spain [2004] EHRR 633

Oneryıldız v Turkey [2004] 39 EHRR 12
Bibliography

*Taşkin and Others v. Turkey* [2004] ECHR 621

*Vides Aizgardišbas Klubs v Latvia* No 57829/00 (27 May 2004)

Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda), Judgment, ICJ Reports 2005, p 168

*Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* Judgment, ICJ Reports 2005 168

*Fadeyeva v Russia* [2005] ECHR 376

*Prosecutor v Naser Oric IT-03-68-T*, Appeals Chamber, Decision on 98 Bis 8 June 2005, Oral Decision transcript 8988

*The Prosecutor v Enver Hadžihasanović and Amir Kubura* ICTY, Case No IT-01-47-T, Judgement 15 March 2006

*Prosecutor v Issa Hassan Sesay, Morris Kallon, Angustine Gbao* Special Court for Sierra Leone, Case No SCSL-04-15-T, Trial Chamber Judgement 2 March 2009

*The Prosecutor v Omar Hassan Ahmad Al Bashir 'Decision on the Prosecution’s Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir’* ICC-02/05-01/09, 4 March 2009

*The Prosecutor v Omar Hassan Ahmad Al Bashir ‘Second Warrant of Arrest for Omar Hassan Ahmad Al Bashir’* ICC-02/05-01/09, 12 July 2010

*Prosecutor v Charles Ghankay Taylor* Special Court for Sierra Leone, Case No SCSL-03-01-T, Judgement, 18 May 2012

Reports of Legal Proceedings

Arguments of Professor Sands in *Armed Activities on the Territory of the Congo (DRC v Uganda)*, CR 2005/9, 18 para 8

Oral Submission by USA, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 9 November 1995, 15.30pm, Peace Palace, The Hague
Oral Submission by Zimbabwe, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 15 November 1995, 15.30pm, Peace Palace, The Hague

Oral Submission by Australia, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 30 October 1995, Peace Palace, The Hague


Oral Submission by Marshall Islands, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 14 November 1995, 10.00am, Peace Palace, The Hague

Oral Submission by Mexico, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 3 November 1995, Peace Palace, The Hague


Oral Submission by Samoa, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 13 November 1995 at 10.35am, Peace Palace, The Hague

Oral Submission by Solomon Islands, Public Sitting of the International Court of Justice, Request for Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, Verbatim Record 14 November 1995, 10.00am, Peace Palace, The Hague

Sir David Maxwell-Fyfe, Transcript of the Trial of The Major War Criminals before The International Military Tribunal "Blue Series", Nuremberg 28 August 1946, 172

Reports and Statements of International Organisations


Scholars IAoG, *Resolution on Darfur* (July 2007)


Gilbert, A., 'Betting on the Better Angels' The Inaugural Henry Dunant Lecture, Australian Red, Melbourne 1999


International Law Commission, Report on the work of its sixty-third session (26 April to 3 June and 4 July to 12 August 2011), General Assembly A/66/10, Annex E 'Protection of the Environment in Relation to Armed Conflicts'

International Law Commission, 57th Sess, Memorandum by the Secretariat - The Effect of Armed Conflict on Treaties: An Examination of Practice and Doctrine, A/CN.4/550, 1 February 2005


International Committee of the Red Cross, Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law, ICRC, Geneva 2009


Council of Europe, Committee on the Environment, Agriculture and Local and Regional Affairs, Report on Armed Conflicts and the Environment, Doc 12774, 17 October 2011


Books


Bibliography

Brownlie I, *Principles of Public International Law* (7th edn, Oxford University Press 2008)


Cullen A, *The Concept of Non-International Armed Conflict in International Humanitarian Law* (Cambridge University Press 2010)


Röling BVA, *International Law in an Expanded World* (Djambatan 1960)


Stewart JG, *Corporate War Crimes: Prosecuting the Pillage of Natural Resources* (Open Society Justice Initiative 2010)


Edited Books

Austin JE and Bruch CE (eds), *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (Cambridge University Press 2000)

Bruch CE, Muffet C and Nichols SS (eds), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (Routledge 2012)

De Jong W, Donovan D and Abe K-i (eds), *Extreme Conflict and Tropical Forests* (Springer 2007)

Grunawalt RJ, King JE and McClain RS (eds), *Protection of the Environment During Armed Conflict and Other Military Operations* (Naval War College 1996)


Pictet JS (ed) *Commentary on Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, vol I* (International Committee of the Red Cross 1952)


