

# 1. Introduction

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## 1. SCOPE OF THE BOOK

Threats to the environment, in all their diversity, are a growing concern for societies, States and the international community as a whole. Environmental threats in relation to security and armed conflict are amongst them. These environmental pressures can, in some circumstances cause violent or armed conflict<sup>1</sup> and such conflict can, in turn, cause devastating damage and destruction to the environment. This vicious circle can have both short-term and long-lasting impacts on not only the environment, but also on the communities that depend on it. Such environmental pressures and damage are no longer isolated incidents that affect only a small section of society. These environmental problems often extend beyond the territories of conflict-affected States, threatening the lives and livelihoods of people across communities and borders.

In the context of this book, threats to ecosystems well known to environmental lawyers are addressed with reference to an aspect of human conduct – war and armed conflict – that has not received the attention it deserves.<sup>2</sup> This is a challenging topic because of the cyclical relationship between environmental insecurity and human insecurity. As the United Nations Environment Programme (UNEP) recently reported, not only have violent conflicts been fuelled by natural resource exploitation and related environmental stresses<sup>3</sup> but the environment itself ‘continues to be a silent victim of armed conflicts worldwide.’<sup>4</sup>

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<sup>1</sup> ‘A dispute involving the use of armed force between two or more parties.’ UNEP, ‘Protecting the Environment During Armed Conflict: An Inventory and Analysis of Law’ (UNEP, Switzerland 2009) at p. 55 [hereinafter, UNEP International Law].

<sup>2</sup> In this study, the terms ‘war’ and ‘armed conflict’ are used interchangeably.

<sup>3</sup> UNEP, ‘From Conflict to Peacebuilding: The Role of Natural Resources and the Environment’ (UNEP, Switzerland 2009) at p. 5 [hereinafter UNEP Conflict to Peacebuilding].

<sup>4</sup> UNEP International Law (n 1) at p. 4.

With regard to what is meant by the ‘environment’, definition of this term varies.<sup>5</sup> For the purpose of this book, the definition of ‘environment’ used is as described by UNEP:

The sum of all external conditions affecting the life, development and survival of an organism ... environment refers to the physical conditions that affect natural resources (climate, geology, hazards) and the ecosystem services<sup>6</sup> that sustain them (e.g. carbon, nutrient and hydrological cycles).<sup>7</sup>

Although the term ‘environment’ will be used in the context of the broad definition above, it is worth noting that in a more holistic anthropocentric approach, the Millennium Ecosystem Assessment (MEA), in its assessment of the links between ecosystems and human well-being, describes an ‘ecosystem’ as a ‘dynamic complex of plant, animal, and micro-organism communities and the nonliving environment interacting as a functional unit.’<sup>8</sup> The MEA further defines ‘ecosystem services’ as:

the benefits people obtain from ecosystems. This includes *provisioning services* such as food, water, timber, and fiber; *regulating services* that affect climate, floods, disease, wastes, and water quality; *cultural services* that provide recreational, aesthetic and spiritual benefits; and *supporting services* such as soil formation, photosynthesis, and nutrient cycling.<sup>9</sup>

These more comprehensive definitions provide some idea as to what could constitute an ‘environment’ or an ‘ecosystem service’.<sup>10</sup>

As is explained in early chapters of this book, the possibility of environmental factors causing armed conflict is not a new idea and the negative consequences of armed conflict on the environment have been well documented. What is relatively new is the idea that protecting the

<sup>5</sup> On the differing definitions of the environment, see e.g. Aust, A., *Handbook of International Law* (CUP, Cambridge 2005) at pp. 329–32 (particularly in relation to the wording of individual treaties); Sands, P., *Principles of International Environmental Law I: Frameworks, Standards and Implementation* (MUP, Manchester 1995) at pp. 17–19.

<sup>6</sup> UNEP uses the same definition for ‘ecosystem services’ as the MEA, see text to (n 8).

<sup>7</sup> UNEP International Law (n 1) at p. 56.

<sup>8</sup> MEA, *Ecosystems and Human Well-Being: Synthesis* (Island, Washington, DC 2005) at p. v. See also Blanco, E. and Razzaque, J. ‘Ecosystem Services and Human Well-Being in a Globalised World: Assessing the Role of the Law’ (2009) 31 *Human Rights Quarterly* 692, at 693.

<sup>9</sup> *Ibid.*

<sup>10</sup> Ecosystem services are discussed further in Chapter 5 in the context of liability for environmental damage.

environment is the foundation on which a society and an economy depends, and the most popular way of conceptualising this is the overarching concept of sustainable development that is at the heart of this book. Thus, this study aims to use this overarching principle, and the 'sub-principles'<sup>11</sup> subsumed within it, to draw conclusions concerning whether law and its enforcement are strong, weak, or somewhere in between in order to answer the question of, how compatible with the norms of sustainable development is policy and law for the protection of the environment in the field of armed conflict?