Watkin K and Norris AJ (eds), *Non-International Armed Conflict in the Twenty-first Century* (Naval War College 2012)
Contributions to Edited Books

Austin JE, ‘Lessons from Other Legal Regimes - Introduction’ in Austin JE and Bruch CE (eds), *The Environmental Consequences of War: Legal, Economic and Scientific Perspectives* (Cambridge University Press 2000)


Drumbl MA, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’ in Austin JE and Bruch CE (eds), *The Environmental*
Consequences of War: Legal, Economic, and Scientific Perspectives (Cambridge University Press 2000)


Harlow RABA and McGregor CME, ‘International Environmental Law Considerations During Military Operations Other Than War’ in Grunawalt RJ, King JE and McClain RS (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996)

Hulme K, ‘Natural Environment’ in Wilmshurst E and Breau S (eds), Perspectives on the ICRC Study on Customary International Humanitarian Law (Cambridge University Press 2007)


Meron T, ‘Chapter XX - Comment: Protection of the Environment During Non-International Armed Conflicts’ in Grunawalt RJ, King JE and McClain RS (eds), Protection of the Environment During Armed Conflict and Other Military Operations (Naval War College 1996)

Miller JG, ‘Civil Liability for War-Caused Environmental Damage: Models from United States Law’ in Austin JE and Bruch CE (eds), The Environmental Consequences of War: Legal Economic, and Scientific Perspectives (Cambridge University Press 2000)


Bibliography


**Journal Articles**


Aldrich GH, ‘Customary International Humanitarian Law: An Interpretation on Behalf of the International Committee of the Red Cross’ (2005) 76 British Yearbook of International Law


Caggiano MJT, ‘The Legitimacy of Environmental Destruction in Modern Warfare: Customary Substance over Conventional Form’ 20 Boston College Environmental Affairs Law Review 479


Bibliography


Coupland R, ‘Humanity: What it is and how does it influence international law?’ (2001) 83 International Review of the Red Cross 969

Crawford E, ‘The Modern Relevance of the Martens Clause’ (2006) 6 ISIL Yearbook of International Humanitarian and Refugee Law 1

Crawford E, ‘Road to Nowhere? The Future for a Declaration on Fundamental Stabdards of Humanity’ Sydney Law School Legal Studies Research Paper No 12/02 January 2012


Fenrick WJ, ‘Targeting and Proportionality During the NATO Bombing Campaign Against Yugoslavia’ (2001) 12 European Journal of International Law 489


Freeland S, ‘Crimes Against the Environment - A Role for the International Criminal Court?’ (2005) 5 Revue Juridique Polynésienne 335

Fry JD, ‘Contextualized Legal Reviews for the Methods and Means of Warfare: Cave Combat and International Humanitarian Law’ (2006) 44 Columbia Journal of Transnational Law 453


Bibliography


Holland TE, ‘Frederic de Martens’ (1909) 10 Journal of the Society of Comparative Legislation 10


Humphreys M, ‘Natural Resources, Conflict and Conflict Resolution’ (2005) 49 Journal of Conflict Resolution 508

Bibliography


Kuhn AK, ‘The Trail Smelter Arbitration - United States and Canada’ (1938) 32 American Journal of International Law 785


Lauterpacht H, ‘The Problem of the Revision of the Law of War’ (1952) 29 British Year Book of International Law 360


Bibliography


Weinstein JM, ‘Resources and the Information Problem in Rebel Recruitment’ (2005) 49 Journal of Conflict Resolution 598


Westing AH, ‘Protected Natural Areas and the Military’ (1992) 19 Environmental Conservation 343


Conference Proceedings and Papers


Cross ICotR, ‘Strengthening Legal Protection for Victims of Armed Conflicts: Report 31IC/11/5.1.1’ (31st International Conference of the Red Cross and Red Crescent)


Doctoral Theses

Al-Duaij N, ‘Environmental Law of Armed Conflict’ (Pace University 2002)

Tranquillo N, ‘Green Casualties of War: The Need for International Protection of the Environment During Armed Conflicts and the Case of the War between Israel and Lebanon in 2006’ (Lund University 2007)

Newspaper Articles and News Reports


Bibliography


Glassborow K, ‘Court Urged to Consider Environmental Crimes’ *ACR (Institute for War & Peace Reporting)* (Washington DC, 4th September)


Bibliography

victims-war-eastern-democratic-republic-congo-north-kivu-m23-rebels-nature-park> accessed 12 January 2013

Websites