Sustainable development, a still evolving concept in international law, has been steadily gaining ground over the last few decades, being used by governments, academics, lawyers and other non-state actors. The concept of sustainable development generally refers to development or the process of improving the quality of life of the present generation without compromising the future generation's. It is a holistic concept increasingly being cited worldwide as a guideline to govern both domestic issues and international relations, though arguably has yet to achieve full international legal status.<sup>12</sup> As sustainable development is a concept being integrated within both the realms of international law and international relations and is seen as a goal to strive for by the international community, it seems practical to also apply this concept in relation to the protection of the environment relevant to security<sup>13</sup> and armed conflict.<sup>14</sup>

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<sup>11</sup> For example, the duty of states to ensure sustainable use of natural resources; equity and the eradication of poverty; common but differentiated responsibilities; precautionary principle; participation; good governance; integration and interrelationship; and the polluter pays principle.

<sup>12</sup> See, e.g. French, D., 'Sustainable Development' in Fitzmaurice, M., Ong, D.M. and Merkouris, P. (eds), *Research Handbook in International Environmental Law* (Edward Elgar, UK 2010) at pp. 51–68; Viikari, L., *The Environmental Element in Space Law: Assessing the Present and Charting the Future* (Koninklijke Brill NV, The Netherlands 2008) at p. 134.

<sup>13</sup> "State or national security" refers to the requirement to maintain the survival of the nation-state through the use of economic, military and political power and the exercise of diplomacy. "Human security" is a paradigm for understanding vulnerabilities, which argues that the proper reference for security should be individual rather than the state. Human security holds that a people-centred view of security is necessary for national, regional and global stability. "Environmental security" refers to the area of research and practice that addresses the linkages among the environment, natural resources, conflict and peacebuilding.' See UNEP Conflict to Peacebuilding (n 3) at p. 7.

<sup>14</sup> The terms 'security' and 'armed conflict' are not used as a complementary phrase but will each be discussed separately. 'Security' is reflected in Chapter 3

This study assesses the evolution of sustainable development and how the concept and its principles have gradually gained a key place in both international and domestic policy and law, particularly within the environmental arena. The book thus adopts a distinctive perspective on a growing body of literature in two main ways. First, it takes a broad holistic view of armed conflict issues, examining three stages in the 'life cycle' of conflict as it affects and is affected by the environment – pre-conflict, in-conflict and post-conflict:

- The 'pre-conflict' stage assesses what system, if any, the international community has in place under international law to prevent, mitigate and manage environmental problems such as environmental degradation and resource scarcity, in order to prevent possible environment-induced armed conflict.
- The 'in-conflict' stage examines the efficacy of the largely familiar rules under international law relevant to the environment during war and armed conflict.
- The 'post-conflict' stage reviews whether, in the current international law regime, appropriate 'reparations' (broadly) or restoration measures are available for war-related environmental damages.

As well as its distinctively holistic focus on the stages at which the environment, security and armed conflict converge, this book is distinctive in a second sense in its use of 'sustainable development' as a normative tool or objective applicable to this field. There is nothing new in the use of sustainable development as a device for measuring success or failure in environmental policy and law.<sup>15</sup>

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(pre-conflict) in the context of environmental and other issues causing environmental insecurity and possible conflict; 'armed conflict' is reflected in Chapter 4 (in-conflict) where the existing international legal regime is examined to ascertain whether the environment is protected during times of armed conflict; and both 'armed conflict' and 'security' are considered in Chapter 5 (post-conflict) in the context of post-conflict environmental damage and the prevention of such damage from causing further environmental insecurity and possible re-conflict.

<sup>15</sup> See, e.g. UK, 'Sustainable Development in Government' DEFRA, [www.defra.gov.uk/sustainable/government/](http://www.defra.gov.uk/sustainable/government/) (accessed 24 February 2012); UK, 'UK Government Sustainable Development Framework Indicators' DEFRA, <http://sd.defra.gov.uk/progress/national/> (accessed 24 February 2012) (primarily used in relation to environmental issues, policy and law); EU, 'Sustainable Development: Environment' European Commission, <http://ec.europa.eu/environment/eussd/> (accessed 24 February 2012); OECD, *Measuring Sustainable*

## 2. AIM AND OUTLINE OF THE BOOK

As mentioned, this research is set in the context of security and armed conflict as relevant to the environment and the book's scope covers three stages: pre-conflict, in the context of prevention of environment-induced armed conflict; during armed conflict, in the context of environmental protection in actual battle; and post-conflict, in the context of how and who 'fixes' the war-damaged environment. This research does not confine itself to a specific geographical area, but it does concentrate on some conflicts in more depth than others.

Chapters 3–5 look at the specific life cycle of armed conflicts – pre-conflict, in-conflict and post-conflict by considering five case-studies to assess the applicability of the sustainable development concept in relation to the protection of the environment in the context of armed conflict. The case-studies selected concern recent relevant conflicts in Iraq; Kosovo; Darfur, Sudan; Somalia; and Sierra Leone. The aim of using these case-studies is to demonstrate the operation of law and policy in practical settings. These case-studies not only give a descriptive view of the subject researched, they are also intended to reflect the human experience in those situations. As Stake notes, '[v]icarious experience is an important basis for refining action option and expectations.'<sup>16</sup>

In addition, the scope of this book encompasses the international community as a whole<sup>17</sup> although in some circumstances it focuses on particular institutions and agencies that are most relevant, notably the United Nations (UN), United Nations Security Council (UNSC) and UNEP. It is worth pointing out that when this research initially began, the focus was entirely on the UNSC. However, as the research progressed, it became clear that no State, institution or agency could stand alone in dealing with environmental problems and protection relevant to security and armed conflict. The view being that through collective international efforts, responsibility or action in this regard would be most effectively

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*Development: Integrated Economic, Environmental and Social Frameworks* (OECD, Paris 2004).

<sup>16</sup> Stake, R.E., 'Qualitative Case Studies' in Denzin, N.K. and Lincoln, Y.S., *The Sage Handbook of Qualitative Research* (3<sup>rd</sup> edn SAGE, California 2005) at p. 460.

<sup>17</sup> Includes States, international organisations and increasingly encompasses 'persons (both legal and natural) within and among those states.' See Sands, P. and Peel, J., *Principles of International Environmental Law* (3<sup>rd</sup> edn CUP, UK 2012) at p. 13. See also Annan, K.A., 'The Meaning of International Community' UNIS/SG/2478 (30 December 1999).

pursued. As Schrijver points out, '[n]o single world environmental organization or world sustainable development organization exists.'<sup>18</sup>

This book is thus divided into four substantive chapters. The aim of these chapters is to highlight the progress being made (or not) and the challenges the international community still faces in seeking to formulate a meaningful approach to the legal and institutional implementation of sustainable development in the context of this study.

- Chapter 2 introduces the general theoretical framework of sustainable development and its sub-principles that will continue to be used in Chapters 3–5. To reiterate, this study seeks to assess the debate surrounding the concept of sustainable development and take the concept forward in terms of the practical implementation of sustainable development in the context of environmental protection in security and armed conflict. Taking this step is only possible by acknowledging the underlying uncertainty that lies within the concept itself. Chapter 2 thus begins by tracing the origins and historical development of the concept of sustainable development; explores the definition of sustainable development; and then, addresses the legal status of the sub-principles under this overarching concept: the duty of states to ensure sustainable use of natural resources; the principle of equity and the eradication of poverty; the principle of common but differentiated responsibilities; the precautionary principle; the principle of participation; the principle of good governance; the principle of integration and interrelationship; and the polluter pays principle.
- Chapter 3 explores the pre-conflict stage in the context of the prevention of environment-induced armed conflict. It investigates the possible link between environmental factors and armed conflict in theory and in practice, through the evaluation of three case-studies: Somalia; Darfur, Sudan; and Sierra Leone. This chapter then reviews within the concept of sustainable development and the appropriate principles, the responses and actions of the international community in preventing environmental-induced armed conflict specifically in relation to the case-studies; followed by an appraisal as to whether in light of lessons learned, the international community has a system in place for preventing environmental-induced conflict.

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<sup>18</sup> Schrijver, N., *Development without Destruction* (Indiana University, Indiana 2010) at p. 114.

- Chapter 4 considers the environment in the heat of armed conflict. It examines the protection of the environment during armed conflict as provided by international humanitarian law (IHL) – from the rules limiting the damage to the environment, to affixing liability for the damage concerned. This is examined within the context of two case-studies: the First Gulf War and the Kosovo conflict. The chapter focuses on whether the protection afforded to the environment by the relevant rules under IHL, allows for the environment to be protected in line with the concept of sustainable development.
- Chapter 5 explores the post-conflict stage where damage to the environment has already been done. This is considered from a crucial aspect of the post-conflict stage: finances. It reviews the international law reparations available for conflict-related environmental damage; possible valuation methods for environmental damage; how these methods are applied in practice by reviewing the US domestic system and in particular, by considering the UN Compensation Commission (UNCC) in relation to environmental damage as a consequence of the First Gulf War; and finally, considers the possible alternative of the polluter pays principle in holding parties financially liable for conflict-related environmental damage. This chapter then analyses post-conflict environmental recovery from a sustainable development perspective, after apportioning reparations (or not) in three post-conflict case-studies: the First Gulf War, Kosovo and Sudan.
- Chapter 6 concludes the book with a discussion of the main arguments; lessons learnt from the case-studies for possible reforms in relation to environmental protection relevant to armed conflict and suggestions for future research stemming from this study. It is argued, in the broadest terms, that at every stage in which it is analysed, policy, law and enforcement fall short of the sustainable development model, and this is something that needs to be addressed as a matter of urgency. The book suggests that among the greatest priorities is to develop an early warning provision that facilitates tackling the causes of armed conflict as they arise from human stress on the natural environment, although there are other priorities which will become clear as the book progresses.